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Morehead State

University Undergraduate Catalog 2009-10

Volume 67

August 2009

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

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

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

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

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

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

Changes

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

Equal Opportunity

Morehead State University is committed to providing equal educational opportunities to all persons regardless of race, color, national origin, age, religion, sex, sexual orientation, Vietnam Era, recently separated, or other protected veteran status, 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's degree program in nursing. Any inquires should be addressed to: Affirmative Action Officer, Morehead State University, 318 AY, Morehead, KY 40351. Telephone: (606) 783-5204 or affirmativeaction@moreheadstate.edu.

Printing

This catalog was prepared by Morehead State University and printed with state funds per KRS 57.375.

Accreditation

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. Contact the Commission on Colleges at 1866 Southern Lane, Decatur, Georgia, 30033-4097 or call (404) 679-4501 for questions about the status of Morehead State University.

SACS
1866 Southern Lane
Decatur, GA 30033-4097
(404) 679-4501

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
Commission on Collegiate Nursing Education
Council on Social Work Education - Baccalaureate Level
Joint Review Committee on Education in Radiologic Technology
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

Membership

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

Campus Building Abbreviations

AAC — Academic-Athletic Center
AC — Alumni Center
ADUC — Adron Doran University Center
APP — Admissions Center
AT — Alumni Tower
AY — Allie Young Hall
BA — Button Auditorium
BM — Baird Music Building
BR — Breckinridge Hall
CB — Combs Building
CCL — Camden-Carroll Library
CH — Cartmell Hall
CHC — Caudill Health Clinic
CY — Claypool-Young Art Building
DAC — Derrickson Agricultural Complex
FH — Fields Hall
GH — Ginger Hall
HM — Howell-McDowell Administration Building
JS — Jayne Stadium
LA — Lappin Hall
LB — Laughlin Health Building
LC — Lloyd Cassity
MA — Mays Hall
ME — Mignon Hall, East
MH — Mignon Hall
MT — Mignon Tower
MW — Mignon Hall, West
NH — Nunn Hall
RA — Rader Hall
RH — Reed Hall
SSC — Space Science Center
TH — Grote-Thompson Hall
WH — Waterfield Hall

About the University

With a coeducational enrollment of nearly 9,000 and a full-time teaching faculty of 389, Morehead State University offers 78 undergraduate degree programs and 12 preprofessional programs of study. It draws students from throughout the United States and several foreign countries to participate in its diverse academic and extracurricular life.

Strategic Plan

Adopted by the Morehead State University Board of Regents, June 2006. [Click the Strategic Plan](#)

<http://www.moreheadstate.edu/aspire/index.aspx?id=7130> for additional information.

Vision Statement

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

Core Values

The University strives to exemplify these core values:

- PEOPLE come first and are encouraged to achieve their full potential;
- Commitment to SCHOLARSHIP, LEARNING and SERVICE is embraced;
- EXCELLENCE is achieved through TEAMWORK, LEADERSHIP, INNOVATION and ACCOUNTABILITY;
- DIVERSITY of people and thought is respected;
- PARTNERSHIPS are built on honesty, integrity and trust.

Mission Statement

We are a diverse community of learners committed to student success. MSU is accredited as a comprehensive University offering quality higher education opportunities in a collegial and open environment. MSU pursues academic excellence, research, community engagement and lifelong learning. MSU is dedicated to improving the quality of life while preserving and promoting the unique cultural heritage of East Kentucky.

Strategic Goals

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

Programs of Study

Subject and Page	Degree	Program	Teacher Cert.
Accounting see page 35	BBA	Option	
Agricultural Science with Following Options: See Page 102	BS	Area, Major, Minor	
Agribusiness See Page 103		Option	
Agriculture Economics See Page 104		Option	
Agricultural Education See Page 104		Option	
Agronomy See Page 105		Option	
Animal Science See Page 105		Option	
Equine Science See Page 106		Option	
General Agriculture See Page 106		Option	
Golf Course Management See Page 107		Option	
Horticulture See Page 107		Option	
Veterinary Science See Page 108		Option	
Veterinary Technology See Page 109		Option	
Agricultural Technology with Following Options: See Page 110	AAS	Associate	
Agribusiness See Page 110		Option	
Agricultural Production See Page 111		Option	
Equine Technology See Page 111		Option	
Ornamental Horticulture See Page 111		Option	
Appalachian Studies		Minor	
Art see page 64 & Design	BA	Area, Major, Minor	Yes
Biology (Teaching) See Page 116	BS	Area	Yes
Biology (Non teaching) See Page 116	BS	Area, Minor	
Business and Information Technology Education See Page 42	BBA	Option	Yes
Business Information Systems	BBA, AAB	Option, Minor	
		Associate	
Chemistry see page 120	BS	Area, Major, Minor	
Chemistry Teaching See Page 121	BS	Option	Yes
Environmental Chemistry See Page 121	BS	Option	
Coaching see page 149		Minor	
Communication with Following Emphasis: See Page 65	BA	Area, Minor	
Advertising/Public Relations See Page 66		Option	
Journalism See Page 66		Option	
Organizational and Interpersonal Communication See Page 66		Option	
Production See Page 67		Option	
Computer Information Systems see page 41	BBA, AAB	Option, Minor	
		Option, Associate	
Computer Science see page 135	BS	Area, Major, Minor	
Creative Writing See Page 71	BFA	Major, Minor	
Criminology (also see Sociology) See Page 99	BA	Area, Emphasis, Minor	
Earth and Space Science Teaching see page 122	BS	Option	Yes
Earth Systems Science see page 122	BS	Area	
Economics see page 36	BBA	Option, Minor	
Elementary Education - P-5 see page 55	BA	Area	Yes
Middle Grades - 5-9 see page 60	BA	Area	Yes
Engineering Technology See Page 128	BS	Area	
English see page 68	BA	Area, Major	Yes (Area)
		Minor	
Environmental Science (option under Biology) See Page 116	BS	Area	
Environmental Science with Regional Analysis Emphasis See Page 116	BS	RAPP Emphasis	
Exercise Science with Options see page 149	BS	Area	
Finance see page 36	BBA	Option	

French see page 76	BA	Major Minor	Yes
General Business See Page 34	BBA	Option, Minor	
Geography see page 48	BA	Major, Minor	
Geography with Regional Analysis Emphasis see page 48	BA	RAPP Emphasis	
Geology See Page 124		Minor	
Government see page 46	BA	Major, Minor	
Government with Regional Analysis Emphasis see page 47	BA	RAPP Emphasis	
Health Teaching See Page 147	BA	Major, Minor	Yes
Health Promotion See Page 147	BA	Major, Minor	
History See Page 72	BA	Major, Minor Minor	
Horsemanship see page 111			
Imaging Sciences See Page 138			
Radiologic Science See Page 139	AAS	Associate	
Computed Tomography/Magnetic Resonance See Page 142	BSIS	Area	
Diagnostic Medical Sonography See Page 143	BSIS	Area	
Leadership in Medical Imaging See Page 143	BSIS	Area	
Industrial Technology with Following Options: See Page 129	AAS	Associate	
Construction Management Technology See Page 127		Option	
Electrical/Electronics		Option	
Computer Aided Design and Graphic Technology See Page 128		Option	
Manufacturing Technology See Page 128		Option	
Telecommunications and Computer Technology		Option	
Industrial Technology with Following Options: See Page 129	BS	Area, Major	
Construction Management Technology (ITCM) See Page 130		Option	
Electronics, Computer, and Telecommunication Tech (ITEC) See Page 130	Option		
Computer Aided Design & Graphics Technology (ITCD) See Page 130		Option	
Manufacturing Technology (ITMT) See Page 130		Option	
Industrial Education See Page 131	BS	Area	Yes
Career & Technical Education See Page 131			
Interdisciplinary Early Childhood Education See Page 54	BA	Area	Yes
Interdisciplinary International Studies See Page 79		Minor	
Interdisciplinary Women's Studies See Page 80		Minor	
Integrated Science See Page 124		Minor	
Legal Studies See Page 74		Minor	
Linguistics See Page 70		Minor	
Literature See Page 70		Minor	
Management see page 37	BBA	Option	
Marketing see page 39	BBA	Option, Minor	
Mathematics - Nonteaching see page 133	BS	Area, Major, Minor	
Mathematics - Teaching see page 133	BS	Major, Area	Yes
Statistics See Page 134		Minor	
Military Science see page 81		Minor	
Music See Page 83			
Music BM See Page 90	BM	Area Certificate	
Music Education See Page 87	BME	Area	Yes
Nursing See Page 152	AAS	Associate	
Nursing See Page 155	BSN	Area, Four-year	
Paralegal Studies see page 74	AB	Major	
Philosophy See Page 73	AB	Area, Major, Minor	
Physical Education See Page 145	AB	Major	Yes
Physics with Following Options: see page 135	BS	Area, Major, Minor	
Computational Physics See Page 136	BS	Option	
Engineering Physics (Mechanical) See Page 136	BS	Option	
Engineering Physics (Electrical) See Page 136	BS	Option	
Astrophysics See Page 126	BS	Option	

Astronomy See Page 126		Minor	
Physics Teaching See Page 136	BS	Option	Yes
Pre-Chiropracty see page 117		Transfer	
Pre-Dentistry see page 117		Transfer	
Pre-Engineering see page 136		Transfer (Dual Degree)	
Pre-Forestry see page 112		Transfer	
Pre-Law		Transfer	
Pre-Medical Technology see page 117		Transfer	
Pre-Medicine see page 122		Transfer	
Pre-Optometry see page 122		Transfer	
Pre-Pharmacy see page 121		Transfer	
Pre-Physician Assistant see page 119		Transfer	
Pre-Physical Therapy see page 118		Transfer	
Pre-Podiatric Medicine see page 119		Transfer	
Pre-Veterinary Medicine see page 112		Transfer	
Psychology see page 137	BA,BS	Area, Major, Minor	
Regional Analysis and Public Policy see page 45		Minor	
Religious Studies See Page 73		Option, Minor	
Respiratory Care See Page 150	AAS	Associate	
Secondary Education See Page 62			Yes
Social Studies see page 75	BA	Area	Yes
Social Work see page 97	BSW	Area	
Social Work with Regional Analysis Emphasis see page 101	BSW	RAPP Emphasis	
Sociology See Page 99	BA	Major, Minor	
Sociology with Regional Analysis Emphasis see page 101	BA	RAPP Emphasis	
Sociology (Criminology) See Page 99	BA	Area, Emphasis, Minor	
Space Science See Page 125	BS	Area	
Spanish see page 77	BA	Major	Yes
		Minor	
Special Education see page 56	BA	Major	Yes
		Minor	
Special Education see page 56			
(Learning and Behavior Disorders) see page 56	BA	Area	Yes
(Moderate and Severe Disability) see page 56	BA	Area	Yes
Sport Management see page 39		Area	
Technology Management (Completer Program) See Page 131	BS	Area	
Theatre See Page 95	BA	Major	Yes
Theatre Education See Page 96		Minor	
University Studies See Page 18	BUS, AA		
Veterinary Technology see page 112	AAS	Associate	
Women's Studies See Page 80		Minor	

Admission, Fees, Financial Aid and Housing

Admission

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

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

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

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

Completion of admission requirements generally allows students to enroll in any program at Morehead State University. However programs such as nursing, imaging sciences, veterinary technology, and teacher education require additional procedures. Students wishing to pursue studies in these programs must submit appropriate application materials to each program separate from

those required by Undergraduate Admissions. For additional information for entering these programs, consult with appropriate sections of the catalog or contact Undergraduate Admissions in Enrollment Services.

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

Admission Index

The Admission Index is calculated as follows:

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

Unconditional & Conditional Admission

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

Conditional Admission: First-time freshman applicants who 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 with the condition that they satisfy their PCC requirements within 24 semester hours. Applicants who do not meet admission requirements may be admitted on "Probation" in certain circumstances. Students on probation must have at least a 2.0 grade point average (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 timeframe, successfully satisfying PCC requirements within 24 semester hours, and/or earning at least a 2.0 GPA in the subsequent semester who do not fulfill those conditions will have the conditional admission revoked and be dismissed from the University.

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

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

Admission as a Freshman

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

To apply for admission, submit to Undergraduate Admissions in the Office of Enrollment Services: (1) a completed Undergraduate Admission 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 \$30 application fee. All applicants for four-year degree programs must meet the PCC requirements for unconditional admission to the University (unless exempted). Applicants who do not meet the PCC requirements are eligible to be admitted conditionally. Students who are admitted conditionally must take specified courses to satisfy PCC requirements. Removal of PCC deficiencies will be monitored by the Office of First Year Programs and Academic Services in University College. Associate degree applicants do not need to meet PCC requirements for admission but their PCC requirements will be assessed and removed.

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

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

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

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

Admission as a Transfer Student

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

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

Applicants for transfer admission to four-year degree programs who did not complete the Kentucky Pre-College Curriculum (PCC) and who have completed fewer than 24 semester hours are eligible for conditional admission. Students admitted conditionally must take specified courses to remove PCC deficiencies. Removal of PCC deficiencies will be monitored by

the Office of First Year Programs and Academic Services in University College. Students who have earned fewer than 24 semester credit hours must submit ACT or SAT scores and high school and college transcripts to facilitate appropriate advising and placement.

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

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

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

Baccalaureate Program Transfer Frameworks

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

Transfer of Credits from Regionally Accredited Colleges

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

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

Transfer of Credits from Non-Regionally Accredited Colleges

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

1. The student has completed a minimum of 12 semester hours at Morehead State University and achieved a minimum GPA of 2.0.

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

Admission as a Returning Student

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

Student who have attended another institution since they last attended MSU must submit: (1) a completed Undergraduate Admission and Scholarship Application, and (2) an official transcript from any institution attended, along with the application fee if not already paid previously.

Consideration for admission will also include the applicant's prior academic work and academic standing at MSU, as well as the academic records and documented behavior/suspension from any other college or university attended.

Admission as an International Student

To be admitted, international students must submit to Undergraduate Admissions in the Office of Enrollment Services: (1) the International Student Undergraduate Admission Application; (2) official records of previous educational experiences; (3) evidence of proficiency in the English language, official scores on the Test of English as a Foreign Language (TOEFL), the Michigan Examination, or other approved test of English proficiency (a minimum score of 500 is required on the TOEFL, 5.0 on the IELTS, and a minimum score of 82 is required on the Michigan Examination); (4) official verification of financial resources; and (5) a \$30 application fee. International students should apply at least four months before the semester or term of enrollment. To assist in the proper placement of students in the areas of English, mathematics, science and social studies, all entering freshmen must take the ACT exam upon arrival unless valid ACT or SAT scores are on file. Entering transfer students with fewer than 24 semester hours of credit completed may be asked to take the ACT exam for the same reasons. Students with an ACT composite score of 19 or higher will be considered proficient in all areas. Students who do not have a 19 composite ACT will be placed in the appropriate level course according to the subject area subscores.

Students transferring to the University from an accredited institution of higher education in the United States, must submit: (1) the International Student Undergraduate Admission Application; (2) an official transcript from the institution from

which they are transferring; (3) official verification of financial resources; and (4) a \$30 application fee.

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

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

Pre-College Curriculum Requirements

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

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

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

Social Studies — three credits required: From U.S. History, Economics, Government, World Geography and World Civilization.

Health — one-half credit required.

Physical Education — one-half credit required.

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

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

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

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

**A student may substitute an integrated, applied, interdisciplinary, or higher level course within a program of study if the substituted course offers the same or greater academic rigor and the course covers or exceeds the minimum required content.*

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

Exceptions to the Pre-College Curriculum

The following shall be exempted from the requirements of the Kentucky Pre-College Curriculum:

1. Students who are 21 years of age or older at time of application;

2. Students entering baccalaureate degree status with 24 or more semester credit hours applicable to a baccalaureate degree with a GPA of at least 2.0 on a 4.0 scale;
3. Students who meet the ACT or SAT exemption scores in a subject;
4. Active duty military personnel, their spouses, and their dependents;
5. A student enrolled in an associate degree program.
6. Out-of-state students; or
7. International students.

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 500 or above.

Developmental Education Requirements

Developmental courses help many MSU freshmen succeed by providing preparatory classes in writing, mathematics, and reading. Students with ACT subscores below 18 in English, 19 in mathematics, or 20 in reading must take one or more of these preparatory classes.

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 45 credit hours. Students who do not complete all developmental requirements within the first 45 credit hours must complete the required course(s) before enrolling in additional college-level courses or obtain a letter of exception from University College.
3. Developmental courses cannot be dropped from a student's schedule without the approval of both the advisor and University College.
4. Developmental coursework is designed to be completed during the first year. Students should complete all development course requirements during their freshman year in order to meet minimum academic standards expected in sophomore and higher level college coursework. Developmental courses are numbered below 100 and do not count toward the total hours needed for degree completion. However, the credit hours count toward full-time status each semester, and the grades are included in calculating GPA.

Admission as a Special Student

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

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

Admission as an Auditor

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

Admission as a Visiting Student

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

Admission as a High School Student

Students currently enrolled in high school as a junior or senior may be eligible for admission to the high school student program. A student must submit to Undergraduate Admissions a completed High School Student Admissions/Registration Application.

The application must include the student's high school GPA and ACT scores. The high school counselor should also include a copy of the student's transcript. Students must have a minimum ACT Composite score of 18 to be admitted to the high school student program. Area subscores from the ACT exam will be used for academic advising and appropriate placement in coursework.

Students who have not taken the ACT exam must have a minimum 3.0 GPA and are not permitted to enroll for coursework in the areas of English and mathematics until the ACT scores are on file in Undergraduate Admissions.

Students who are not expected to meet the Kentucky Pre-College Curriculum may not enroll for course work in the area of the anticipated deficiency or deficiencies.

Any exception to the above requirements must have the approval of Undergraduate Admissions and the Associate Vice President for Academic Programs.

Graduates of Non-Certified, Non-Public Schools

(Including Home Schools)

Students who are graduates of non-certified, non-public schools, including home-schooled students, must submit MSU's Undergraduate Admission and Scholarship Application, an official transcript, a \$30 application 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 colleges can be admitted to Morehead State University while attending the community college. Students need to only apply for admission once. Interested students may contact the admissions office at the

community college and request that their admissions information be forwarded to Undergraduate 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 are 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 community and technical colleges.

Servicemembers Opportunity College

MSU has been designated a servicemembers opportunity college (SOC) and awards military credits in accordance with SOC and American Council on Education (ACE) guidelines. For more information, contact the Office of the Registrar, telephone (606) 783-2008.

Fees

Housing

Complete and return the Application for Campus Housing with a deposit to the Office of Student Housing. Assignments are made based on the date the **housing application and deposit** are received in the Office of Student Housing. 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, Grote-Thompson Hall, Morehead, KY 40351, telephone (606) 783-2060, fax (606) 783-5062, or online at www.moreheadstate.edu/housing.

Classification of Residence for Admission and Tuition Assessment Purposes

Residency for Fee Assessment Purposes

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

enacted by the Council on Postsecondary Education is required to pay nonresident registration and/or entrance fees.

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

Procedure for Determination of Student Residency Status for Fee Assessment Purposes

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

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

Tuition and Fee Information

Student Billing and Payment Information

Morehead State University students will receive online monthly billing statements via their MSU e-mail account to keep them informed of their account balance. Students will be able to view and pay their bill online (after July 1 for Fall semesters) via MSU Datatel Web Advisor located at www.moreheadstate.edu, in person, by mail, or at any regional campus center.

Questions about costs may be answered by referring to the online Fee Schedule located at www.moreheadstate.edu/abc. Tuition and fees are subject to change without notice by the Council on Postsecondary Education and the University's Board of Regents.

Explanation of Statement of Intent

After students register for classes, no matter when this is done, they are required to "Accept" or "Opt out" of the MSU Statement of Intent. If a student chooses to "Accept" the conditions of the Statement of Intent, they will be given an extended period of time to pay their balance and be charged a one-time per semester payment extension fee, if applicable, as outlined in the Statement of Intent document. If a student chooses to "Opt out" of the Statement of Intent, their balance must be paid in full one week prior to the start of classes to avoid having their class schedule cancelled. MSU does not offer a "deferred payment plan"; however, by completing the Statement of Intent online via Datatel Web Advisor located at www.moreheadstate.edu, students are offered a way to confirm they will be attending MSU and the option of paying their bill at a later date. The Statement of Intent will explain in detail the requirements that students must agree to complete. By agreeing to the conditions of this document, students confirm they will attend classes at MSU and acknowledge they have a bill due for the upcoming semester. It will allow students, who cannot pay their total balance in full by the deadline date, an extended period of time to pay their bill. The

Statement of Intent does not require students to make a down payment and can be used by students who need to charge their books at the University bookstore.

Instructions for Accessing the Statement of Intent Online

Step 1: Go to www.moreheadstate.edu

Step 2: Select online services under Current Students at top of page

Step 3: Under Quick Login, select Datatel Web Advisor

Step 4: Enter MSU ID and Password

Step 5: On Main Menu screen, select Students

Step 6: Select Statement of Intent under Financial Information (A student must be registered for each term in which he/she needs to complete a Statement of Intent)

Students may log back in with the same steps as above to review their acknowledgement of the Statement of Intent. However, once "Accepted" students cannot modify the document, only review and print it. If students would like to void the Statement of Intent once "Accepted" they must contact the Office of Accounting and Budgetary Control at 207 Howell-McDowell either in person or provide a written request. The Statement of Intent cannot be voided by phone.

Students must read the Statement of Intent carefully to assure that they understand the requirements and deadline dates before agreeing to abide by the terms of this document.

The online Statement of Intent provides students both privacy and convenience. Questions about billing and/or payment information should be directed to the Office of Accounting & Budgetary Control at (606) 783-2019 or view our Web site at www.moreheadstate.edu/abc/.

Refund Checks

Students who so elect have the option to participate in direct deposit of their refund checks. Students may sign up for direct deposit via WebAdvisor located at www.moreheadstate.edu. Refund checks are usually mailed or directly deposited 10 days before the first day of classes for each semester. Students who have advance registered for classes and are expecting a refund check, but do not receive it prior to the beginning of classes, should check with their financial aid counselor to ensure that financial aid has been awarded. 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.

How To Pay Tuition and Fees

Students who have registered for fall classes will be able to view their billing shortly after July 1. Payment is due, or a completed Statement of Intent, by the close of business one week before classes begin. Payments may be made in the following manner:

- Pay by phone at: (606) 783-2849 or (606) 783-5212
- Online Web payment (credit card or debit card)
- Mail balance due, addressed to:
Morehead State University
Office of Accounting and Budgetary Control
207 Howell-McDowell Ad. Bldg.
Morehead, KY 40351

Mail payment so that it can reach our office two weeks prior to the beginning of classes.

- Pay in person on campus. (Pay in person at the Cashier's Window, 207 Howell-McDowell)
- Pay in person at one of the Regional Campus Centers.
MSU at Ashland 1-800-648-5370 or (606) 327-1777
MSU at Jackson 1-800-729-5225 or (606) 666-2800
MSU at Mt. Sterling 1-866-870-0809 or (859) 499-0780
MSU at Prestonsburg 1-800-648-5372 or (606) 886-2405
MSU at West Liberty 1-800-648-5371 or (606) 743-1500

Forms of Payment:

MSU accepts the following forms of payment:

1. Cash
2. Check
3. Master Card
4. Visa
5. American Express
6. Discover

Student Billing Statements

For questions, please contact the Office of Accounting & Budgetary Control at (606) 783-2019.

All fees are subject to change without notice by action of the Kentucky Council on Postsecondary Education and/or the Morehead State University Board of Regents.

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

Student Health Service Fee

The fee is consolidated with tuition and mandatory fees for all students (undergraduate and graduate) each semester. Students are entitled to the basic services of the Caudill Health Clinic.

Credit/Adjustments

Students withdrawing from school during any semester or term must arrange for their withdrawal with the Office of the Registrar. No credits will be given unless the withdrawal is made through the proper channels. Tuition, housing, and course fees may be credited to students' accounts who withdraw during certain time periods following the start of each term. Meal plans and 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 on-campus students:

Fall or Spring Session Credit Adjustments

first six days of classes	100%
next five days of classes	75%
next five days of classes	50%
next five days of classes	25%

No credits are given after the first 20 class days of the semester.

Summer I and Summer II Sessions (Four week sessions)

first two days of classes	100%
next two days of classes	75%
next two days of classes	50%
next two days of classes	25%

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

Summer Intersession (Two week session)

first two days of classes	100%
next one day of classes	75%
next one day of classes	50%
next one day of classes	25%

No credits are given after the first five class days of the classes.

Summer Session (Eight week session)

first four days of classes	100%
next two days of classes	75%
next two days of classes	50%
next two days of classes	25%

No credits are given after the first 10 class days of the classes.

Creditable fees include tuition, housing, and course fees.

Financial Options

The University offers a broad program of financial assistance to eligible students in the form of grants, loans, scholarships, and work.

In many cases, financial aid is made up of a combination of the various types of assistance available (a financial aid package). 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 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 by March 15 for the coming academic year or for the coming summer terms. Applying before the priority deadline increases the chance of receiving financial aid. Most financial aid is credited to students' accounts, one-half of the year's 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 resources are reported on the aid application.
3. Notify the Office of Enrollment Services of aid received from sources other than the Office of Enrollment Services.

Selective Service Registration Requirement

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

Satisfactory Academic Progress for Financial Aid Recipients

(See scholastic standing, academic probation, and suspension See Page 23 for more information)

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 obtainment of 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.

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

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

Policies and Procedures

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

1. Satisfactory progress will be evaluated at the end of each spring semester.

2. Hours attempted for purposes of this policy will be defined as those for which a student receives a grade of A, B, C, D, E, F, I, IP, K, N, R, U, W, WP, or WF.
3. For undergraduate students, grades of E, F, I, IP, N, R, U, W, WP, and WF will not qualify as successful completion of hours attempted.
4. Non-credit 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.
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 Satisfactory Progress Appeals Form and must attach supporting documentation. Copies of the appeals form may be obtained in the Office of Enrollment Services. Students will be notified in writing of the action taken on their appeals.

Reinstatement of Financial Aid Eligibility

Should a student's financial aid eligibility be terminated for failure to maintain satisfactory progress as defined, the eligibility for financial aid will not be reinstated until the student enrolls for a subsequent academic term (fall, spring, or summer term) at his or her own expense, completes the term satisfying the satisfactory progress definition, and subsequently appeals to the Office of Enrollment Services. Financial aid eligibility will be reinstated for all students whose appeals are approved.

Scholarships

Students who have been admitted to MSU should refer to the Morehead State University Scholarship Guide, available at <http://www.moreheadstate.edu/scholarships> for current information about MSU scholarships.

Financial Aid

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

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

Work-Study Programs. The work-study programs provide work in a variety of offices and departments at the University.

- **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 on the census date to receive Direct Loans.
- **Federal Direct PLUS Loan.** Allows parents and/or stepparents of dependent undergraduate students to borrow money from the institution 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.** For eligible veterans (G. I. Bill) and/or eligible children, wives, and widows of veterans who died or were permanently and totally disabled as the result of service in U.S. Armed Forces (V.A. benefits program). 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.
- **Tuition Waiver for Dependents of Kentucky Veterans, Police Officers, Firefighters, or Volunteer Firefighters.** The Commonwealth of Kentucky provides funds to institutions for the 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 Financial Aid, telephone (606) 783-2000.
- **Vocational Rehabilitation.** For eligible individuals with physical or emotional disabilities. 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.** For eligible individuals enrolled in advanced military science classes. 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 our Web site at: www.moreheadstate.edu/finaid.

Financial Aid and Fee Terminology

The University offers a broad program of financial assistance to eligible students in the form of grants, loans, scholarships, and work. The following terms are important:

Census date is 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 or spring 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, or some loans may not be need-based.

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

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

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

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

Tuition is the fee charged for class enrollment.

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

Work-Study Programs provide part-time employment for eligible students to help with educational expenses. The work schedule is built around the student's academic schedule.

Terms to Know

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

An associate degree requires no fewer than 64 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 128 semester hours and can be completed in four years or less.

An area (area of concentration) is a field of specialization requiring not less than 48 semester hours of credit, which can be completed in place of a major-minor combination.

A major is a principal field of specialized study in which a student plans to obtain a degree. A major requires no fewer than 30 semester hours of designated course work 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 course work.

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

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

Degree Abbreviations

AA — Associate of Arts

AAB — Associate of Applied Business

AAS — Associate of Applied Science

AAS — Associate of Applied Science in Nursing

AAS — Associate of Applied Science in Radiologic Science

AS — Associate of Science

BA — Bachelor of Arts

BBA — Bachelor of Business Administration

BFA — Bachelor of Fine Arts

BM — Bachelor of Music

BME — Bachelor of Music Education

BS — Bachelor of Science

BS — Bachelor of Science in Imaging Sciences

BSN — Bachelor of Science in Nursing

BSW — Bachelor of Social Work

BUS — Bachelor of University Studies

Academic Programs and Requirements for Graduation

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

General Academic Information

Applying for Graduation

An Application for Degree Form (available in the Office of the Registrar) should be submitted to the Office of the Registrar at least one semester before degree requirements are completed. A one-time application fee for graduation is required.

Commencement is observed two times during the academic year. Ceremonies are held at the end of the fall and spring terms.

Program Evaluations

Students should review their official Program Evaluation online. A copy of the official Program Evaluation is available online from the WebAdvisor student account in the Academic Profile section. <http://webadvisor.moreheadstate.edu/>.

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

Requirements for Graduation

To earn an undergraduate degree, students must meet general University requirements and specific program of study requirements. Program of study requirements are explained in the academic programs section of this catalog. *What follows 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 128 semester hours of prescribed and elective college credit, 43 semester hours of which must be courses numbered 300 or above. See the academic programs section of this catalog for the specific requirements of the area of concentration or major and minor programs.
2. Earn a minimum cumulative GPA of 2.0 on all work completed at the University and on all work completed to satisfy area of concentration or major and minor requirements.
3. Complete an area of concentration of no fewer than 48 semester hours or a major of no fewer than 30 semester hours and a minor of no fewer than 21 semester hours. (These are minimum requirements. Students may also elect to satisfy two majors or a major and more than one minor.)

A major, minor, or area of concentration is not required for the Bachelor of University Studies degree.

4. Complete at least 32 semester hours at Morehead State University, with the last 16 hours preceding graduation earned from MSU. Correspondence courses do not satisfy this requirement. Fifty percent of the hours required for the major or area of concentration must be credit earned at Morehead State University. Exceptions may be made with permission of the dean of the college in which the major or area of concentration is granted.
5. Bachelor of Science degree candidates must complete a minimum of 60 semester hours in science or science-related fields.
6. Complete 48 semester hours of general education courses. (See Teacher Education requirements for more specific general education course requirements.) Some degree programs require specific courses within each general education category. Please refer to your program elsewhere in this catalog for detailed course information. Listed below are the general education course requirements.
7. Complete a one credit hour MSU 101: Discovering University Life course during the student's first semester if the student begins as a freshman or transfers to MSU with less than 24 credit hours.
8. A bachelor's degree and an associate degree may be applied for at the same degree date. However, no more than one bachelor's and one associate degree will be awarded at the same date. A student may not apply for an AA degree once qualified for the bachelor's degree. A student may not apply for a Bachelor of University Studies as a second degree.
9. Cross listed courses can only be taken once for credit. If a cross listed course is taken a second time using the different prefix it will be considered a repeat.

Note: Credit earned by a combination of correspondence courses and credit by examination cannot exceed 32 semester hours toward a baccalaureate degree or 16 semester hours toward an associate degree. Correspondence enrollment will not be considered in the determination of full-time status.

*General Education Courses

I. Required Core 15 hours

<i>Writing I (100 level) — three hours</i>	
ENG 100 — Writing I	3
<i>Writing 2 (200 level) — three hours</i>	
ENG 200 — Writing II	3
or ENG 292 — Technical Composition	
<i>Oral Communications (100 level) — three hours</i>	
CMSP 108 — Fundamentals of Speech Communication	3
<i>Math Reasoning (100 level) — three hours</i>	

Choose one course from the following list:

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 — Pre-Calculus Mathematics; or
MATH 175 — Calculus I

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Computer Competence — three hours

Choose one course from the following list:

AGR 261 — Information Acquisition & Analysis;
ART 109 — Introduction to the Computer in the Visual Arts;
CIS 101 — Computers for Learning;
CS 170 or MATH 170 - Introduction to Computer Science;
CMAP 166 — Desktop Publishing and Publication Tech. I;
EDUC 222 — Computing Tools for Educators;
IET 110 — Fundamentals of Computer Technology;
MUSE 215 — Microcomputers and Music;
RAPP 202 — Basic Computer Tech. in Regional Analysis; or
SCI 110 — Introduction to Scientific Computing

3

II. Area Studies 30 hours

Only one course may be chosen from each prefix in Area Studies courses; for example, only one course from the three ART courses may be chosen to satisfy the nine hours of humanities for the Area Studies General Education Requirements.

A. Humanities 9 hours

Choose three courses from the following list:

Students may choose only one course from each prefix.

ART 263 or IST 263 — Art History I
ART 264 or IST 264 — Art History II
ART 265 or IST 265 — Art History III
CHI 101 - Elementary Chinese
CMEM 210 — Media Literacy
CMSP 350 or IST 350 — Comm., Culture, & Diversity
CMSP 383 — Small Group Communication
CMSP 390 — Conflict and Communication
ENG 120 or WST 120 — Approaches to Literature
ENG 205 — Language: Culture and Mind
ENG 211 or IST 211 — Introduction to World Literature I
ENG 212 or IST 212 — Introduction to World Literature II
ENG 293 — Introduction to Creative Writing
FNA 160 — Understanding the Visual Arts
FRN 101 — Beginning French I
FRN 205 or IST 205 — French Culture and Civilization
GOVT 180 or WST 210 — Introduction to Political Theory
HIS 201 or IST 201 — Global Studies
HIS 202 — American Studies
HUM 170 — Introduction to Film
HUM 203 — Introduction to Medieval Culture
HUM 340 — Health and the Hispanic Community
IST 101 — Introduction to International Studies
IST 201 or His 201— Global Studies
MUSH 261 — Music Listening
MUSH 361 — History of Music I

MUSH 362 — History of Music II
PHIL 200 — Introduction to Philosophy
PHIL 203 — Social Ethics
PHIL 306 — Introduction to Logic
PHIL 333 — Environmental Ethics
PHIL 355 — Ancient and Medieval Philosophy
PHIL 356 — Modern and Contemporary Philosophy
SPA 101 — Spanish Language and Culture I
SPA 102 — Spanish Language and Culture II
THEA 110 — Fundamentals of the Theatre

B. Natural and Mathematical Science 9 hours

Choose three courses from the following list:

ASTR 111 — Concepts in Astronomy I
ASTR 112 — Concepts in Astronomy II
BIOL 105 — Introduction to Biological Sciences
BIOL 110 — Biological Science for Elementary Teachers
BIOL 150 — Introduction to Plant Science
BIOL 155 — Introduction to Environmental Science
BIOL 160 — Introduction to Biological Principles
BIOL 171 — Principles of Biology
BIOL 234 — Human Anatomy and Physiology I
CHEM 101 — Survey of Chemistry
CHEM 104 — The Chemistry of Ordinary Things
CHEM 111 — Principles of Chemistry I
GEO 101 — Physical Geography
ESS 106 — Introduction to Geology
ESS 108 — Physical Geology
MATH 232 — Mathematics for the Elementary Teacher II
MATH 353 — Statistics
MATH 354 — Business Statistics
PHYS 109 — A History of the Universe
PHYS 110 — Concepts in Astronomy
PHYS 201 — Elementary Physics I
PHYS 220 — The Science of Music
PHYS 231 — Engineering Physics I
SCI 103 — Introduction to Physical Sciences
SCI 104 — Modern Issues and Prob. in the Physical Sciences
SCI 109 — Physical Science for the Elementary Teacher
SCI 111 — Inquiry Physical Science for Elementary Teachers
SCI 112 — Inquiry Earth and Space Sci. for Elem. Teachers

C. Social and Behavioral Sciences 9 hours

Choose three courses from the following list:

AGR 204 or IST 204 — World Food
ECON 101 — Introduction to Economics
ECON 102 — Economic History of the United States
ECON 201 — Principles of Macroeconomics
ECON 202 — Principles of Microeconomics
EDF 211 — Human Growth and Development
GEO 100 — Fundamentals of Geography
GEO 300 or IST 300 — World Geography
GOVT 141 — United States Government
GOVT 230 — Introduction to Comparative Politics
GOVT 362 or IST 362 — Current World Problems
HIS 210 — Early World Civilization

IET 300 — Technology and Society
 IMS or NURS 300 — Ethical and Legal Issues in Hlth Care
 PSY 154 — Introduction to Psychology
 PSY 156 — Lifespan Developmental Psychology
 RAPP 201 — Society, Nature, and Development
 SOC 101 — General Sociology
 SOC 203 — Contemporary Social Problems
 SOC 305 or IST 305 or WST 305 — Cultural Anthropology
 SOC 354 or WST 354 — The Individual and Society
 WST 273 — Introduction to Women's Studies

D. Practical Living

3 hours

Choose one course from the following list:

AGR 202 — Agricultural Plants and Humanity
 FIN 264 — Personal Finance
 HLTH 151 — Wellness: Theory to Action
 HLTH 203 — Safety and First Aid
 HS 101 — Nutrition and Well-Being
 IET 120 — Technology Systems
 LSIM 201 — Living in an Information Society
 MNGT 160 — Business and Society
 IMS 302 or NURS 302 — Hlth Maint. Throughout the Life Span
 IMS 303 or NURS 303 or WST 474 — Women's Health Care
 IMS 304 or NURS 304 — Men's Health Issues
 IMS 345 or NURS 345 — Global Health
 PLS 226 — Law for the Layperson
 For a listing of the General Education goals see the appendix

III. Integrative Component

3 hours

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

AGR 499C — Senior Seminar in Agriculture
 ART 499C — Visual Art Capstone
 BIOL 499C — Contemporary Environmental Issues
 BIOL 499D — Principles of Evolution
 CMAP 499C — Senior Project
 CMEM 499C — Electronic Media Senior Seminar
 CMJN 499C — Journalism Senior Seminar
 CMSP 499C — Senior Seminar Applied Communication
 CRIM 499C — Senior Criminology Capstone
 CRW 499C — Senior Thesis
 EDEM 499C — Student Teaching Seminar Capstone
 EDSE 499C — Teacher in Today's Schools
 ENG 499C — Senior Seminar in English
 FRN 499C — Senior Colloquium in French
 GEO 499C — Senior Seminar in Geography
 GOVT 499C — Senior Seminar
 HIS 499C — Senior Seminar in History
 HIS 499D — Teaching Social Studies
 HLTH 499C — Senior Seminar in Health Promotion
 HLTH 499D — Senior Seminar in Health Education
 HS 499C — Senior Seminar
 IET 499C — Senior Project
 MATH 499C or CS 499C — Senior Capstone
 MNGT 499C — Strategic Management
 MSU 499C — Senior Seminar

MUSP 499C — Senior Recital
 NURB 499C — Advanced Nursing Practicum
 PHED 499C — Senior Capstone
 PHED 499D — Senior Capstone
 PHIL 499C — Senior Seminar in Philosophy
 PLS 499C — Senior Paralegal Practice Seminar
 PSY 499C — Systems and Theories
 RSCI 499C — Senior Seminar in Radiologic Sciences
 SCI 498 — Senior Thesis I
 SCI 499C — Senior Thesis II
 SOC 499C — Senior Seminar
 SPA 499C — Senior Seminar in Spanish
 SPMT 499C — Senior Capstone
 SWK 497 — Practicum in Social Work
 SWK 498 — Social Work Practice Skills III
 SWK 499C — Senior Seminar
 WST 490 — Integrative Capstone in Women's Studies

Notes:

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

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

Correspondence enrollment will not be considered in the determination of full-time status.

Bachelor of University Studies Degree Requirements

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

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

1. Complete a minimum of 128 semester hours of prescribed and elective college credit, 43 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 48 semester hours of general education courses. See the general education course requirements for bachelor's degree requirements.
5. Complete a one credit hour MSU 101: Discovering University Life course during the first semester if the student begins as a freshman or transfers to MSU with less than 24 credit hours.

Associate Degree Requirements

You will receive your associate degree after you:

1. Complete a minimum of 64 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 a one credit hour MSU 101: Discovering University Life course during the student's first semester if the student begins as a freshman or transfers to MSU with less than 24 credit hours.
5. Complete 21 semester hours of general education requirements as follows:

General Education Courses

Writing I (100 level) 3 hours

ENG 100 — Writing I

Writing 2 3 hours

ENG 200 — Writing II

or ENG 292 — Technical Composition 3 hours

Oral Communications (100 level) 3 hours

CMSP 108 — Fundamentals of Speech Communication

Math Reasoning (100 level) 3 hours

Choose one course from the following list:

MATH 123 — Introduction to Statistics

MATH 131 — Mathematical Reasoning and Problem Solving

MATH 135 — Mathematics for Technical Students

MATH 141 — Trigonometry

MATH 152 — College Algebra

MATH 174 — Pre-Calculus or

MATH 175 — Calculus I

Computer Competence 3 hours

Choose one course from the following list:

AGR 261 — Information Acquisition & Analysis

ART 109 — Introduction to the Computer in the Visual Arts

CIS 101 — Computers for Learning

CMA 166 — Desktop Publishing & Publication Tech. I

CS 170 or MATH 170 — Introduction to Computer Science

EDUC 222 — Computing Tools for Educators

IET 110 — Fundamentals of Computer Technology

MUSE 215 — Microcomputers and Music

RAPP 202 — Basic Computer Tech. in Regional Analysis or

SCI 110 — Introduction to Scientific Computing

Humanities 3 hours

Choose one course from the following list:

ART 263 or IST 263 — Art History I

ART 264 or IST 264 — Art History II

ART 265 or IST 265 — Art History III

CHI 101 - Elementary Chinese

CMEM 210 — Media Literacy

CMSP 350 or IST 350 — Comm., Culture and Diversity

CMSP 383 — Small Group Communication

CMSP 390 — Conflict and Communication

ENG 120 or WST 120 — Approaches to Literature

ENG 205 — Language: Culture and Mind

ENG 211 or IST 211 — Introduction to World Literature I

ENG 212 or IST 212 — Introduction to World Literature II

ENG 293 — Introduction to Creative Writing

FNA 160 — Understanding the Visual Arts

FRN 101 — Beginning French I

FRN 205 or IST 205 — French Culture and Civilization

GOVT 180 or WST 210 — Introduction to Political Theory

HIS 201 or IST 201 — Global Studies

HIS 202 — American Studies

HUM 170 — Introduction to Film

HUM 203 — Medieval Culture

HUM 340 - Health and the Hispanic Community

IST 201 — Global Studies, (cross listed with HIS 201)

MUSH 261 — Music Listening

MUSH 361 — History of Music I

MUSH 362 — History of Music II

PHIL 200 — Introduction to Philosophy

PHIL 203 — Social Ethics

PHIL 306 — Introduction to Logic

PHIL 333 — Environmental Ethics

PHIL 355 — Ancient and Medieval Philosophy

PHIL 356 — Modern and Contemporary Philosophy

SPA 101 — Spanish Language and Culture I

SPA 102 — Spanish Language and Culture II

THEA 110 — Fundamentals of the Theatre

Social and Behavioral Sciences 3 hours

Choose one course from the following list:

AGR 204 or IST 204 — World Food

ECON 101 — Introduction to Economics

ECON 102 — Economic History of the United States

ECON 201 — Principles of Macroeconomics

ECON 202 — Principles of Microeconomics

EDF 211 — Human Growth and Development

GEO 100 — Fundamentals of Geography

GEO 300 or IST 300 — World Geography

GOVT 141 — United States Government

GOVT 230 — Introduction to Comparative Politics

GOVT 362 or IST 362 — Current World Problems

HIS 210 — Early World Civilization

IET 300 — Technology and Society

IMS 300 or NURS 300 — Ethical & Legal Issues in Health Care

PSY 154 — Introduction to Psychology

PSY 156 — Lifespan Developmental Psychology

RAPP 201 — Society, Nature, and Development

SOC 101 — General Sociology

SOC 203 — Contemporary Social Problems

SOC 273 or WST 273 — Introduction to Women's Studies

SOC 305 or IST 305 or WST 305 — Cultural Anthropology

SOC 354 — Individual and Society

Associate of Arts in University Studies Degree Requirements

Except for the 21 hours of general education requirements and the one credit hour MSU 101: Discovering University Life, no prescribed program of study is required for this degree. You may take a wide variety of subjects or concentrate all studies beyond the general education requirements in a single discipline. All other associate degree requirements must be met. (See associate degree requirements above.) For more information, see your advisor or the University College, 331 Allie Young Hall, (606) 783-2084.

Second Degree Requirements

If you have earned a degree from Morehead State University or any other accredited college or university, you may earn a second bachelor's degree or associate degree by completing program requirements approved by your major department and the following minimum requirements.

For a second bachelor's degree, you must:

1. Hold an acceptable bachelor's degree from an accredited college or university.
2. Complete a program of study approved by the head of your major department, including at least 32 new semester hours earned at Morehead State University. Of these 32, a minimum of 15 semester hours must be earned to complete a new major or area of concentration.
3. Earn a minimum of 2.0 GPA in all coursework presented to complete the program, in all coursework completed at Morehead State University, and in all coursework in a major, minor, or area of concentration.

For a second associate degree, you must:

1. Hold an acceptable associate or higher degree from an accredited college or university.
2. Complete a program of study approved by the head of your major department, including at least 16 new semester hours (at least 12 must be earned at Morehead State University). At least nine of the 16 semester hours earned must be in courses in a new prescribed associate degree program.
3. Earn a minimum of 2.0 GPA in all coursework presented to complete the program, in all coursework completed at Morehead State University, and in all coursework in the new prescribed associate program.

Administrative Policies and Procedures

Assessment

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

Academic Regulations and Procedures

Student Orientation, Advising, and Registration

New freshmen or transfer students enrolling for the fall semester are encouraged to participate in the Student Orientation, Advising, and Registration (SOAR) program. The activities provide an overview of the educational opportunities and facilities of the University. Students will also meet with academic advisors and register for classes.

New Student Days orientation programs are held during the regular fall and spring registration periods. All new freshmen and transfer students, including those that attended the summer orientation, are required to attend the fall program. Students are notified of the specific dates and times of these activities upon their acceptance to MSU by the Office of First Year Programs and Retention (www.moreheadstate.edu/soar).

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 often encounter scheduling difficulties. After the scheduled enrollment period, students registering for the first time must report to Enrollment Services, 100 Admissions Center. Returning students must reapply in the admissions office and process registration in the department of the major.

Change in Schedule

Schedule changes include adding and dropping a course, changing from one course section to another, changing the number of credits involved in any course, or changing from audit to credit or from credit to audit. Any schedule change must be approved by the student's advisor and be recorded with the Registrar as a drop/add.

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

Course Load

To be classified as full time, a student must enroll for at least 12 semester hours in a regular semester and four semester hours in a summer term. Audited and correspondence courses do not contribute toward a full-time load. The maximum load a full-time undergraduate student may carry during any semester is 18 credit hours including audited courses.

Enrollment in 19 to 21 credit hours is considered an overload. Undergraduate students desiring to register for an overload must:

1. Have a 3.25 in the previous semester or overall cumulative GPA.
2. Have the approval of the academic advisor and the appropriate college dean.
3. Pay additional tuition per credit hour over 18 hours.

It is expected that no student shall be allowed to enroll in more than 21 hours in a regular semester and seven hours in a summer session.

Undergraduates Enrolling for Graduate Credit

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

If the work for a baccalaureate degree is being completed during a summer term, the combined course load is not to exceed six semester hours. Application for permission to take graduate courses is made to the Associate Vice President, Academic Programs prior to registration. Forms are available in the Graduate Office.

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

Student Classification

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

Course Numbering

Courses numbered below 100 are developmental courses. These courses carry credit which is counted in the student's load. The grade earned is computed in the student's GPA.

However, credits earned do not count toward program or general education requirements, and they do not count toward the minimum hours required for graduation.

Courses numbered as follows:

100-199	Freshman courses
200-299	Sophomore courses
300-399	Junior courses
400-499	Senior courses
600-699	Graduate courses

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.

Repeating Courses

Undergraduate students are permitted to repeat any course regardless of the grade received. Only the grade received on the last attempt is computed in the overall GPA. This practice applies to MSU and is not necessarily the way other institutions might compute the cumulative GPA upon transfer.

MSU courses for which a failing grade has been received must be repeated in residence unless prior approval has been received from the MSU department head. A failing grade may not be removed by correspondence study or proficiency testing unless approved in advance by the department chair and dean of the college in which the course was offered.

Cross listed courses can only be taken once for credit. If a cross listed course is taken a second time using the different prefix, it will be considered a repeat.

Auditing Courses

An auditor is a student who enrolls and participates in a course without expecting to receive academic credit. The same registration procedure is followed and the same fees are charged as courses taken for credit. An audited course is not applicable to any degree. Audit enrollment will not be considered a part of the minimum number of hours required to determine full-time status or normal load. Audit enrollment will be counted in determining overload.

Regular class attendance is expected of an auditor. Other course requirements, which may be obtained in writing from the instructor, will vary depending on the nature of the course. Students interested in auditing a course should contact the instructor and discuss course requirements prior to enrolling. Failure to meet audit requirements for the course may result in the auditor being withdrawn from the course at the request of the instructor with a "WY" (Audit Withdrawal) entry made on the student's transcript. A successful audit will be recorded on the transcript with the designation "Y." Any change from audit to credit must be done by the last day to add a class. Changes from credit to audit must also be done by the last day to add a class. Refunds for withdrawals from audited courses will be prorated on the same basis as refunds for withdrawals from courses taken for credit.

Attendance

Prompt and regular class attendance, being essential to the learning experience, is the responsibility of all students. More specific attendance policies may be established by individual course instructors and must be distributed to students in written form during the first week of the session. A copy of the policy will be kept on file by the department chairperson.

Absence

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

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

Final Examinations

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

Withdrawals

To withdraw from the University, a student must complete a withdrawal form with the Office of the Registrar. It is important for a student's academic record to reflect an official withdrawal; entitled refunds are not made unless the withdrawal is properly recorded. Withdrawals can be submitted electronically to the Registrar at registrar@moreheadstate.edu or mailed to the Registrar's Office at 201 GH, Morehead State University, Morehead, KY 40351 or faxed to (606) 783-9104.

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.
- I** — **Incomplete** — Given only when a relatively small amount of work is not complete because of illness or other reasons satisfactory to the instructor. Incompletes must be made up by midterm of the following semester (summer school excluded).
- IP** — **In progress** — Course work has not been completed, and the student must register for same course the following semester; no credit hours or quality points (restricted to approved courses).
- K** — **Credit, pass-fail course** — Semester hours earned; no quality points; not computed in GPA.
- N** — **Failure, pass-fail course** — No quality points; computed in GPA.
- P** — **Withdrew from school passing** — Not computed in GPA.
- F** — **Withdrew 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.

- W** — **Withdrew 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.

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 passed at least 12 undergraduate hours and have earned at least a 3.5 GPA for the current semester.

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

Grade Reports

Grades will be available on the student's Web Advisor account no later than Wednesday following the end of the term.

Transcripts

Request official transcripts in writing to the Office of the Registrar, 201 Ginger Hall or online at www.moreheadstate.edu/registrar. Requests received by noon are ready for pickup or mailing by noon of the next working day. Official transcripts are \$4 each.

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.

Scholastic Standing

To continue enrollment at MSU, students must maintain certain GPA standings based on the number of credit hours attempted. 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 following minimum cumulative scholastic level:

- I. A 1.6 MSU cumulative grade-point average if 16 or fewer semester hours have been attempted.
- II. A 1.7 MSU cumulative grade-point average if 17-32 semester hours have been attempted.
- III. A 1.8 MSU cumulative grade-point average if 33-48 semester hours have been attempted.
- IV. A 1.9 MSU cumulative grade-point average if 49-67 semester hours have been attempted.
- V. A 2.0 MSU cumulative grade-point average if 68 or more semester hours have been attempted.

Academic Probation. Students failing to meet the scholastic standards listed above are placed on Academic Probation. At the end of each academic term, the Registrar provides a grade report that reflects grades for the term and the MSU cumulative grade point average. A student on Academic Probation may enroll in no more than 13 semester hours of course work during each semester and for no more than three semester hours of course work 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 probation requirements outlined in Academic Probation Requirements <http://www.moreheadstate.edu/probation/>. See also the Financial Aid Satisfactory Progress Standard See Page 13.

Suspension. Any student who after two consecutive semesters (excluding summer terms) on academic probation has not earned

the grade point average specified above on academic probation will be suspended from the University. The suspension period following a fall semester is the spring semester; following a spring semester the suspension period is for the summer terms and fall semester. During a suspension period, a student will be ineligible for any credits at Morehead State University.

Students suspended under this policy have the following two options:

1. They may appeal by petitioning a hearing before the Committee on Academic Standards and Appeals if the student believes the suspension was the result of circumstances beyond his or her control. If an appeal of the suspension is granted, the student must meet all additional requirements set forth by the Committee on Academic Standards and Appeals. The committee may, in some cases, waive the requirement that the student have attempted 48 semester hours before declaring bankruptcy. Requests for appeals are made in the Office of the Associate Vice President, Academic Programs.
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 submit at the admission hearing the probation requirements outlined in Academic Probation/Suspension Requirements <http://www.moreheadstate.edu/probation/>. See also the Financial Aid Satisfactory Progress Standard See Page 13.

Academic Bankruptcy

To create an opportunity for undergraduate students with an unacceptable grade point average 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 notification "academic bankruptcy" appears on the transcript beneath the semester's work. Bankruptcy cannot be revoked once it has been granted. Bankruptcy cannot be used more than once.

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

The requirements for academic bankruptcy are:

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

Procedure: To apply for academic bankruptcy, the student obtains an Academic Bankruptcy form in the Office of the Registrar. This form is filled out, signed by the academic advisor, the department chair, and the appropriate college dean and returned to the Registrar for verification of eligibility. The Registrar notifies the student, the academic advisor, the

department chair, and the college dean in writing regarding eligibility. An appeal of the eligibility ruling is made through the Academic Standards and Appeals Committee of the University.

Academic Grievance Procedure

When a student has an academic dispute with a faculty member over a grade, there are procedures that exist to resolve the complaint in the most satisfactory way for both the student and faculty member. If the complaint involves a final grade, the student must take the complaint to the faculty member within the first two weeks of the beginning of the following semester. This policy requires several steps to complete the process. The entire policy that outlines the process, along with forms that must be completed, may be found at the following link:
<http://www.moreheadstate.edu/provost/>
<http://www.moreheadstate.edu/provost/>

An electronic or hard copy of the policy may be obtained by calling Academic Programs at 606-783-2003 if you are unable to review it electronically.

Academic Honesty Policy

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

Guidelines for Dealing with Acts of Academic Dishonesty

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

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

material and hold an investigative hearing with the student(s) involved. At this time, the Assistant VP/Dean of Students will determine if further disciplinary action is warranted.

6. The Assistant VP/Dean of Students will report, in writing, any additional disciplinary actions taken to the college dean, the department chair, the Provost, the faculty member making the charges, and student(s) being charged.

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

Sexual Harassment Policy

Morehead State University takes seriously the rights of the campus community to be free from sexual harassment in all forms. The Board of Regents has adopted a policy prohibiting sexual harassment across the University that applies to students and employees alike. PG-6 provides detailed procedures for the reporting, investigation, and resolution of all such complaints. Students and employees are urged to become familiar with the policy and to report harassment. Click on the following link for the most current Sexual Harassment Policy:
<http://www.moreheadstate.edu/hr/policies/index.aspx?id=1607> or contact Human Resources at (606) 783-2097 to request an electronic or hard copy of the policy.

Academic Support

University Outreach

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

MSU at Ashland

1400 College Drive, Suite L 272
Ashland, KY 41101
(606) 783-2901; (606) 327-1777 or (800) 648-5370
www.moreheadstate.edu/ashland
BA (Elementary & Middle Grades Education)
Bachelor of Social Work
Bachelor of University Studies

MSU at Jackson

Breathitt County Life Skills Center
1127 Main Street
Jackson, KY 41339
(606) 783-2940; (606) 666-2800 or (800) 729-5225
www.moreheadstate.edu/jackson
BA (Elementary & Middle Grades Education)
Bachelor of University Studies

MSU at Mt. Sterling

Clay Community Center
3400 Indian Mound Drive
Mount Sterling, KY 40353
(606) 783-2078; (859) 499-0780 or (866) 870-0809

www.moreheadstate.edu/mtsterling
AA (University Studies)
Bachelor of University Studies
Bachelor of Social Work
AAS (Nursing)

MSU at Prestonsburg

6 Bert Combs Drive
Prestonsburg, KY 41653
(606) 783-5421; (606) 886-2405 or (800) 648-5372
www.moreheadstate.edu/prestonsburg
BA (Elementary & Middle Grades Education)
BS (Social Work)
Bachelor of University Studies

MSU at West Liberty

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

Maysville

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

Distance Education

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

Instructional Sites

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

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:

Tutoring and Learning Center. Free tutoring is available during the day and evening to help students having difficulty with a particular class. Supplemental instruction is also available along with several self-paced tutoring programs designed to assist students in improving basic academic skills. Professional staff is available to assist students with study skills, time management, and specific academic programs. For more information or assistance at the Tutoring and Learning Center, call (606) 783-5200.

Services for Students with Physical or Learning

Disabilities. Professional staff assists students with physical or learning disabilities in the acquisition of academic aids such as taped textbooks, note takers, and tutoring. The staff coordinates efforts to address the accessibility needs and class accommodations with instructors of students with physical or learning disabilities. For most services, proper documentation must be on file. For more information or assistance, call (606) 783-5188.

Study Skills. Opportunities for students to acquire skills in time management, note taking, test taking, outlining, improving memory, and listening skills are also available at the Tutoring and Learning Center through non-credit seminars and monitored study tables. For more information or for assistance with study skills, call (606) 783-5200.

Minority Retention. Academically related activities designed to assist minority students in their transition and adjustment to University life and help ensure academic success are provided by the Minority Retention Coordinator. Call (606) 783-5195 for an appointment.

Office of First Year Programs

The Office of First Year Programs administers MSU 101, a freshman success course, which introduces students to the expectations and rigors of college. The office also administers the Peer Advising program, which offers upper-class students the opportunity to assist first-year students in their transition to University life. The office coordinates SOAR and New Student Days. For additional information or assistance, call (606) 783-2517.

Office of Retention

The Office of Retention Programs provides leadership at MSU for faculty, staff and administrators to provide individualized assistance to MSU students and to make sure that they obtain a sense of direction, receive a high quality education in the field of their choice, complete their degree in no more than five years, and become the employees of choice by employers throughout the region. For additional information, call (606) 783-9580.

Provisional Studies Program

Provisionally admitted students are assigned to academic advisors in the Office of First Year Programs and Academic Services. These advisors will monitor and direct their academic activities. Provisionally admitted students work with their advisor(s) to design a plan of remediation in developmental courses designed to increase competency in identified areas of need. Credits earned from developmental courses do not count toward program or general education requirements, and they do not count toward

the minimum hours required for graduation. However, developmental courses do carry credit which is counted in the semester workload, and the grades earned for developmental courses are computed in the student's GPA.

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

1. Obtain a grade of "C" or higher in all required developmental courses.
2. Pass MSU 101: Discovering University Life.
3. Successfully complete two semesters with a cumulative GPA of 1.6 if 16 or fewer semester hours have been attempted and 1.7 if 17-32 semester hours have been attempted.
4. Successfully complete a minimum of 12 semester hours of general education requirements.
5. Attend a minimum of three hours of study tables per week.
6. Meet as required with their academic 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 will result in academic dismissal. For more information, contact the Provisional Studies Coordinator, 222 Allie Young Hall, (606) 783-2310.

Instructional Support

Academic Advising Program

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

Advisor Assignment

Although students may not have a permanent 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, or Provisional Studies students, may contact the Office of First Year Programs and Academic Services in 215 Allie Young Hall or by calling (606) 783-2084. It is the student's responsibility to make the initial contact with the academic advisor.

Required Advisor Contacts

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

1. To obtain the advisor's signature approval of the trial schedule prior to registration;
2. To pick up midterm grade reports;
3. To initiate class changes during the drop/add period;
4. To complete a change of program form to change the major, minor, or area of concentration; and

5. To complete the online Program Evaluation. Transfer students should schedule a conference at the beginning of the first semester at MSU.

Student Support Services

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

Nontraditional and Commuter Student Counseling

The coordinator for nontraditional and commuter students is available to see all undergraduate, nontraditional students who are 23 years of age or older and all commuter students.

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

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

Computer Resources

Morehead State University, through the offices of information technology, academic computing, and administrative computing applications, provides a variety of computing resources in support of instructional, administrative, alumni, and research activities. Several minicomputer systems and other servers are maintained to support Web, e-mail, and other academic and administrative functions. More than 2,200 microcomputers located in classrooms, labs, and offices are replaced on a regular cycle to maintain state-of-the-art desktop technology across campus.

The University maintains more than 60 networked student labs/classroom facilities available to students throughout the campus, including a 50-station open access computer lab. All instructional facilities, residence hall rooms, and administrative facilities are attached to a campus telecommunications backbone that provides high-speed data access to local, state, national, and international networks through the Internet. Additionally, all classroom buildings and selected commons areas across campus provide secure wireless access to the high-speed backbone.

Access to student services such as course registration, financial aid processing and fee payments is available to students and prospective students through the campus Web site at www.moreheadstate.edu. The University instructional programs utilize computing resources for programming, problem solving, computer-assisted instruction, simulation, record keeping, word processing, electronic mail, research, and other activities.

Other technology resources available to students include free voice mail and e-mail service, as well as free local phone service

and digital cable television services to students living in a residence hall. Various instructional seminars are offered by the Office of Administrative Computing Applications to instruct staff and faculty in the effective use of the various technology resources available at MSU. The University also offers undergraduates an affordable lease program for PC Tablet microcomputers.

Student Trip Insurance

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

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

Testing Center

The Testing Center provides testing services to the University and the region. Testing is conducted on a daily basis by appointment or prior registration. Established testing programs include ACT, CLA, AP, CLEP, GED, LSAT, Miller Analogies, The PRAXIS Series, correspondence exams, and various departmental proficiency examinations. Literature describing the different testing programs and their functions is available at the Testing Center, 501A Ginger Hall, (606) 783-2526 or online at www.moreheadstate.edu/testing.

Credit-by-Examination

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

1. The Advancement Placement Program (APP)
2. The College Level Examination Program (CLEP)
3. Departmental Examinations

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 upon the GPA.

College-Level Examination Program (CLEP)

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

Students may register for CLEP examinations at MSU by contacting the Testing Center, 501A Ginger Hall, (606) 783-2526. For score requirements to earn credit hours through CLEP examinations, please contact the Testing Center at the address and phone number above.

For complete CLEP descriptions, access the Web site www.collegeboard.org/clep.

Examination Equivalent MSU Course

Composition and Literature:

Analyzing and Interpreting Literature	ENG 120
*Freshman College Composition	ENG 100

**Portfolio required; evaluated by the English department.*

Foreign Languages

French Language - Level 1	FRN 101 and 102
French Language - Level 2	FRN 201 and 202
German Language - Level 1	GER 101 and 102
German Language - Level 2	GER 201 and 202
Spanish Language - Level 1	SPA 101 and 102
Spanish Language - Level 2	SPA 201 and 202

Social Sciences and History

American Government	GOVT 141
History of the United States, Early Colonization to 1877	HIS 220
History of the United States 1865 to the Present	HIS 202
Humanities	ENG 120 and FNA 160
Principles of Macroeconomics	ECON 201
Principles of Microeconomics	ECON 202
Introductory Psychology	PSY 154
Social Sciences and History	HIS 201
Introductory Sociology	SOC 101
Western Civilization: Ancient Near East to 1648	HIS 210
Western Civilization: 1648 to Present	HIS 201

Sciences and Mathematics

Biology	BIO 105
Calculus	MATH 175
Chemistry	CHEM 101 or 111
College Algebra	MATH 152
College Mathematics	MATH 131
Natural Sciences	BIO 105 and SCI 103
Pre-Calculus	MATH 174

Business

Financial Accounting	ACCT 281
Introductory Business Law	MNGT 261
Principles of Marketing	MKT 304
Principles of Management	MNGT 301

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 APP score should be sent to the Testing Center, Morehead State University, 501A Ginger Hall, (606) 783-2526, at the time application for admission is submitted or as soon as possible thereafter. Upon enrollment at MSU, the student should notify the Testing Center so that proper credit will be posted to the transcript. For more information and requirements, please

contact the Testing Center. With a score of three or higher on the following examinations, credit will be awarded for the corresponding course.

Examination	Equivalent MSU Course
Art History	FNA 160
Art - Drawing	ART 101
Art - General	ART 101
Art - 2D & Art 3D	ART 101
Biology	BIOL 105
Calculus AB	MATH 175
Calculus BC	MATH 275
Chemistry	CHEM 101 or 111
ECON - MAC	ECON 201
ECON - MIC	ECON 202
English Language Comp	ENG 100
English Language/Literature Comp	ENG 100, 120
Environmental Science	BIO 155
European History	HIS 201
French Language	FRN 101, FRN 102, 201, and 202
	FRN 101, 102, and 201
	FRN 101 and 102
French Literature	Elective credit for one three- credit 300-level literature course to be determined by the dept.
German Language	GER 101
Government & Policies: U. S.	GOVT 141
Human Geography	GEO 100
INTL English Language	in lieu of TOEFL
Latin - Vergil	LAT 101
Latin - Literature	LAT 101
Music Theory	MUST 131 and 133
Physics B and	PHY 201 and 201A PHYS 202 and 202A
Physics C — Mech	PHYS 231 and 231A
Physics C — E&M	PHYS 232 and 232A
Psychology	PSY 154
Spanish Language	SPA 101, 102, 201, and 202
	SPA 101, 102, and, 201
	SPA 101 and 102
Spanish Literature	Elective credit for one three- credit
	300-level literature course to be determined by the department.
Statistics	MATH 123
U. S. History	HIS 220 and 202
World History	HIS 201 and 210

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. Then,

the student arranges to take the test and pays the fee in the Testing Center, 501A Ginger Hall, before taking the examination.

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.

Exception from ENG 100 (Writing I) given through CLEP

In order for a student to receive an exception from the Writing I course (with CLEP), the student must produce a collection of writing matching that required in Writing I and must attain a passing score on the CLEP "Freshman College Composition Subject Exam."

The student should:

- obtain a description of the CLEP test from the University Testing Center.
- submit a portfolio of writing to the English Department that includes: 1) example of an extended research paper using the APA, MLA, or Chicago style documentation; 2) a paper that demonstrates the writer's ability to present a reasoned argument; and 3) a cover letter explaining to the reviewers why the work being submitted meets the criteria for ENG 100: Writing I. Questions regarding the portfolio procedure should be directed to the Coordinator of the General Education Writing Program, telephone (606) 783-2185.
- wait for the General Education Writing Committee to review the portfolio.
- if the portfolio passes, then the student may take the CLEP examination.
- if after having passed the portfolio requirement, the student attains a passing score on the CLEP exam, the student will be granted credit for ENG 100.

Computer Competency

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

University Counseling Center

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

The University Counseling Center's (UCC) services include individual psychotherapy and counseling, groups, workshops, and consultations. Caudill Health Clinic (CHC) services include patient assessments, examinations, treatment, and emergency first aid.

Health clinic hours are from 8 a.m. to 5 p.m., Monday through Friday during fall and spring semesters. At other times except

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

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

Alcohol and Other Drug Education The Alcohol and Other Drug counselor provides a variety of educational programming 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 Services

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

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

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

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

Alumni Association

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

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

Camden-Carroll Library

Camden-Carroll Library is the information center of Morehead State University. The Library's collections of books, journals, newspapers, and government documents in both print and electronic format, as well as its nonprint media, support the University's curriculum and provide a wealth of materials to meet students' research, recreational, and personal enrichment needs. More than 40 public workstations located throughout the building afford students access to a world of Web-based resources, including a galaxy of online databases.

One of the library's primary tasks is to provide research assistance. The Reference staff provides students with one-on-one help with searching for and finding materials in the library and online. The goal of the library's Instructional Services is to promote information literacy skills which include the ability to find, evaluate, and use information effectively and ethically. The Library offers two courses to help students improve these skills: LSIM 101: Introduction to Library Research and LSIM 201: Living in an Information Society. Instructional Services staff provides subject and assignment specific instruction for individual classes and also conducts building tours.

Through its Interlibrary Loan services, the Library participates in state and national resource-sharing networks to obtain materials not available locally. The Regional Campus Library Services Office is responsible for providing research, document delivery, and instructional services to the faculty and students in any of Morehead State University'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, Web sites, and presentations. The lab includes color scanners, digital cameras, video capture/edit capability, color printers, and a wide variety of software packages.

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

Cooperative Education

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

Career Services

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

Government Seminars and Internships

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

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

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

International Education Study Abroad Programs

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

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

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 monthlong summer program to provide oral English training in Guangxi, China.

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

Continuing Education

The Office of Continuing Education provides noncredit continuing education and community education opportunities to meet the needs of business, industry, schools, and the public in the service region. The Office of Continuing Education offers a supportive learning environment through appropriate education facilities, learning materials, equipment, and other services. The Office of Continuing Education's goals and outcomes are to

improve the quality of life and enhance the lifelong learning process. Workshops, seminars, and training programs are sponsored by the Office of Continuing Education on-campus and off-campus. Workshops are tailored to meet the unique professional development needs of business, industry, schools, and organizations in the service region. For more information, a schedule of noncredit courses, or to develop a training program, contact the Office of Continuing Education at 307 Allie Young Hall, (606) 783-2875 or visit us on the web at <http://www.moreheadstate.edu/oce/>.

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 greater curriculum flexibility.

If you would like more information or admission forms, contact Honors Program Director, Honors House, 209 Elizabeth St., Morehead, KY 40351-1689, (606) 783-2807 or (606) 783-2726.

Leadership Learning Community

The Leadership Learning Community (LLC) is a residential experience in which students of high academic ability live and take some of their classes (if offered) in their residence hall, Butler Hall. Learning communities are created to enhance student learning. Students living in Butler Hall are also encouraged to become members of the LEAD Program (LEAD). LEAD consists of a progressive cluster of leadership courses that deal with leadership principles and leadership skill building in a contemporary setting. A major focus of this program is the civic engagement of each student in campus, community, state, national, and international issues with a situation analysis and decision-making emphasis. Each student participates in community service through a variety of service learning projects. An application is required for acceptance into both the LLC and LEAD programs. For more information, contact the office at (606) 783-2027 or (606) 783-5399.

Academic and Honors Organizations

Numerous organizations offer opportunities for academic enrichment outside the classroom. Members may participate in informal discussions with faculty and professionals, field trips, and on-campus programs. Further information is available by contacting the specific organizations listed below:

Academic/Honor

Academic Honors Student Association, Accounting Club, Aikido Club, Amazing Corporation Organization, Amnesty International, Art Education Club, Association of Information Tech Professionals, Black Gospel Ensemble, Bowling Club, Caving Club, Chemical Society, Chi Beta Gamma, College Republicans, Collegiate FFA, Collegiate Middle Level Association, Cosmopolitan Club, Criminology Club, Dance Team, Economics and Finance Club, Equestrian Club, Future Managers Society, Gamma Beta Phi, Geographical Society, Geological Society, Habitat for Humanity, HRIM/Diet Student Council, Ignite, International Studies Club, International Tuba Euphonium

Association, KEA-SP, Le Cercle Francais, Math & Computer Science, MSU Players, National Association of Industrial Technology, Phi Alpha Theta, Phi Mu Alpha Sinfonia, Phi Sigma Pi, Pi Sigma Alpha, Pinnacle Non-Traditional Honor Society, Prae Medicorum, Pre-Physician Assistant Studies Student Association, Public Relations Student Society of America, Societas Pro Legibus, Society of Manufacturing Engineers, Spanish Club, Student Association of Feminist Thought, Students in Free Enterprise, Student Nurses Association and Visual Art Guild.

College of Business and Public Affairs

College of Business and Public Affairs at a Glance

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

School of Business Administration

Greg Russell, Associate Dean

Department of Accounting, Economics & Finance

BBA - Accounting Option
BBA - Economics Option
BBA - Finance Option

Department of Information Systems

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

Department of Management & Marketing

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

School of Public Affairs

Michael Hail, Interim Associate Dean

Department of Government and Regional Analysis

BA- Government

Mission Statement

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

School of Business Administration

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

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

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

Small Business Development Center

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

Center for Economic Education

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

development training for K-12 teachers in economic education activities in Ashland and in Elliott, Carter, and Johnson counties.

Business Advisory Board

The School of Business Administration 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; Larry Columbia, The Kroger Company; Billy Joe Hall, Investment Broker; Jerry Johnson, Fifth Third Bank; Jeff Fraley, United States Achievement Academy; Stephanie Kidd, U.S. Bank; Dan Markwell, Trademark Insurance and Investments Inc.; Susan Martin, The Jockey Club Information Systems; David Michael, Community Holding Company; Mark Neff, St. Claire Regional Medical Center; Randall L. Norwood, Sealmaster Bearings; Karen C. Seiler, Louisville; John D. Sewell, Whitaker Bank Corporation; Dennis Wallingford, retired; Toyota Motor Manufacturing; Gary Wientjes, Morehead Clinic Pharmacy; Harold Wilson, Caswell Prewitt Realty Inc.; and Gary K. Young, Community Trust Bank.

Organizational Systems Research Association (OSRA)

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

Bachelor of Business Administration (BBA) General Education Requirements

For a complete listing of approved general education courses See Page 16.

Required Core

ENG 100 — Writing I	3
ENG 200 — Writing II	3
CIS 101 — Computers for Learning	3
CMSP 108 — Fundamentals of Speech Comm.	3
MATH 152 or MATH 174 or MATH 175	3
Total	15

Area Studies

Only one course may be chosen from each prefix in Area Studies courses; for example, only one course from the three ART courses

may be chosen to satisfy the nine hours of humanities for the Area Studies General Education Requirements.

Humanities

Courses listed under General Education 9

Natural and Mathematical Sciences

MATH 354 — Business Statistics	3
Any two courses from ASTR, BIOL, SCI, CHEM, GEO 101, GEOS, or PHYS courses listed under General Education (three hours per prefix)	6

Social and Behavioral Sciences

ECON 201 — Principles of Macroeconomics	3
PSY 154 — Introduction to Psychology	3
SOC 101 — General Sociology	3

Practical Living

FIN 264 — Personal Finance	3
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Integrative Component

*MNGT 499C — Strategic Management	3
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General Education Total 48

Business Requirements

Pre-Business Core

ACCT 281 — Principles of Financial Accounting	3
ACCT 282 — Principles of Managerial Accounting	3
ECON 201 — Principles of Macroeconomics	•
ECON 202 — Principles of Microeconomics	3
MNGT 160 — Business and Society	3
MNGT 261 — The Legal Environment of Business Organizations	3

Total 15

Upper Division Business Core

Students must be admitted to the School of Business

Administration degree program to be able to register for

Upper Division Business Core courses. Admission requires completion of the Pre-Business Core and a cumulative Morehead State GPA of at least 2.25 for all MSU and transfer courses.

BIS 321 — Business Communications	3
BIS 421 — Business and Technical Presentations	3
CIS 311 — Management Information Systems	3
ECON/MNGT 300 — Quant. Methods in Bus & Econ	3
FIN 360 — Business Finance	3
MKT 304 — Marketing	3
MNGT 301 — Principles of Management	3
MNGT 465 — Organizational Behavior	3
MNGT 499C — Strategic Management	•
MSU 400 — The World of Work (Business Area)	1
Any ECON course above 300	3

Total 28

Options

Choose one option from those listed.

Total	27
+Free Electives	10
Total Credit Hours for BBA Degree	128

• *Course hours have been counted in another area.*

* *Students are required to have an integrative component within the General Education requirements.*

+ *Free Electives. Business students may:*

*Apply the 10 semester hours in elective credits to Accounting, Business Information Systems, Computer Information Systems, Economics, Finance, Management, Marketing, and Real Estate courses. **By doing so, students can create the opportunity to develop a second BBA option or business minor.***

Apply the 10 elective credits toward any 100-499 level courses at the University. MSU 101 counts as 1 hour of Option Requirements

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

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

Completing a Second Option

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

Bachelor of Business Administration (BBA) Program Goals

- Goal 1: Our graduates will communicate effectively.
- Goal 2: Our graduates will know and properly analyze ethical issues faced in business.
- Goal 3: Our graduates will have a global perspective of business.
- Goal 4: Our graduates will understand the regulatory, technological, and legal aspects of business and their impact on business decisions.
- Goal 5: Our graduates will be knowledgeable and skilled in the application of analytical and quantitative tools used to solve business problems.
- Goal 6: Our graduates will be competent in their discipline.

Assessment Procedures

The School of Business Administration systematically assesses all BBA programs as a basis for program improvement and quality assurance. Measures used include the following:

- AACSB/EBI Undergraduate Student Satisfaction Survey
- AACSB/EBI Undergraduate Alumni Survey
- Assurance of Learning Assessment for BBA Program

General Business Option

In addition to the option courses listed below, the general education, BBA core and free electives must be completed. The option is composed of 27 hours of General Business Option courses.

The option is comprised of one required course in Accounting, Information Systems, Economics and Finance, Management, Marketing, Real Estate, International Business, and two approved Business electives selected from the list of approved courses below.

Pre-Business Core Courses

ACCT 281 — Principles of Financial Accounting	3
ACCT 282 — Principles of Managerial Accounting	3
*ECON 201 — Principles of Macroeconomics	
ECON 202 — Principles of Microeconomics	3
MNGT 160 — Business and Society	3
MNGT 261 — Legal Environment of Bus. Organizations	3
Total Pre-Business Core Credit Hours	15

Upper Division Business Core Courses

Prior to registering for upper division business core courses, students must apply for Admission to the BBA program. Admission requirements include completion of all pre-business core courses and an overall cumulative GPA of at least 2.25.

BIS 321 — Business Communications	3
BIS 421 — Business & Technical Presentations	3
CIS 311 — Management Information Systems	3
ECON/MNGT 300 — Quant Methods in Business & Econ	3
FIN 360 — Business Finance	3
MKT 304 — Marketing	3
MNGT 301 — Principles of Management	3
MNGT 465 — Organizational Behavior	3
*MNGT 499C — Strategic Management	3
MSU 400 — World of Work (Business Area)	1
Any ECON Course above 300	3

**Credits included in General Education Requirements*

Total Credit Hours **28**

Choose one of the following: Accounting

ACCT 375, ACCT 381, ACCT 387, or ACCT 390 3

Choose one of the following: Information Systems

CIS 211, CIS 320, CIS 322, CIS 330, CIS 340, CIS 360, CIS 413, or CIS 426 3

Choose one of the following: Economics and Finance

FIN 365, FIN 370, FIN 373, FIN 375, ECON/FIN 342, FIN 420, or ECON 351 3

Choose one of the following: Management	
MNGT 306, MNGT 310, MNGT 311, MNGT 357, MNGT 463,	3
Choose one of the following: Marketing	
MKT 340, MKT 345, MKT 354, MKT 365, MKT 452	3
Choose one of the following: Real Estate	
REAL 105 — Principles of Real Estate	3
Choose one of the following: International Business	
ECON 447, FIN 485, MKT 469, MNGT 409	3
Business electives: Any courses 300 or above, for which prerequisites are met and that are not used to fulfill any other requirements, in the following areas: ACCT, BIS, CIS, ECON, FIN, MKT, MNGT, REAL, including a maximum of 3 hours of co-operative education.	6
OPTION TOTAL	27
GENERAL EDUCATION REQUIREMENTS	48
PRE-BUSINESS CORE	15
UPPER DIVISION BUSINESS CORE	28
FREE ELECTIVES	10
TOTAL CREDIT HOURS FOR BBA DEGREE	128

General Business Minor (Non-Business Majors Only)

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

CIS 101 must be taken as the computer competency course.

Department of Accounting, Economics, & Finance

Sharon Walters, Department Coordinator
 222 Combs Building
 (606) 783-2152

Accounting

Faculty

T. Elliott, S. Meisel, E. Criscione, S. Walters, L.K. Williams

Program Competencies

Students completing the program will possess:

1. Knowledge of fundamental accounting issues.

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
- COB Co-Op Employer Performance Appraisals

Bachelor of Business Administration - Accounting Option

In addition to the option courses listed below, the general education, BBA core and free electives must be completed. The option is composed of 27 hours of specialized courses in accounting.

ACCT 381 — Intermediate Accounting I	3
ACCT 382 — Intermediate Accounting II	3
ACCT 383 — Intermediate Accounting III	3
ACCT 387 — Income Tax	3
ACCT 390 — Cost Accounting	3
ACCT 483 — Auditing	3
Approved accounting electives	9
Total	27

Approved electives for the Accounting Option:

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

CPA Exam

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

Economics

Faculty

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

Program Competencies

Students completing the program should:

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

Assessment Procedures

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

Bachelor of Business Administration - Economics Option

In addition to the option courses listed, the general education, BBA core See Page 33 and free electives must be completed. The option is composed of 27 hours of specialized courses in economics.

ECON 302 — Labor Economics, or	
ECON 455 — Economic Development and Growth	3
ECON 341 — Public Finance	3
ECON 342 — Money and Banking	3
ECON 350 — Intermediate Microeconomics	3
ECON 351 — Intermediate Macroeconomics	3
ECON 410 — History of Economic Thought	3
ECON 447 — International Economics	3
Approved economic elective	6
Total	27

Approved electives for the Economics Option

ECON 302 — Labor Economics	3
ECON 305 — Comparative Economic Systems	3
ECON 315 — Resource Economics	3
ECON 339 — Cooperative Education III, or	
ECON 439 — Cooperative Education IV	3
ECON 401 — Environmental Economics	3
ECON 403 — Urban and Regional Economics	3
ECON 455 — Economic Development and Growth	3
ECON 456 — Introduction to Econometrics	3

FIN 373 — Investments	3
FIN 472 — Portfolio Analysis	3
FIN 485 — International Finance	3
MATH 175 — Calculus I	4
MATH 275 — Calculus II	4
MATH 276 — Calculus III	4
MATH 301 — Elementary Linear Algebra	3

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

Economics Minor

ECON 201 - Principles of Macroeconomics	3
ECON 202 - Principles of Microeconomics	3
ECON 350 - Microeconomic Theory	3
ECON 351 - Macroeconomic Theory	3
Approved Economics Minor Electives	9

Approved Economics Minor Electives:

ECON 300 - Quant Methods in Business & Economics	3
ECON 302 - Labor Economics	3
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

Finance

Faculty

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

Program Competencies

Students completing the program should be qualified to:

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

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

Assessment Procedures

Finance Exit Exam
Finance Exit Survey

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

Bachelor of Business Administration - Finance Option

In addition to the option courses listed below, the general education, BBA core See Page 33, and free electives must be completed. The option is composed of 27 hours of specialized courses in finance.

FIN 373 — Investments	3
FIN 420 — Financial Markets and Institutions	3
FIN 460 — Advanced Business Finance	3
FIN 485 — International Finance	3
FIN 490 — Seminar in Financial Theory and Practice	3
Approved Finance electives	12
Total	27

Approved Finance Option Elective Courses

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

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

Corporate Finance Track

Finance Core	15
Electives chosen from approved electives	12

Financial Planner Track

Finance Core	15
ACCT 387 — Income Tax	3
FIN 372 — Retirement Planning & Employee Benefits	3
FIN 374 — Estate Planning and Taxation	3
FIN 376 — Risk Management and Insurance	3

Financial Analyst Track

Finance Core	15
FIN 472 — Portfolio Analysis	3
Approved electives	9

Real Estate Track

Finance Core	15
REAL 310 - Real Estate Law	3
REAL 400 - Real Estate Brokerage Management	3
Real Estate Electives	6
Total	27

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 electives must be substituted for the course(s) used to fulfill the BBA/Core requirement.

Department of Management & Marketing

Michelle Kunz, Department Coordinator

114H Combs Building
(606) 783-2164

Management

Faculty

L. Godwin, M. Harford, A. Hassan,
F. Mohamed, G. Russell, B. Whitaker

Program Competencies

Students completing the program will be able to:

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

Assessment Procedures

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

Bachelor of Business Administration - Management Option

In addition to the option courses listed below, the general education, BBA core and free electives must be completed. The Management Core is the five required courses in Management common to both of the Management tracks.

MNGT 306 — Production and Quality Management	3
MNGT 310 — Small Business Organization	3
MNGT 311 — Human Resource Management	3
MNGT 463 — Law and Ethics of Business	3
MNGT 475 — Business Leadership and Teamwork	3
Total	15

Students must choose a "track" to complete the 27 hours in the Management Option.

Management Track (General)

Management Option Core	15
MNGT 357 — Business Information and Industry Analysis	3
Management Elective (MNGT prefix)	3
Business Elective chosen from approved electives	6

International Management Track

Management Option Core	15
ECON 447 — International Economics, or FIN 485 — International Finance	3
MKT 469 — International Marketing	3
MNGT 409 — International Management	3
Business Elective chosen from approved MNGT elective	3

In addition, students in the International Management Track will be required to complete:

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

Approved electives for the Management Option

ECON 447 — International Economics	3
FIN 342 — Money and Banking	3
FIN 373 — Investments	3
MKT 305 — Purchasing	3
MKT 345 — Marketing Strategies for Small Business	3
MKT 350 — Personal Selling	3
MKT 351 — Sales Management	3
MKT 354 — Consumer Behavior	3
MKT 451 — Retail Marketing	3
MKT 452 — Market Research and Analysis	3
MKT 469 — International Marketing	3
MNGT 339 — Cooperative Education III, or MNGT 439 — Cooperative Education IV	3
MNGT 362 — The Legal Envir. & Business Practices	3
MNGT/FIN 365 — Financial Issues for Small Business	3
MNGT 399 — Selected Workshop Topics	3
MNGT 409 — International Management	3
MNGT 411 — Labor Relations	3
MNGT 417 — Management and Marketing of Public and Non-Profit Organizations	3
MNGT 420 — New Venture Creation	3
MNGT 425 - Training and Development in Industry	3
MNGT 476 — Special Problems in Management	3
REAL 105 — Principles of Real Estate	3
REAL 309 — Real Estate Land Planning and Development	3
REAL 330 — Real Estate Property Management	3
REAL 335 — Real Estate Investment	3

Small Business Management & Entrepreneurship

Faculty

A. Hassan & F. Mohamed

Program Competencies

Upon successful completion of the program, the student should be able to:

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

Assessment Procedures

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

Bachelor of Business Administration - Small Business Management & Entrepreneurship Option

In addition to the option courses listed, the general education, BBA core and free electives must be completed. The option is comprised of five required courses, an International Business elective, and three approved electives.

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 Bus	3
MNGT 420 — New Venture Creation	3
International Business Elective	3
Approved Small Bus. Mgnt & Entrepren. electives	9
Total	27

International Business Elective 3
Choose one of the following courses:
 MNGT 409, MKT 469, ECON 447, or FIN 485

Approved Electives - Small Business & Entrepreneurship Option
 MNGT 339 - Cooperative Education III, or
 MNGT 439 - Cooperative Education IV 3
 MNGT 463 - Law & Ethics in Business 3
 MNGT 475 - Leadership 3
 MNGT 476 - Special Problems in Management 3
 MKT 340 - Interactive E-Marketing 3
 REAL 105 - Real Estate Principles 3
 FIN 370 - Working Capital Management 3
 CIS 211 - Advance Microcomputer Applications 3
 BIS 320 - Web Tech. & Informational Architecture 3
 Additional International Course
Choose one of the following courses:
 Must be a different course than International Business Elective
 MNGT 409, MKT 469, ECON 447, or FIN 485 3

Marketing

Faculty

K. Henderson, M. Kunz, B. Lyons

Program Competencies

Students completing the program should possess the ability to:

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

Assessment Procedures

Comprehensive Marketing Exit Exam
 Comprehensive Marketing Case Analysis

Bachelor of Business Administration - Marketing Option

In addition to the option courses listed, the general education, BBA core and free electives must be completed. The option is composed of 27 hours of specialized courses in marketing.

MKT 350 — Personal Selling 3
 MKT 354 — Consumer Behavior 3
 MKT 452 — Marketing Research and Analysis 3
 MKT 453 — Marketing Planning and Strategies 3
 MKT 454 — Integrated Marketing Communication 3
 MKT 469 — International Marketing 3
 Approved Marketing electives 9
 (six of the nine hours must have a MKT prefix)
Total 27

Approved electives for the Marketing Option

MKT 339 — Cooperative Education III, or
 MKT 439 — Cooperative Education IV 3
 MKT 340 — Interactive E-Marketing 3
 MKT 345 — Marketing Strategies for Small Business 3
 MKT 351 — Sales Management 3
 MKT 365 — Services Marketing 3
 MKT 370 — Direct and Database Marketing 3
 MKT 451 — Retail Marketing 3
 MKT 455 — Advertising 3
 MKT 476 — Special Problems in Marketing 3
 MNGT 463 — Law and Ethics in Business 3
 REAL 320 — Real Estate Marketing 3

Minor in Marketing

Requirements for Marketing Minor

MKT 304 — Marketing 3
 MKT 350 — Personal Selling 3
 MKT 354 — Consumer Behavior 3
 MKT 454 — Integrated Marketing Communication 3
 Approved Marketing Minor electives 12
Total 24

Approved electives for the Marketing Minor

MKT 340 — Interactive E-Marketing 3
 MKT 345 — Marketing Strategies for Small Business 3
 MKT 351 — Sales Management 3
 MKT 365 — Services Marketing 3
 MKT 370 — Direct and Database Marketing 3
 MKT 451 — Retail Marketing 3
 MKT 469 — International Marketing 3

Sport Management

Faculty

S. Chen, J. Hypes, M. Hypes, W. Kerr

Program Competencies

The student will demonstrate competencies in the following areas:

1. Socio-culture context of sport.
2. Management and leadership in sport.
3. Ethics in sport management.
4. Marketing in sport.
5. Public relations in sport.
6. Financial management in sport.
7. Legal aspects in sport.
8. Research in sport.
9. Economics in sport.
10. Governance in sport.
11. Communication in sport.
12. Field experience in sport management.

Assessment Procedures

Senior capstone course

Sport Management Area of Concentration General Education Core Requirements

Required Core

CMSP 108 — Fundamentals of Speech Communication	3
ENG 100 — Writing I	3
ENG 200 — Writing II	3
Math Reasoning Course	3
Computer Competency	3
Area Studies - <i>Only one course may be chosen from each prefix in area studies courses.</i>	
Humanities	9
Natural and Mathematical Sciences	9
Social and Behavioral Sciences	9
Practical Living	3
Integrative Component (SPMT 499C)	3
Total	48

Core Electives

Students will select 21 hours from the following list based on their interests and career objectives. Prerequisites for electives are in italics below the course title.

ACCT 281 — Principles of Financial Accounting	3
BIS 321 — Business Communications	3
CIS 311 — Management Information Systems	3
CMAF 366 - Desktop Publishing & Pub. Tech II	3
CMAF 382 — Principles of Public Relations	3
CMAF 383 — Principles of Advertising	3
CMEM 320 - Advertising & Sales for Elect. Media	3
CMEM 390 - Electronic Media Web Layout & Design	3
CMEM 459 — Electronic Media Law & Regulations	3
CMJN 492 — Media Law and Ethics	3
CMSP 367 - Intro to Organizational Communication	3
CMSP 385 - Persuasion	3
CMSP 390 — Conflict and Communication	3
CMSP 401 - Communication and Leadership	3
ECON 202 — Principles of Microeconomics	3
MKT 304 — Marketing	3
MKT 350 - Personal Selling	3
MKT 354 - Consumer Behavior	3
MKT 454 — Integrated Marketing Communication	3
MNGT 261 — The Legal Envir. of Business Org.	3
MNGT 301 — Principles of Management	3
MNGT 311 — Human Resource Management	3
MNGT 463 — Law and Ethics in Business	3
Total	21

Area of Concentration

SPMT 100 — Introduction to Sport Management	3
SPMT 102 — Diversity in Sport and Phys. Act.	3
SPMT 200 — Mngt. of Sport and Phys. Act. Programs	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
PHED 430 — Psychosocial Dimensions of Sport and Physical Activity	3
SPMT 450 — Field Experience Preparation	2
SPMT 471 — Sport Management Internship	15
SPMT 480 — Legal Aspects of Sport and Phys. Act.	3
SPMT 481 — Employee Service Management in Sport and Physical Activity Settings	3
Total	59
Total Program	12

**Depending on the core electives chosen, the student may exceed the 128 hours.*

Sport Management Concentration Suggested Course Sequence

Freshman Year

First Semester

ENG 100 — Writing I	3
Computer Competency	3
Humanities	3
Social & Behavioral Sciences	3
SPMT 100 — Introduction to Sport Management	3
MSU 101	1
Total	16

Second Semester

CMSP 108 — Fundamentals of Speech Comm.	3
Humanities	3
Natural and Mathematical Sciences	3
Social and Behavioral Sciences	3
SPMT 102 — Diversity in Sport and Physical Activity	3
Total	15

Sophomore Year

First Semester

Core Elective	3
ENG 200 — Writing II	3
Natural and Mathematical Science	3
Practical Living	3
SPMT 200 — Mngt. of Sport & Phy. Activity Programs	3
Total	15

Second Semester

Humanities	3
Natural and Mathematical Science	3
Social & Behavioral Science	3
SPMT 204 — Sport Finance	3
SPMT 206 — Ethics in Sport & Physical Act.	3
Total	15

Junior Year

First Semester

Core Electives	6
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Natural & Mathematical Science	3
SPMT 304 — Sport Economics	3
SPMT 380 — Sport Media Relations	3
Total	15

Second Semester

Core Electives	3
SPMT 307 — Sport Marketing	3
SPMT 309 — Risk Mngt. in Sport & Physical Activity	3
SPMT 310 — Governance in Sport	3
Total	12

Senior Year

First Semester

Core Electives	3
SPMT 402 — Plan., Designing, & Managing Spt Fac	3
SPMT 480 — Legal Aspects of Sport & Physical Act	3
SPMT 481 — Employee Svc Mgt in Sport & Phys Act	3
Total	12

Second Semester

Core Electives	6
PHED 430 — Psychosocial Dimensions of Sport	3
SPMT 499C — Senior Capstone	3
SPMT 450 — Field Experience Preparation	2
Total	14

Summer Semester

SPMT 471-Sport Management Internship	15
Total	15

Department of Information Systems

Scott Wymer, Department Coordinator

108C Combs Building
(606) 783-2163

Computer Information Systems

Faculty

H. Choi, S. Hunt, E. Kim, D. Kizzier,
R. McCoy, S. Nataraj, E. Regan, S. Wymer

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

Students completing the program should be able to:

1. Apply problem solving and analytical reasoning skills within the context of information systems.
2. Understand the strategic importance of information systems as an integral part of organizational performance.
3. Apply concepts and processes of computer information systems analysis, design, development, and implementation.
4. Demonstrate a mastery of database concepts and technologies for the design, implementation, and management of information resources.
5. Design, code, and successfully execute a complex business solution using a modern programming language.
6. Demonstrate knowledge of telecommunications, networking, and multi-user, wide-area platforms.
7. Model organizational and quantitative processes and functions (such as accounting, sales, distribution, and production/space as a foundation for designing information systems solutions).
8. Design and implement an Internet-based information systems solution for E-business.
9. Use project management methodology to successfully plan, execute and evaluate an information systems project for a client.

Assessment Procedures

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

Bachelor of Business Administration - Computer Information Systems Option

In addition to the option courses, students must complete the general education, BBA core See Page 33, and general electives. The option is composed of 27 hours of specialized courses in computer information systems. Students complete 18 hours of CIS Core courses and 9 hours of approved CIS electives.

CIS 200 — Problem Solving in Information Systems	3
CIS 211 — Spreadsheet & Database Applicants	3
CIS 320 — Web Technologies & Design	3
CIS 340 — Telecommunications and Networking	3
CIS 413 — IS Design & Implementation	3
CIS 490 — IT Project Management and Systems Project	3
Approved CIS electives	3
Total	27

Approved electives for the CIS Option

CIS 202 — Introduction to Programming-Visual Basic	3
CIS 205 — Introduction to Programming-C++	3
CIS 214 — Introduction to Programming-Java	3
CIS 302 — Advanced Programming-Visual Basic	3
CIS 305 — Advanced Programming-C++	3
CIS 314 — Advanced Programming-Java	3
CIS 322 — Security and Information Assurance	3

CIS 360 — Business Enterprise Systems	3
CIS 398 — Practicum in IS	3
CIS 399 — Selected Workshop Topics	1-4
CIS 405 — Web Development Strategies and E-Commerce	3
CIS 426 — Database Management Systems	3
CIS 430 — Advanced Topics in IS	3
CIS 442 — Network Administration	3
CIS 443 — Advanced Computer Networking Administration	3
CIS 476 — Special Topics	3
CIS 490 — Cases in Information Technology	3
BIS 425 — Training in Business & Industry	3

Students may choose one of three "specializations/tracks" to follow in the Computer Information Systems Option. Each specialization/track consists of nine credit hours.

Business Application Development

- CIS 202, CIS 205, or CIS 214 - Beginning Programming
- CIS 302, CIS 305, or CIS 314 - Advanced Programming
- CIS 426 - Database Management Systems

Information Systems Management

- CIS 360 - Business Enterprise Systems
- CIS 322 - Security & Information Assurance
- IS Elective

Health Informatics (HIT)

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

Computer Information Systems Minor

Requirements for minor in CIS

CIS 200 — Logic and Design of Computer Programs	3
CIS 202 — Introduction to Programming- Visual Basic	3
CIS 205 — Introduction to Programming-C++, or CIS 215 — Introduction to Programming- COBOL	3
CIS 305 — Advanced Programming-C++, or CIS 315 — Advanced Programming-COBOL	3
CIS 311 — Management Information Systems	3
CIS 340 — Telecommunications and Networking	3
CIS 405 — Web Development Strategies and E-commerce, or BIS 320 — Web Technologies and Information Architecture	3
CIS approved electives	3

Total 24

Approved electives for the CIS Minor

BIS 320 — Web Technologies and Information Architecture	3
BIS 350 — Computer Systems Support & Security	3
CIS 211 — Advanced Microcomputer Applications	3
CIS 303 — Data Structures	3
CIS 314 — Advanced Programming-Java	3
CIS 325 — Analysis and Design of Information Systems	3

CIS 405 — Web Development Strategies & E-commerce	3
CIS 426 — Database Management Systems	3
CIS 442 — Network Administration	3

Interdisciplinary Computing Minor

Required Core

CIS 211 - Spreadsheet & Database Applications	3
CIS 311 - Management Information Systems	3
CIS 320 - Web Technologies & Design	3
CIS 322 - Security & Information Assurance	3
CIS 360 - Business Enterprise Systems	3
Approved Electives - discipline or career focus	6
Total	21

Approved Electives

ITCD 203, MKT 370, ACCT 391, ART 309, CMAP 366, CS 172, SSE 110, SSE 120, EDEL 302, GEO 202, GEO 349, GEO 351, IET 242, IET 300, IET 320.

Other electives based upon students' career track may be approved depending on the technology component of the course. Consult with advisor and/or IS Department Chair for approval.

Business & Information Technology Education

Faculty

D. Everett, H. Iwu

The mission of the Business and Information Technology Education program is to prepare exemplary educators in business, computer, and marketing education. Forecasters reveal that the workplace will continue to become more dependent on workers who have skills in computer hardware and software, have knowledge in business and computer systems, and display the attitude to continue to learn and grow. Students who elect the teacher-training specialty in the Information Systems department are entering into an arena where they have an opportunity to impact this future by preparing their students to compete for and enter the dynamic, global work environment.

The Business and Information Technology Education program is designed for those students who are seeking certification to teach business, computer, and marketing courses in Grades 5-12. By completing this program, students are earning the Kentucky Business and Marketing Education certification. An endorsement (18 hours) also may be completed for teaching computer science.

Program Competencies

Students completing the program should acquire the following competencies:

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

Students completing the program should be able to teach the following concepts as approved by the Kentucky Department of Education:

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

Assessment Procedures

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

Bachelor of Business Administration -Business and Information Technology Education Option

In addition to the BBA general education course requirements, students must complete the designated BBA core courses, specialized courses in BIS and CIS, and professional education courses listed below.

General Education Requirements

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

Required Core

CIS 101 — Computers for Learning	3
CMSP 108 — Fundamentals of Speech Communication	3
ENG 100 — Writing I	3
ENG 200 — Writing II	3
MATH 152 — College Algebra	3
Total	15

Area Studies

Only one course may be chosen from each prefix in Area Studies courses; for example, only one course from the three ART courses may be chosen to satisfy the nine hours of humanities for the Area Studies General Education Requirements.

Humanities

(listed under General Education See Page 16	9
Natural and Mathematical Sciences	
MATH 354 — Business Statistics	3
Any two courses from BIOL, CHEM, GEOS, PHYS, or SCI courses listed under General Education (three hours per prefix)	6

Social and Behavioral Sciences

ECON 201 — Principles of Macroeconomics	3
EDF 211 — Human Growth and Development	3
Any course listed under general education from AGR, GEO, GOVT, HIS, IET, NAHS, PSY, RAPP, SOC, or WST	3

Practical Living

FIN 264 — Personal Finance	3
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Integrative Component

BIS 499C — Teaching Methods in Business and Information Technology Education	6
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General Education Total 48

BBA Supplemental Requirement

ECON 202 — Principles of Microeconomics	3
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Supplemental Requirement

MSU 101 — Discovering University Life	1
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BBA Core for Business and Information - Technology Education Option

ACCT 281 — Principles of Financial Accounting	3
ACCT 282 — Principles of Managerial Accounting	3
BIS 321 — Business Communications	3
BIS 421 — Business and Technical Presentations	3
CIS 311 — Management Information Systems	3
MNGT 261 — The Legal Environment of Business Organizations	3
MNGT 301 — Principles of Management	3
MKT 304 — Marketing	3
One approved MKT elective	3
Total	27

BIS/CIS Courses for Business and Information Technology Education Option

BIS 216 — Advanced Document Processing	3
BIS 320 — Web Technologies and Information Architecture	3
BIS 330 — Collaborative Technology and Knowledge Management	3
BIS 350 — Computer Systems Support & Security	3
BIS 425 — Training and Development for Industry	3
BIS 440 — Planning and Implementation of IT	3

*BIS 499C — Teaching Methods in Business and Information Technology Education	*
CIS 211 — Advanced Microcomputer Applications	3
CIS 340 — Telecommunications and Networking, or CIS 442 — Network Administration	3
Total	24

** This course is calculated in the hours for General Education.*

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

Professional Education

*BIS 499C — Teaching Methods in Business and Information Technology Education	*
EDF 207 — Foundations of Education	3
EDF 311 — Learning Theories and Assessment in Education	3
EDMG 306 — Development and Learning in Middle Grades	3
EDSE 416 — Clinical Practice	12
EDSE 483 — Classroom Organization and Management for Secondary Teachers	3
EDSP 332 — Teaching the Exceptional Student	2
Total	26

** This course is calculated in the hours for General Education.*

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

Associate of Applied Business (AAB) - Computer Information Systems

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

Program Competencies

Students completing the program should be able to:

1. Understand business fundamentals required for success in contemporary organizations.
2. Understand basic concepts of computer programming design and logic.
3. Demonstrate proficiency in advanced microcomputer applications.
4. Troubleshoot and maintain PC hardware and software.
5. Code a moderately complex problem in COBOL or C++ and have that program execute successfully.

General Education

CIS 101 — Computers for Learning	3
CMSP 108 — Fundamentals of Speech Communication	3

ECON 201 — Principles of Macroeconomics	3
ENG 100 — Writing I	3
ENG 200 — Writing II	3
FIN 264 — Personal Finance	3
MATH 152 — College Algebra	3
Humanities (one course from approved list)	3
Total	24

Supplemental Requirement

MSU 101 — Discovering University Life	1
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BBA Supplemental Requirement

ECON 202 — Principles of Microeconomics	3
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Business Core

ACCT 281 — Principles of Financial Accounting	3
ACCT 282 — Principles of Managerial Accounting	3
BIS 321 — Business Communications	3
MKT 304 — Marketing	3
MNGT 261 — The Legal Environment of Business Organizations	3
MNGT 301 — Principles of Management	3
Total	18

CIS (AAB) Option Requirements

The option is composed of 15 hours — nine hours of required CIS courses plus six hours of approved electives.

CIS 101 — Computers for Learning	3
CIS 200 — Logic and Design of Computer Programs	3
CIS 202 — Introduction to Programming- Visual Basic	3
CIS 205 — Introduction to Programming-C++, or CIS 215 — Introduction to Programming-COBOL	3
CIS 340 — Telecommunications and Networking	3
Approved CIS Electives	6
Total	18
Total hours for degree	64

Approved Electives for CIS Option

BIS 320 — Web Technologies and Information Architecture	3
BIS 350 — Computer Systems Support and Security	3
CIS 211 — Advanced Microcomputer Applications	3
CIS 305 — Advanced Programming-C++	3
CIS 314 — Advanced Programming-Java	3
CIS 315 — Advanced Programming-COBOL	3

School of Public Affairs

Michael Hail, Interim Associate Dean

110G Combs Building
(606) 783-5420

Department of Government and Regional Analysis

Regional Analysis Emphasis Program

Regional Analysis Minor

Government Major and Minor

Government Major with Regional Analysis Emphasis

Regional Analysis (IRAPP) Program

Faculty

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

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

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

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

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

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

The Regional Analysis Scholars Program provides scholarship awards to students who have demonstrated scholastic excellence.

Awards range from \$1,000 to \$6,000 per year and are based on ACT composite score and GPA. More information on IRAPP is available by contacting the Associate Dean of the Institute for Regional Analysis and Public Policy, 110F Combs, Morehead, KY 40351, telephone (606) 783-5419, m.hail@moreheadstate.edu.

Regional Analysis and Public Policy Emphasis

Admission Requirements

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

Program Competencies

The student will:

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

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

Assessment Procedures

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

Emphasis: Regional Analysis and Public Policy

Required coursework:

RAPP 201 — Society, Nature and Development	3
RAPP 202 — Basic Computer Tech. in Regional Analysis	3
RAPP 300 — Seminar in Regional Issues	3
RAPP 350 — Practicing Regional Analysis I	3
RAPP 450 — Practicing Regional Analysis II	3
RAPP 490 — Seminar in Regional Issues II	3
Total Required Hours	18

Regional Analysis and Public Policy Minor

Admission Requirements

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

Program Competencies

The student will:

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

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

Assessment Procedures

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

The following specific general education requirements must be completed prior to enrolling in RAPP 202 — Sociology 101 Computer Enhanced or Math 152 or Math ACT of 20 or higher.

Minor: Regional Analysis and Public Policy

Required coursework:

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

Total Required Hours 15

Elective coursework:

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

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

Total Elective Hours 9
Total Hours 24

Government

Faculty

M. Bessette (IRAPP), R. Caric, W. Green, M. Hail (IRAPP), T. Hare, S. Lange (IRAPP), E. Lewis, C. McMichael, J. Masterson, E. Reeves, D. Rudy, M. Sloan (IRAPP), P. Steele

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 in Political Inquiry

Bachelor of Arts

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

General Education Requirements 48

See general education requirements for the University.

Major

Required Introductory Courses

<i>The following courses are required:</i>	12
GOVT 141 — United States Government	3
GOVT 180 — Introduction to Political Theory	3
GOVT 230 — Introduction to Comparative Politics	3
GOVT 289 — Methods of Political Inquiry	3

Required Advanced Subfield Courses 12

Choose one course in each of the four subfields:

1. American Politics (GOVT 305; 320-328; 340-349; 351-359)
2. Political Theory (GOVT 310-319)
3. Comparative Politics (GOVT 301-304, 329-339)
4. International Politics (GOVT 360-369)

Required Advanced Courses

Complete the following:	9
GOVT 499C — Senior Seminar	3
GOVT electives (any 300 or 400 level GOVT course)	6
Total	33

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

Government-Regional Analysis Program

Faculty

M. Bessette (IRAPP), R. Caric, W. Green, M. Hail (IRAPP), S. Lange (IRAPP), E. Lewis, J. Masterson, M. Sloan (IRAPP), P. Steele

The Institute for Regional Analysis & Public Policy, MSU's Program of Distinction, offers a core of courses (18 hours) in regional analysis that can be combined with the following program.

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 inequities 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.
3. 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 carry out studies in their area of expertise that include a significant analysis of regional resources and issues.
7. The ability to present research and policy reports that are comprehensible to audiences of various public policymakers.
8. The ability to interpret the output of regional resource analyses and their potential use in formulating public policymakers.

Assessment Procedures

Capstone course

Bachelor of Arts

General Education Requirements 48

See general education requirements for the University.

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

Group I Electives

Select three from the following:

GOVT 344 — Kentucky Government	3
GOVT 347 — American Public Policy	3
GOVT 351 — Public Administration	3
GOVT 364 — International Relations	3
GOVT 242 — State and Local Government	3
GOVT 329 — North American Politics: United States and Canada	3

Group II Free Electives

Any GOVT electives including courses not selected in group I. GOVT 499C — Senior Seminar (recommended).

Regional Analysis Courses

RAPP 201 — Society, Nature, & Development	3
RAPP 202 — Basic Computer Tech in Reg Analysis	3
RAPP 300 — Seminar in Regional Issues I	3
RAPP 350 — Practicing Regional Analysis I	3
RAPP 450 — Practicing Regional Analysis II	3
RAPP 490 — Seminar in Regional Issues II	3

Supplemental Requirements

To be chosen with the approval of student's advisor:

ECON 401 — Environmental Economics, or GEO 349 — Introduction to GIS/Cartography I	3
GOVT 324 — Environmental Law and Policy	3

Government Minor

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

Required Advanced Subfield Courses 9

Choose one course in three of the four subfields:

1. American Politics (GOVT 305; 320-328; 340-349; 351-359)
2. Political Theory (GOVT 310-319)
3. Comparative Politics (GOVT 301-304, 329-339)
4. International Politics (GOVT 360-369)

Required Advances Courses

GOVT elective	3
Total	24

Three GEO electives	9
Minimum for a minor	21

Geography

Faculty

R. Berglee, V. Craig, J. Holcomb, G. Odell, E. Ratajeski

The Department of Earth and Space Sciences offers a well-balanced undergraduate program in geography, which includes a 33-hour major and a 21-hour minor.

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.

Program Competencies

Students completing the program will:

1. Demonstrate appropriate content knowledge of core geographic concepts.
2. Be able to interpret and use a variety of maps, as well as demonstrate proficiency in storage, management, and manipulation, and display of geographic data in order to answer research questions and solve problems.
3. Be able to conduct original research, and communicate research results effectively in written and oral formats.

Assessment Procedures

- Senior Exit Exam
- Performance in Geospatial Skills Courses
- Senior Capstone Project

Bachelor of Arts

General Education Requirements **48**

See general education requirements for the University.

Major

GEO 100 — Fundamentals of Geography	3
GEO 101 — Physical Geography	3
GEO 201 — Map Interpretation and Analysis	3
GEO 202 — Computer Tech in Reg Analysis	3
GEO 241 — United States and Canada	3

Three technical hours from the following: **3**

GEO 349 — Introduction to GIS/Cartography	
GEO 351 — Geographic Information Systems	
GEO 355 — Remote Sensing	
GEO 499C — Senior Seminar in Geography	3
Four GEO electives	12

Minimum for a major **33**

Minor

GEO 100 — Fundamentals of Geography	3
GEO 101 — Physical Geography	3
GEO 201 — Map Interpretation and Analysis	3
GEO 241 — United States and Canada	3

Certificate in Geographic Information Science

The Certificate in Geographic Information Science is an interdisciplinary opportunity designed to provide students and professionals with the theoretical, practical and technical skills that are essential for the analysis of map products and the manipulation of spatial data. Students from a wide range of disciplines can benefit from this certificate program by becoming proficient in the use and application of geographic technologies through an appropriate set of courses. This certification program is open to all MSU students. Students in any discipline can complete this certificate program to better advance their educational standing for employment or graduate education.

To receive the 15 credit hour Certificate in Geographic Information Science, an individual must successfully complete each of the listed required courses with a grade of "C" or better.

GEO 201 — Map Interpretation and Analysis	3
GEO 349 — Introduction to GIS/Cartography	3
GEO 351 — Geographic Information Systems	3
GEO 353 — GIS Applications	3
GEO 355 — Remote Sensing of the Environment	3

Upon completion of the required courses, the Certificate in Geographic Information Science will be issued to the individual by the Department of Earth & Space Sciences.

Geography-Regional Analysis Program

The College of Business and Public Affairs offers a core of courses (18 hours) in regional analysis that can be combined with the following program.

Program Competencies

Students are expected to have:

1. The technical ability to store, manage, manipulate, and display geographic data in order to answer research questions and solve problems.
2. The ability to perform synthetic regional analyses with a focus on economic development, including consideration of factors contributing to growth and its impact on the physical environment.
3. The ability to perform real world location analyses, which are based on traditional geographic theories and concepts.
4. The ability to recognize and value the varied nature of the human condition across individuals and culture groups through the practice of world regional analysis.
5. The ability to express methods of geographic investigation, to conduct original studies, and to present findings of those investigations in written and oral format.
6. The ability to carry out studies in their area of expertise that include a significant analysis of regional resources and issues.
7. The ability to present research and policy reports that are comprehensible to audiences of various public policymakers.
8. The ability to interpret the output of regional resource analysis and their potential use in formulating public policy.

Assessment Procedures

Capstone course

Bachelor of Arts

General Education Requirements 48

See general education requirements for the University.

Major

GEO 100 — Fundamentals of Geography	3
GEO 101 — Physical Geography	3
GEO 201 — Map Interpretation and Analysis	3
GEO 211 — Economic Geography	3
GEO 349 — Introduction to GIS/Cartography	3
GEO 499C — Senior Seminar in Geography	3
Four GEO electives	12
Total	30

Regional Analysis Courses

RAPP 201 — Society, Nature, & Development	3
RAPP 202 — Basic Computer Tech in Reg. Analysis	3
RAPP 300 — Seminar in Regional Issues I	3
RAPP 350 — Practicing Regional Analysis I	3
RAPP 450 — Practicing Regional Analysis II	3
RAPP 490 — Seminar in Regional Issues II	3
Total	18

Supplemental Requirements

ECON 401 — Environmental Economics	3
GOVT 324 — Environmental Law and Policy	3

College of Education

College of Education at a Glance

Cathy Gunn, Dean

100 Ginger Hall
(606) 783-2040
E-mail: c.gunn@moreheadstate.edu

Department of Early Childhood, Elementary, and Special Education

BA - Interdisciplinary Early Childhood Education
BA - Elementary Education P-5
Learning and Behavior Disorders P-12/P-5 Special Education Certificate
Moderate and Severe Disability P-12/P-5 Special Education Certificate

Department of Middle Grades & Secondary Education

BA - Middle Grades Education 5-9

Department of Foundational and Graduate Studies in Education

Graduate Degrees Only
Undergraduate Courses

Educational Service Unit

Teacher Recruitment Program

Teacher Education Program Admissions

Clinical Practice Placement

Clinical & Field Scheduling

Teacher Certification

Kentucky Teacher Internship Program

Teacher Education Program (TEP) and Professional Experiences

Regulations are subject to change by the Education Professional Standards Board (EPSB) and/or the University Teacher Education Council. Due to 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.

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

Teacher Education Program Policies Handbook

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

Early Childhood, Elementary, Middle Grades, and Special Education

Students in early childhood, elementary and middle grades education must select an area of concentration in either interdisciplinary early childhood (teaching certification in birth to primary); early elementary (teaching certification in grades P-5); or middle grades (teaching certification in grades 5-9). Students in special education must select an area of concentration in learning and behavior disorders (LBD) certification in grades P-12 or (MSD) certification in grades P-12. Within each of those areas, a student will choose, dual P-5 certification or 5-9 certification and may teach in both the special education and regular classroom.

Students may select an approved major, which will require additional classes. There is a nonteaching major and a nonteaching minor in special education.

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, chemistry, earth and space science, English, mathematics, physics, or social studies.

Other Education Content Areas

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

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 to the TEP coordinator by the dates posted on the ESU Web page. The electronic application/portfolio is to include the following:

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

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

TEP Application for Transfer Students Admitted at Another Kentucky Institution

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

Writing Proficiency Requirement

Students applying for TEP at MSU must take the Writing Preprofessional Skills Test (PPST) and obtain a minimum score of 172.

The PPST Writing test is available in two formats. Test dates and test sites (which include MSU) are listed in the Educational Testing Service Registration Booklet, which is available in the MSU Testing Center (501 Ginger Hall). The computer-based version is available in most major cities, including Lexington, Covington, and Louisville. Check the ETS Web site or PRAXIS Registration Bulletin for additional information and/or to schedule testing. Please allow ample time for test results to be

submitted to the MSU Testing Center prior to applying for admission.

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

Criteria for Admission

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

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

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

Transfer of appropriate education courses from another institution is contingent upon successful completion of required field experiences in the public schools and clinical experiences on

campus. Documentation is required. The appropriate department in the College of Education shall approve substitution of education courses. No transfer grades below "C" are accepted in IECE, early elementary, middle grades, or special education programs.

Education courses completed more than five years prior to 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:

AGR 392 — Methods of Instructional Technology
AGR 470 — Methods of Instruction
AGR 478 — Clinical Practice in Agriculture
ART 300 — Elementary Materials and Methods
ART 301 — Field Experience in Art Education
ART 321 — Materials and Methods for Secondary Art
BIOL 402 — Integrated Biology, Mathematics, and Physical Sciences Teaching Methods
BIOL 403 — Integrated Biology, Mathematics, Physical Sciences Field Experiences in Teaching
BIS 499C — Teaching Methods in Business and Information Technology Education
CTE 392 — Methods of Instructional Technology
CTE 470 — Methods of Instruction
CTE 478 — Clinical Practice
EDEC 426 — Activities and Materials: Infants and Toddlers
EDEC 428 — Activities and Materials: 3-5 year olds
EDEE 321 — Teaching Math in Early Elementary Grades
EDEE 322 — Teaching Social Studies in Early Elementary Grades
EDEE 323 — Language Arts for Early Elementary
EDEE 331 — Reading for Early Elementary Teachers
EDEE 423 — Clinical Practice (P-5)
EDF 311 — Learning Theories and Assessment in Education
EDEL 333 — Fundamentals of Elementary Education
EDEM 499C — Senior Capstone
EDMG 332 — Teaching Reading in the Middle Grades Content Area
EDMG 341 — Teaching Math in Middle Grades
EDMG 342 — Teaching Social Studies in the Middle Grades
EDMG 343 — Teaching Language Arts in the Middle Grades
EDMG 446 — Clinical Practice (5-9)
EDSE 312 — Educational Methods and Technology
EDSE 416 — Clinical Practice Secondary
EDSP 365 — Including Students with Diverse Needs in the

Classroom

EDSP 373 - Curriculum for Students with MSD
EDSP 374 — Teaching Students With MSD
EDSP 375 - Practicum in Education of Students with MSD
EDSP 435 — Clinical Practice (LBD)
EDSP 437 — Clinical Practice (MSD)
EDSP 353 — Language Arts for Students with LBD
EDSP 355 — Teaching Students with LBD
EDSP 357 — Math and Content Area Teaching for Students with LBD
EDSP 359 — Practicum in LBD
EDUC 476 — Reading in the Secondary School
EDUC 482 — Classroom Management and Assessment
ENG 382 — Teaching Writing in Secondary Schools
ENG 500 — Studies in English for Teachers
FRN 405 — Linguistics and Language Teaching
HIS 451 — Curriculum and Instruction for Social Studies
HIS 499D — Teaching of Social Studies
HLTH 301 — Health, Safety and Nutrition for Early Elementary
HPE 300 — Methods of Teaching Elementary Physical Education
HPE 302 — Methods of Teaching Elementary Health Education
HPE 303 — Methods of Teaching Secondary Physical Education
HPE 304 — Methods of Teaching Secondary Health Education
HPE 499C — Senior Seminar
HS 392 — Methods of Instructional Technology
HS 470 — Methods of Instruction
HS 478 — Clinical Practice Human Sciences
HS 573 — Curriculum Development in Home Economics
IECE 411 — The Role of the Teacher: Creating a Learning Environment for Diverse Groups
IECE 425 — Clinical Practice
IET 520 — Industrial Arts for the Elementary Teacher
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 Services Unit. An online application for clinical practice must be submitted at the beginning of the semester PRIOR to the clinical semester. (August for the Spring Semester and January for the Fall Semester).
2. Admission to the Teacher Education Program is required.
3. Applicant must have a grade point average of 2.50 on a 4.0 scale on all coursework completed (includes transfer credit).
4. Coursework completed at Morehead State University must have an overall 2.5 GPA.

5. A grade point average of 2.50 on a 4.0 scale in area of concentration, major(s), and academic components.
6. For all teacher education candidate, a minimum grade of "C" is required in courses requiring field experience hours AND all TEP restricted courses (those courses requiring TEP admission as a prerequisite) with an overall grade point average of 2.5 on a 4.0 scale in area of concentration, major(s), and academic components.
7. Completion of prerequisite courses.

Secondary Certification Programs

EDF 207, 211, 311, EDSE 312, EDSP 332/230 EDSE 483 and required methods or field experience courses.

5-12 Certification Programs

AGR - CTE 207, EDF 211, EDSP 332/230, AGR 388, 392, 470, 478

IET - CTE 207, 388, 392, 470, 478, EDF 311, EDEM 330, EDSP 332/230, IET 496, 499C

BITE - EDF 207, 211, 311, EDMG 306, EDSE 416, 483, EDSP 332/230, BIS 499C

P-12 Certification Programs

HPE - EDF 207, 211, 311 or EDMG 306, EDSE 312, 483, HLTH 360, 475, 518, HPE 300, 301, 303, PHED 212, 213, 214, 215, 216, 217, 218, 315, 475

HE - EDF 207, 211, 311 or EDMG 306, EDSE 312, 483, HPE 300 (HLTH only), 301, 303 (HLTH only), HLTH 475, 518

PE - EDF 207, 211, 311 or EDMG 306, EDSE 312, 483, PHED 212, 213, 214, 215, 216, 217, 218, 315, 475, HPE 300 (PHED only), 301, 303 (PHED only)

BME - EDF 207, 211, 311, EDSE 312, 483, EDSP 332/230 and

Keyboard/Guitar - MUSG 211, 213, 217, 226, 239, MUSC 271, 471/472, MUSE 215, 230, 325, 375/376, 335 or

Voice - MUSG 211, 213, 217, 226, 239, MUSC 271, 471, MUSE 215, 230, 325, 375, 335 or

Brass/Woodwinds/Percussion - MUSG 211, 212, 213, 214, 226, 239, MUSC 271, 472, MUSE 215, 230, 325, 376, 335

ART - ART 301, EDF 207, 311, EDSE 312, 483, EDSP 332/230 and required methods or field experience courses

LBD and MSD - P-5 education requirements plus EDSP 230, 350, 356, 363, 365, 367, 372 and

LBD - EDSP 360, 353, 355, 356, 357, 359 or

MSD - EDSP 370, 371, 373, 374, 375

FRN - EDF 207, 211, 311, EDSE 312, 483, EDSP 332/230, FRN 405

SPA - EDF 207, 211, 311, EDSE 312, 483, EDSP 332/230, SPA 405

Interdisciplinary Early Childhood

(For candidates admitted prior to fall 2005) EDF 207, IECE 301, 345, 410, 411, 412, PHED 311, HS 253, 254, 354

(For candidates admitted fall 2005) EDF 207, EDEE 305, 327, HS 253, EDSP 230, 350, 363, 365, 370, 371, IECE 301, 345, 360, 361, 411

P-5 Certification Program

EDF 207, 211, EDEL 302, EDEE 305, 321, 322, 323, 327, 331, EDEM 330, EDSP 230, EDUC 482, PHED 311, HLTH 301, SCI 490

Middle Grades Certification Program

EDF 207, 211, EDEL 302, EDEM 330, EDMG 306, 332, 347, EDSP 230, EDUC 482; 2 courses corresponding to academic components (EDMG 341, 342, 343, SCI 402)

1. A minimum average grade of 2.5 on professional education courses is required.
2. A minimum of 90 semester hours must have been completed.
3. Applicant must have a bona fide major for teacher certification. (See Curriculum Standards ST-2).
4. Must complete a minimum of 75 percent of the course requirements in area or teaching component(s) as required by program. (To include all methods courses).
5. One semester (12 hours minimum) in residence at Morehead State University.
6. A copy of the applicant's program evaluation must accompany the application.
7. A current physical examination must be on file in the Educational Services Unit prior to commencing the professional semester.
8. An official, current transcript must accompany the application.
9. Successfully completed field experiences associated with courses in the professional education sequence.
Transfer and substitution of required education courses is dependent upon applicant completing appropriate field experiences. Documentation is required.
10. Students will contact the school district after having received the clinical placement for the criminal background check. Criminal background checks are required for individuals working with the school districts.
11. Scores for all required PRAXIS tests must be on file in the MSU Testing Center prior to commencing the clinical semester.

If a student is unable to obtain passing PRAXIS scores, a retake plan must be filed with the ESU Director prior to commencing clinical practice.

Courses for which application must be scheduled with the director of student teaching one semester in advance include:

AGR 478 — Student Teaching Practicum

CTE 478 — Student Teaching Practicum

EDEE 423 — Supervised Student Teaching Practicum

EDMG 446 — Supervised Student Teaching

EDSE 416 — Clinical Practice

EDSP 435 — Supervised Teaching Practicum

EDSP 437 — Student Teaching Practicum in Education of Students with Moderate and Severe Disabilities

HS 478 — Student Teaching Practicum

IECE 425 — Practical Student Teaching

Recommendation for Certification

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

recommendation for a statement of eligibility must meet all certification requirements in effect at the time of their application for certification.

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

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

Department of Early Childhood, Elementary, and Special Education

James Knoll, Chair

A301J Ginger Hall
(606) 783-2598

Early Childhood Education

Faculty

E. McLaren, M. Shon

Program Competencies

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

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.
6. Examine legislation and public policy regarding children and families.
7. Communicate as a child and family advocate.

Assessment Procedures IECE

GPA of 2.50

ACT scores

Interview

Completion of required field experience hours

Writing sample

Teacher Performance Assessment

PRAXIS Exams

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

Program Requirements **51**

HS 253 — Child Growth and Development	4
HS 254 — Preschool Administration	4
EDF 207 — Foundations of Education	3
EDSP 230 — Education of Exceptional Children	3
EDEE 305 — Learn Theories & Prac. in Early Elem	3
IECE 301 — At-Risk Infants and Toddlers	3
IECE 345 — Preschool Prog for Special Needs Children	3
EDSP 350 — Characteristics of Individuals with Mental Retardation and Orthopedic Handicaps	3
IECE 360 — Role of Families in Early Childhood Ed	3
IECE 361 — Positive Child Guidance	3
EDSP 363 — Assistive Technology	3
EDSP 365 — Including Students with Diverse Needs in the classroom	3
EDSP 370 — Transdisciplinary Assessment of Students with Moderate and Severe Disabilities	3
EDSP 371 — Transdisciplinary Assessment of Students with Moderate and Severe Disabilities Field Experiences	1
IECE 411 — Role of the Teacher: Creating a Learning Environment for Diverse Groups	3
EDEC 426 — Activities and Materials in Early Childhood Education: Infants and Toddlers	3
EDEC 428 — Activities and Materials in Early Childhood Education: 3-5 year olds	3

Related Studies **15**

ART 121 — School Art	3
MUSE 222 — Music for Elementary Teachers	3
PHED 311 — Movement Exploration	3
EDSP 320 — Introduction to Corrective Speech	3
EDEE 327 — Literature & Materials for Young Readers	3

Integrated Capstone Component **15**

IECE 425 — Clinical Practice	12
EDEM 499C — Student Teaching Seminar	3

Approved Electives **4**

(Choose four hours, limit of one PHED class)

EDSP 367 — Ed Assessment	
EDUC 222 — Computing Tools for Educators (if not taken previously)	
HS 200 — Family Relations	
HS 201 — Principles of Nutrition	
HS 257 — Care & Development: Prenatal, Infants & Toddlers	
HS 327 — Maternal, Infant and Child Nutrition	
HS 328 — Nutrition in the Life Cycle	
HS 353 — Program Planning for Infants and Toddlers	
HS 363 — Family Economics	
PHED 104 — Gymnastics	
PHED 105 — Conditioning	
PHED/AGR 109 — Elementary Horsemanship	
PHED 140 — Aerobics	

PHED 120— Basic Rhythms
 PSY 356 — Cognitive Development of the Infant and Child
 SWK 315 — Child Welfare Services

General Education	46
MSU 101 — Understanding Univ. Life	1
ENG 100 — Writing I *	3
ENG 200 — Writing II *	3
CMSP 108 — Fund. of Speech Communications *	3
Math Reasoning course	3
CIS 101 or EDUC 222 — computer course	3
BIOL 110 — Biological Science for Elem. Teachers	3
SCI 111 — Inq. Physical Science for Elem. Teachers or	3
SCI 112 — Inq. Earth & Space Science for Elem. Teachers	3
Nat. & Math. Sci.: Choose one (not BIOL or SCI)	3
GEO 100 — Fundamentals of Geography	3
PSY 154 — Introduction to Psychology	3
Soc. & Behav. Sci.: Choose one not GEO or PSY	3
FNA 160 — Understanding the Visual Arts	3
Humanities: Choose two. <i>NOTE: You may choose only one course from a prefix in this category</i>	6
HS 101 — Nutrition and Well-Being	3

Child Development Associate (CDA) Program

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

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

Elementary (P-5) Education

Faculty

J. Arrington, S. Benton, C. Bromagen, B. Collins, M. Decker, K. Frederick, K. Hazler, K. Nettleton, J. McCain, T. Miller, M. Moehle, D. Peterson, E. Schack, M. Schack, B. Winkleman, M. Willis

Program Competencies

Based on the Teacher Standards, students graduating from the P-5 program should:

1. Demonstrate knowledge of growth and development of children.
2. Be able to assess developmental and instructional needs of children.
3. Organize an effective classroom environment which will maximize learning.

4. Effectively manage classroom behavior.
5. Develop skills in planning and implementing appropriate instructional programs for children.
6. Demonstrate appropriate interaction and communication with children, parents, and other adults working in schools.
7. Describe information about options for school and home cooperation.
8. Identify appropriate professional development activities.
9. Demonstrate knowledge of the philosophical, historical, sociological, and psychological basis of early elementary education.
10. Demonstrate knowledge of the provisions of the Kentucky Education Reform Act.
11. Demonstrate appropriate uses of technology to support classroom instruction.
12. Demonstrate the capacity to provide leadership within the school, the community, and the profession.

Assessment Procedures P-5

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

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

Professional Education 54

EDEE 305 — Learn. Theor. & Pract. in Early Elem	3
EDF 207 — Foundations of Education	3
EDSP 230 — Education of Exceptional Children	3
EDSP 365 — Including Students with Diverse Needs	3

Elem. Teaching I (courses to be taken concurrently)

EDEL 302 — Integrating Technology into the Classroom	3
EDMG 332 — Teaching Reading in the Middle Grades Content Area	3

EDSP 367 — Educational Assessment	3
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Elem. Teaching II (courses to be taken concurrently)

SCI 490 — Science for the Elementary Teacher	3
EDEE 321 — Teaching Math in Early Elementary	3
EDUC 482 — Classroom Management and Assessment	3

Elem. Teaching III (courses to be taken concurrently)

EDEE 322 — Teaching Social Studies in Early Elem.	3
EDEE 323 — Language Arts in Early Elementary	3
EDEE 331 — Reading in the Early Elementary	3

Clinical Practice Semester

EDEE 423 — Supervised Student Teaching Practicum	12
EDEM 499C — Senior Teaching Seminar	3

Academic Core Content 30

English/Language Arts

EDEE 327 — Literature and Materials for Young Readers	3
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Mathematics

MATH 231 — Math for the Elementary Teachers I	3
MATH 330 — Geometry for Teachers	3

Science

SCI 112 — Inquiry Earth & Space Sc. for Elem Tchr	3
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Social Studies

HIS 201 — Global Studies	3
HIS 220 — Early U.S. History	3

Practical Living

HLTH 301 — Hlth, Safety & Nutrition for Early Elementary	3
PHED 311 — Movement Exploration	3

Arts & Humanities

ART 121 — School Art I	3
MUSE 222 — Music for the Elementary Teacher	3

General Education

46

CMSP 108 — Fundamentals of Speech Communication	3
ENG 100 — Writing I	3
ENG 200 — Writing II	3
ENG 120 — Approaches to Literature	3
MATH 123, MATH 131, MATH 152, or MATH 353	3
MATH 232 — Math for Elementary Teachers	3
EDF 211 — Human Growth and Development	3
BIOL 110 — Biological Science for Elementary Teachers	3
SCI 111 — Inquiry Physical Science for Elementary Teacher	3
HIS 202 — American Studies	3
GEO 100 — Fundamentals of Geography, or GEO 300 — World Geography	3
GOVT 141 — United States Government	3
HLTH 151 — Wellness: Theory to Action, or HS 101 — Nutrition and Well-Being	3
EDUC 222 — Computing Tools for Educator or CIS 101 — Computers for Learning	3
THEA 110 — Fundamentals of the Theatre	3
MSU 101 — Discovering University Life	1

Special Education

Faculty

S. Hawkins, D. Grace, J. Knoll, R. Lester, A. Miller, D. Spoelker

Program Competencies

Based on Teacher Standards, students graduating from the LBD & MSD program should possess:

1. An understanding of the varied nature of exceptional children, and of the range of special programs and resources available in the public school and the community.
2. Knowledge and skills in the development of alternative individualized curricula and in the effective teaching of academic skills, including oral and written language and the content areas.
3. An understanding of the principles and techniques of behavior management, and the ability to implement those techniques in the public school classroom.

4. An ability to measure the effectiveness of ongoing special education programs, and to critically evaluate the utility of published materials.
5. An understanding of the roles and responsibilities of special education teachers in various education program settings, including due process for the identification, placement, and continuing evaluation of students in special instructional programs.
6. Knowledge of the curriculum in various areas of child development at the preschool level, together with an understanding of the characteristics of handicapped preschool children and the program modifications that they require.
7. An understanding of career education as an integral part of the P-12 curriculum including knowledge of teaching methods, materials, and outside agencies typically involved in vocational training and independent living.
8. An understanding of fundamental principles of education assessment and the ability to administer a wide range of formal and informal, academic, communication, and behavioral assessment instruments.
9. The ability to interpret formal and informal assessment data in the process of forming conclusions about student needs, implementing and evaluating individualized education programs, and designing appropriate curricula for children with learning, behavioral, or developmental needs.
10. An understanding of KERA and the full inclusion of special education students with nonhandicapped students in regular classrooms.
11. Demonstrate appropriate uses of technology to support classroom instruction.
12. Demonstrate the capacity to provide leadership within the school, the community, and the profession.

Assessment Procedures Special Education

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

P-5/P-12/5-9 Special Education LBD or MSD Certification

This program provides certification for teaching children who have learning disabilities, behavior disorders, orthopedic handicaps, or who are mildly mentally disabled.

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

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

1. Certification for teaching students with Learning and Behavior Disorders (LBD, P-12) and P-5.
2. Certificate for teaching students with Moderate and Severe Disabilities (MSD, P-12) and P-5.

3. Certification for LBD P-12 and 5-9.
4. Certification for MSD P-12 and 5-9.

Area of Concentration in Special Education and P-5

Total Credit hours: 130-31

1. Special Education Core 21

EDSP 230 — Education of Exceptional Children	3
EDSP 350 — Characteristic of Individuals with Mental Retardation and Orthopedic Handicaps	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 372 — Transition to Adult Life	3

2. Area of Specialization

Option 1: Learning and Behavior Disorders 19

EDSP 360 — Characteristic of Learning & Behavior Disorders	3
EDSP 353 — Language Arts for Students with LBD	3
EDSP 355 — Teaching Students with LBD	3
EDSP 357 — Mathematics and Content Area Teaching for Students with LBD	3
EDSP 359 — Pract. Teaching Stdts. with LBD	1
EDSP 435 — Supervised Teaching Practicum	6

Option 2: Moderate and Severe Disabilities 18

EDSP 370 — Transdisciplinary Assessment and Services for Students with MSD	3
EDSP 371 — Field Experience in Transdisciplinary Assessment and Services for Students with MSD	1
EDSP 373 — Curriculum for Students with MSD	3
EDSP 374 — Teaching Students with MSD	3
EDSP 375 — Practicum in Education of Students with MSD	2
EDSP 437 — Student Teaching Practicum MSD	6

3. Professional Education (P-5) 39

EDF 207 — Foundations of Education	3
EDF 211 — Human Growth and Development	3
EDEL 302 — Integrating Tech. into the Classroom	3
EDEE 305 — Learning Theories in Early Elementary	3
EDEE 321 — Teaching Math in Early Elementary	3
EDEE 322 — Teaching Social Studies in Early Elementary	3
EDEE 323 — Language Arts in Early Elementary	3
EDEE 331 — Reading in the Early Elementary	3
SCI 490 — Science for Elem. Teachers	3
EDEM 499C — Capstone	3
EDEE 423 — Supervised Student Teaching Practicum	6
EDMG 332 — Teaching Reading in the Middle Grades Content Area	3

4. Related Studies 6

EDEE 327 — Literature and Materials for Young Readers	3
MATH 231 — Mathematics for Early Elementary Teachers I	3

Total general education credit hours required: 46

MSU 101 — Discovering University Life	1
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ENG 100 — Writing I	3
ENG 200 — Writing II	3
CMSP 108 — Fundamentals of Speech Comm.	3
Math Reasoning: MATH 123, MATH 131, MATH 135, MATH 141, MATH 152, or MATH 174	3
Computer Competency: CIS 101 or EDUC 222	3
ENG 120 — Approaches to Literature	3
HIS 201 — Global Studies, or HIS 202 — American Studies	3
PHIL 200 — Introduction to Philosophy	3
BIOL 110 — Biological Sciences for Elementary Teachers	3
SCI 111 — Inq. Physical Science for Elem. Teachers or SCI 112 — Inq. Earth and Space Science for Elem. Teachers	3
MATH 232 — Mathematics for Early Elementary Teachers II	3
PSY 154 — Introduction to Psychology	3
GOVT 141 — United States Government; or *GOVT 362 — Current World Problems	3
GEO 100 — Fundamentals of Geography; or *SOC 305 — Cultural Anthropology; or *GEO 300 — World Geography	3
HLTH 151 — Wellness: Theory in Action or HS 101 — Nutrition and Well-Being	3

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

Special Education 37

EDSP 230 — Education of Exceptional Children	3
EDSP 320 — Introduction to Corrective Speech	3
EDSP 350 — Characteristics of Individuals with Mental Retardation and Orthopedic Handicaps	3
EDSP 356 — Applied Behavior Analysis	3
EDSP 360 — Characteristics of Individuals with Learning Disabilities and Behavior Disorders	3
EDSP 363 — Assistive Technology	3
EDSP 365 — Including Students with Diverse Needs	3
EDSP 367 — Educational Assessment	3
EDSP 372 — Transition to Adult Life	3
EDSP 353 — Language Arts for Students with LBD	3
EDSP 355 — Teaching Students with LBD	3
EDSP 359 — Pract. in Teaching Students with LBD	1
EDSP 357 — Mathematics and Content Area Teaching for Students with LBD	3

Education 33

EDEL 302 — Integrating Tech. into the Classroom	3
EDEM 330 — Foundations of Reading	3
EDF 207 — Foundations of Education	3
EDF 211 — Human Growth and Development	3
EDMG 306 — Development and Learning in Middle Grades	3
EDMG 347 — Literature and Materials for the Middle Grades	3
EDMG 332 — Teaching Reading in the Middle Grades Content Area	3
EDMG 341 — Teaching Math in Middle Grades	3

EDMG 342 — Teaching Social Studies in the Middle Grades	3
EDMG 343 — Teaching Language Arts in the Middle Grades Content Area	3
EDUC 482 — Classroom Management and Assessment	3
Integrated Component (Professional Semester)	15
EDEM 499C — Senior Teaching Seminar	3
EDMG 446 — Supervised Student Teaching	6
EDSP 435 — Supervised Teaching Practicum	6
General Education	45
CMSP 108 — Fundamentals of Speech Communication	3
ENG 100 — Writing I	3
ENG 200 — Writing II	3
CIS 101 — Computers for Learning, or EDUC 222 — Computing Tools for Educators	3
HIS 201 — Global Studies	3
HIS 202 — American Studies	3
PHIL 200 — Introduction to Philosophy	3
<i>Choose three hours from the following math reasoning courses:</i>	
MATH 123 — Introduction to Statistics, or MATH 131 — Mathematical Reasoning and Problem Solving, or MATH 135 — Mathematics for Technical Students, or MATH 141 — Plane Trigonometry, or MATH 152 — College Algebra, or MATH 174 — Pre-Calculus Mathematics	3
Area Studies — only one course may be chosen from each prefix in area studies courses.	
<i>Choose three hours from the following Humanities courses:</i>	
ART 263 — Art History I	
ART 264 — Art History II	
ART 265 — Art History III	
CMEM 210 — Media Literacy	
CMSP 350 — Communication, Culture, and Diversity	
CMSP 390 — Conflict and Communication	
ENG 205 — Language: Culture and Mind	
ENG 120 — Approaches to Literature	
ENG 293 — Introduction to Creative Writing	
FNA 160 — Understanding the Visual Arts	
GOVT 180 — Introduction to Political Theory	
MUSH 261 — Music Listening	
MUSH 361 — History of Music I	
MUSH 362 — History of Music II	
THEA 110 — Introduction to the Theatre or Foreign Language course	
<i>Choose nine hours from the following Natural & Mathematical Science courses:</i>	
SCI 111, SCI 112, ASTR 111, ASTR 112, BIOL 110, BIOL 155, BIOL 160, CHEM 101, CHEM 104, CHEM 111, ESS 106, ESS 108, MATH 232, PHYS 109, PHYS 110, or PHYS 231	3-4
<i>Science Components: Select from the following:</i> BIOL 110, BIOL 150, BIOL 155, BIOL 234, BIOL 352, BIOL 351	6

PHYS 201/201L, CHEM 101/101L, ESS 108	4
SCI 111, SCI 112, ASTR 111, ASTR 112	3

Choose nine hours from the following Social and Behavioral Science courses:

GEO 100 — Fundamentals of Geography, or *SOC 305 — Cultural Anthropology, or *GEO 300 — World Geography	3
GOVT 141 — United States Government, or *GOVT 362 — Current World Problems	3
PSY 154 — Introduction to Psychology, or *Meets the non-western culture course requirement. One non-western culture course must be completed.	

Choose three hours from the following Practical Living courses:

HLTH 151 — Wellness: Theory to Action, or HS 101 — Nutrition and Well-Being	3
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Other Requirement

MSU 101 — Discovering University Life	1
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Middle Grades Academic

Component (minimum) 24

The component must be chosen from English, science, social studies, and mathematics (see Middle Grades Program for list of specific courses in each component).

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

Special Education 36

EDSP 230 — Education of Exceptional Children	3
EDSP 320 — Introduction to Corrective Speech	3
EDSP 350 — Characteristics of Individuals with Mental Retardation and Orthopedic Handicaps	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 — Transdisciplinary Assessment of Students with MSD	3
EDSP 371 — Field Experience in Transdisciplinary Assessment and Services for Students with MSD Disabilities	1
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 Ed of Students with MSD	2

Education 33

EDEL 302 — Integrating Technology into the Classroom	3
EDF 207 — Foundations of Education	3
EDF 211 — Human Growth and Development	3
EDMG 306 — Development and Learning in Middle Grades	3
EDMG 332 — Teaching Reading in the Middle Grades Content Area	3
EDMG 341 — Teaching Math in Middle Grades	3
EDMG 342 — Teaching Social Studies in the Middle	3

Grades	
EDMG 343 — Teaching Language Arts in the Middle Grades	3
EDMG 347 — Literature and Materials for the Preadolescent	3
EDUC 482 — Classroom Management and Assessment	3
Integrated Component (Professional Semester)	15
EDEM 499C — Senior Teaching Seminar	3
EDMG 446 — Supervised Student Teaching	6
EDSP 437 — Student Teaching Practicum in Educ. of Students with Moderate and Severe Disabilities	6
Related Studies	3
MATH 231 — Mathematics for the Elementary Teachers I	3
ART 121 — School Art I, or MUSE 221 — Music for Elementary Teachers	3
General Education	45
CMSP 108 — Fundamentals of Speech Communication	3
ENG 100 — Writing I	3
ENG 200 — Writing II	3
CIS 101 — Computers for Learning, or EDUC 222 — Computing Tools for Educators	3
HIS 201 — Global Studies	3
HIS 202 — American Studies	3
PHIL 200 — Introduction to Philosophy	3
<i>Choose three hours from the following math reasoning courses:</i>	
MATH 123 — Introduction to Statistics, or MATH 131 — Mathematical Reasoning and Problem Solving, or MATH 135 — Mathematics for Technical Students, or MATH 141 — Plane Trigonometry, or MATH 152 — College Algebra, or MATH 174 — Pre-Calculus Mathematics	3
Area Studies — only one course may be chosen from each prefix in area studies courses.	
<i>Choose three hours from the following Humanities courses:</i>	
ART 263 — Art History I	
ART 264 — Art History II	
ART 265 — Art History III	
CMEM 210 — Media Literacy	
CMSP 350 — Communication, Culture, and Diversity	
CMSP 390 — Conflict and Communication	
ENG 205 — Language: Culture and Mind	
ENG 120 — Approaches to Literature	
ENG 293 — Introduction to Creative Writing	
FNA 160 — Understanding the Visual Arts	
GOVT 180 — Introduction to Political Theory	
MUSH 261 — Music Listening	
MUSH 361 — History of Music I	
MUSH 362 — History of Music II	
THEA 110 — Introduction to the Theatre or Foreign Language course	
<i>Choose nine hours from the following Natural & Mathematical Science courses:</i>	
BIOL 110 — Biological Science for Elementary Teachers	3

MATH 232 — Math for the Elementary Teacher II	3
SCI 109 — Physical Science for Elementary Teachers	3

Choose nine hours from the following Social and Behavioral Science courses:

GEO 100 — Fundamentals of Geography, or GOVT 141 — United States Government, or *GOVT 362 — Current World Problems	3
PSY 154 — Introduction to Psychology	3
*SOC 305 — Cultural Anthropology, or *GEO 300 — World Geography	3

**Meets the non-western culture course requirement. One non-western culture course must be completed.*

Choose three hours from the following Practical Living courses:

HLTH 151 — Wellness: Theory to Action, or HS 101 — Nutrition and Well-Being	3
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Other Requirement

MSU 101 — Discovering University Life	1
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Middle Grades Academic Component (minimum) 24

The academic component must be chosen from English, science, math, or social studies (see Middle Grades Program for list of specific courses required in each component).

**The student's program must include one of the indicated non-western courses.*

Nonteaching Major and Minor

The department offers a nonteaching major and minor for students who would like to study special education but do not desire teacher certification. The major or minor is often taken in connection with majors or minors (for example, recreation or psychology) which prepare individuals to work with adults or children in nonpublic school settings.

Major (Nonteaching)

CMSP 320 — Introduction to Corrective Speech, or EDSP 320 — Introduction to Corrective Speech	3
EDMG 332 — Teaching Reading in the Middle Grades Content	3
EDSP 230 — Education of Exceptional Children	3
EDSP 350 — Characteristics of Indiv. with Mental Retardation and Orthopedic Handicaps	3
EDSP 356 — Applied Behavior Analysis	3
EDSP 360 — Characteristics of Indiv. with Learning Disabilities and Behavior Disorders	3
EDSP 367 — Educational Assessment or Advisor approved course from either LBD or MSD Programs	6
Electives (approved by advisor)	6
EDSP 435 — Laboratory Experience	4

Total 34

Minor (Nonteaching)

EDMG 332 — Teaching Reading in the Middle Grades Content Area	3
EDSP 230 — Education of Exceptional Children	3
EDSP 350 — Characteristics of Individuals with Mental	3

Retardation and Orthopedic Handicaps	
EDSP 356 — Applied Behavior Analysis	3
EDSP 360 — Characteristics of Individuals with Learning Disabilities and Behavior Disorders	3
EDSP 367 — Educational Assessment	
Advisor approved course from either MSD or LBD Program	3
EDSP 435 — Supervised Teaching Practicum	4
Total	25

Department of Middle Grades & Secondary Education

Lynne Fitzgerald, Chair

201 Laughlin Health Bldg.
(606) 783-2466

Middle Grades (5-9) Education

Faculty

J.Fernandez, L. Fitzgerald (Chair), K.Lafferty, S.Lindsey, K.Sharp, K. Warsame

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.

Assessment Procedures 5-9

GPA of 2.50

ACT scores

Interview

Completion of required field experience hours

Writing sample

Teacher Performance Assessment

PRAXIS Exams

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

Professional Education 33

EDEL 302 — Integrating Technology into the Classroom	3
EDEM 330 — Foundations of Reading	3
EDF 207 — Foundations of Education	3
EDF 211 — Human Growth and Development	3
EDMG 306 — Development and Learning in Middle Grades	3
EDMG 332 — Reading Strategies for the Middle Grade Teacher	3
EDMG 347 — Literature and Materials for the Preadolescent	3
EDSP 230 — Education of Exceptional Children	3
EDUC 482 — Classroom Management and Assessment	3

Select two that correspond to chosen academic components: 6

EDMG 341 — Teaching Math in Middle Grades	
EDMG 342 — Teaching Social Studies in the Middle Grades	
EDMG 343 — Language Arts in Middle Grades	
SCI 402 — Integrated Biology, Mathematics, and Physical Science Teaching Methods	

Integrated Component (Professional Semester) 15

EDEM 499C — Senior Teaching Seminar	3
EDMG 446 — Supervised Student Teaching	12

General Education 45

CMSP 108 — Fundamentals of Speech Communication	3
ENG 100 — Writing I	3
ENG 200 — Writing II	3
CIS 101 — Computers for Learning, or EDUC 222 — Computing Tools for Educators	3

Choose three hours from these math reasoning courses:

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 — Pre-Calculus Mathematics	3
Area Studies — only one course may be chosen from each prefix in area studies courses.	

Humanities Elective:

ART 263 — Art History I	
ART 264 — Art History II	
ART 265 — Art History III	
CMEM 210 — Media Literacy	
CMSP 350 — Communication, Culture, and Diversity	
CMSP 390 — Conflict and Communication	

ENG 205 — Language: Culture and Mind	
ENG 120 — Approaches to Literature	
ENG 293 — Introduction to Creative Writing	
FNA 160 — Understanding the Visual Arts	
GOVT 180 — Introduction to Political Theory	
MUSH 261 — Music Listening	
MUSH 361 — History of Music I	
MUSH 362 — History of Music II	
THEA 110 — Introduction to the Theatre or foreign language course	3
HIS 201 — Global Studies, or	
HIS 202 — American Studies	.. 3
PHIL 200 — Introduction to Philosophy	3

Select nine hours from the following (only one course may be chosen from each prefix.)

Natural & Mathematical Sciences

ASTR 111 — Concepts in Astronomy I: Planetary Sciences and the Sky	3
ASTR 112 — Concepts in Astronomy II: Stars, Galaxies, and Cosmology	3
BIOL 110 — Biological Science for Elementary Teachers, or	
BIOL 155 — Introduction to Environmental Science, or	
BIOL 160 — Introduction to Biological Principles	3
CHEM 101 — Survey of Chemistry, or	
CHEM 111 — Principles of Chemistry I	3
ESS 106 — Introduction to Geology, or	
ESS 108 — Physical Geology	3
MATH 232 — Mathematics for the Elementary Teacher II (prerequisite MATH 231), or	
MATH 353 — Statistics	3
PHYS 109 — A History of the Universe, or PHYS 110, or	
PHYS 231 — Engineering Physics I	4
SCI 109 — Physical Science for the Elementary Teacher	3

Choose nine hours from the following Social and Behavioral Sciences courses:

GEO 100 — Fundamentals of Geography, or	
*SOC 305 — Cultural Anthropology, or	
*GEO 300 — World Geography	3
GOVT 141 — United States Government, or	
*GOVT 362 — Current World Problems	3
PSY 154 — Introduction to Psychology	3

**Meets the non-Western culture course requirement. One non-Western culture course must be completed.*

Choose three hours from the following Practical Living courses:

HLTH 151 — Wellness: Theory to Action, or	
HS 101 — Nutrition and Well-Being	3

Other Requirement

MSU 101 — Discovering University Life	1
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Academic Components

Each student must select two academic components requiring a minimum of 24 semester hours each. The two components must be chosen from English, science, social studies, and mathematics.

Students concurrently obtaining special education certification
See Page 56 select only one component.

5-9 Academic Components

A GPA of 2.5 is required in all academic components.

English/Communications	24
CMSP 350 — Communication, Culture, and Diversity	3
ENG 205 — Language, Culture and Mind, or	
ENG 394 — Language and Society	3
ENG 211 — Introduction to World Literature I, or	
ENG 212 — Introduction to World Literature II	3
ENG 293 — Introduction to Creative Writing, or	
ENG 390 — Professional Writing, or	
ENG 391 — Advanced Expository Writing, or	
ENG 395 — Poetry Writing, or	
ENG 396 — Fiction Writing	3
ENG 392 — Teaching Writing in Elem & Middle Schools	3
ENG 305 — Introduction to Linguistics, or	
ENG 315 — Structure of English	3
ENG 341 — American Literature to 1865, or	
ENG 342 — American Literature since 1865, or	
ENG 360 — Appalachian Literature	3
EDMG 347 — Literature & Materials for the Preadolescent	3

Mathematics 24

MATH 141 — Plane Trigonometry, and	
MATH 152 — College Algebra, or	
MATH 174 — Pre-Calculus Mathematics, and Elective	6
Math 170 or higher	
MATH 231 — Mathematics for the Elementary Teacher I	3
MATH 232 — Mathematics for the Elementary Teacher II	3
MATH 300 — Introduction to Mathematical Proof	3
MATH 332 — Introduction to Finite Mathematics	3
MATH 330 — Geometry for Teachers (P-9)	3
MATH 353 — Statistics, or	
MATH 354 — Business Statistics	3

Social Studies 24

ECON 101 — Introduction to Economics, or	
ECON 201 — Principles of Macroeconomics	3
GEO 241 — United States and Canada	3
GEO 300 — World Geography	3
GOVT 141 — United States Government	3
HIS 201 — Global Studies	3
HIS 202 — American Studies	3
HIS 210 — Early World Civilization	3
HIS 220 — Early American History	3

Science 24

ASTR 111 — Concepts in Astronomy I: Planetary Science and the Sky, or	
ASTR 112 — Concepts in Astronomy II: Stars, Galaxies, and Cosmology, or	
SCI 109 — Physical Science for the Elementary Teacher	3
BIOL 110 — Biological Science for Elementary Teachers or higher with a lab	3
BIOL 150 — Introduction to Plant Science, or	

BIOL 155 — Introduction to Environmental Science, or BIOL 231 — Human Anatomy, or BIOL 352 — Animal Natural History, or BIOL 351 — Plant Natural History	6
CHEM 101/101L — Survey of Chemistry	4
ESS 108 — Physical Geology	4
PHYS 201A — Elementary Physics I	4

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.

Secondary Education

Faculty

L. Lennex, R. Lockhart, S. Riegle

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 Early Childhood, Elementary & Special Education (606-783-2598) or the departmental Web pages that contain copies of departmental checksheets for downloading and printing.

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
EDSP 230 — Education of Exceptional Children	3

Professional Semester

EDSE 416 — Clinical Practice	12
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Secondary education students admitted to the teacher education program will be required to demonstrate computer expertise prior to graduation. They may demonstrate this 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

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, chemistry, earth and space science, English, mathematics, physics, or social studies.

Caudill College of Arts, Humanities & Social Sciences

School of the Arts

Art & Design
Communication, Media & Leadership Studies
Music, Theatre & Dance

School of Humanities & Social Sciences

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

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

M. Scott McBride, Interim Dean

212 Rader Hall
(606) 783-2650
E-mail: s.mcbride@moreheadstate.edu

Department of Art & Design

BA - Art
BA - Art Education

Department of Communication, Media & Leadership Studies

BA - Communication with options:
Advertising/Public Relations
Journalism
Organizational & Interpersonal Communication
Production

Department of English

BA - English
BA - English Education
BFA - Creative Writing

Department of History, Philosophy, Religion & Legal Studies

BA - History
BA - Philosophy
BA - Religion Studies
BA - Paralegal Studies
BA - Social Studies Education

Department of International & Interdisciplinary Studies

BA - French
BA - French Education
BA - Spanish

BA - Spanish Education

Department of Military Science

Department of Music, Theatre & Dance

BME - Music Education (with areas of specialization)

Woodwind, Brasswind, Percussion

Keyboard & Guitar

Orchestral Strings

Voice

BM - Music Performance (with areas of specialization)

Woodwind, Brasswind, Percussion

Voice

Piano

Collaborative Piano

Orchestral Strings

Jazz Studies

BA - Music

BA - Theatre

BA - Theatre Education

Department of Sociology, Social Work & Criminology

BA - Sociology

BA - Criminology

BSW - Area of Concentration in Social Work

Department of Art & Design

Robert Franzini, Chair

211 Claypool-Young Art Building
(606) 783-2193

Faculty

D. Bartlett, R. Campbell, K. Campbell, B. Frieder, R. Franzini,
D. Golding, J. Gritton, D. Li, E. Mesa-Gaido, G. Mesa-Gaido,
E. Perkins

Competencies Required in the Program

Students will be able to:

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

7. Communicate about art effectively in written and oral form.

Assessment Procedures

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

Bachelor of Arts

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

Program Requirements

- Sophomore exhibit of four to six works with Faculty Review.
- Senior exhibit up to six works.
- Senior resumes and slide portfolio.
- Viewing of art exhibitions outside the Morehead area.

Transfer students must comply with the intent of these requirements on an individually evaluated basis.

General Education Requirements **48**

See general education requirements for the University. The following courses are required General Education courses for students in the Area of Concentration and the Major in Art:

- ART 109 — Introduction to the Computer in the Visual Arts 3
- ART 499C — Visual Art Capstone 3

Art Major

- ART 101 — Two-Dimensional Foundation 3
- ART 102 — Three-Dimensional Foundation 3
- ART 103 — Color Foundation 3
- ART 204 — Drawing 3
- ART 214 — Painting Techniques I 3

Choose two of three 6

- ART 263 — Art History I
- ART 264 — Art History II
- ART 265 — Art History III

Choose one of two 3

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

Choose one of three 3

- ART 351 — Intaglio Printmaking
- ART 352 — Lithographic Printmaking
- ART 373 — Basic Black and White Photography
- ART History (300 or higher elective) 3
- ART electives 6

Art Major (minimum) credits **36**

Area of Concentration beyond the Major

- ART 304 — Drawing II 3

- ART History 300 or above 3
- Four additional elective art courses (could include Studio, Graphic Design, Art History, Art Education, Intern. courses as choices) 12

Art Concentration (minimum) credits **54**

Art Area with Graphic Design Emphasis-Recommended Elective Courses

- ART 205 — Graphic Design I
- ART 302 — Typography
- ART 305 — Graphic Design II
- ART 306 — Graphic Design for the Web
- ART 309 — Computer Art
- ART 320 — Survey of Graphic Design
- ART 405 — Graphic Design III
- ART 406 — Graphic Design IV
- ART 410 — Computer Animation

General Education courses required by the program for P-12 Teacher Education

- ART 109 — Introduction to the Computer in the Visual Arts 3
- ART 499C — Visual Art Capstone 3
- EDF 211 — Human Growth and Development 3

Art Major with Teacher Certification for Grades P-12

- ART 101 — Two-Dimensional Foundation 3
- ART 102 — Three-Dimensional Foundation 3
- ART 103 — Color Foundation 3
- ART 204 — Drawing I 3
- ART 214 — Painting Techniques I 3

Choose two of three 6

- ART 263 — Art History I
- ART 264 — Art History II
- ART 265 — Art History III

Choose one of two 3

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

Choose one of three 3

- ART 351 — Intaglio Printmaking
- ART 352 — Lithographic Printmaking
- ART 373 — Basic Black and White Photography
- ART History (300 or higher elective) 3
- ART 300 — Elementary Materials and Methods 3
- ART 321 — Materials and Methods for Secondary Art 3

Art Major (minimum) credits **36**

Additional Requirements for an Area of Concentration beyond the Major with Teacher Cert. grades P-12

- ART 304 — Drawing II 3
- ART History 300 or above 3
- Four additional elective art courses (could include Studio, Commercial Art, Art History, Art Education, Intern. courses as choices) 12

Art Concentration (minimum) credits **54**

Required Courses for Certification from the College of Education

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

Total **30**

Visual Art Minor

ART 101 — Two-Dimensional Foundation	3
ART 103 — Color Foundation	3
ART 109 — Introduction to Computers in the Visual Arts	3
ART 205 — Graphic Design I	3
ART 302 — Typography	3

Electives (choose three courses) 9

ART 305 — Graphic Design II	
ART 306 — Graphic Design for the Web	
ART 309 — Computer Art	
ART 320 — Survey of Graphic Design	
ART 373 — Basic Black and White Photography	
ART 410 — Computer Animation	

Visual Art Minor (minimum) credits **24**

Studio Art Minor

ART 101 — Two-Dimensional Foundation	3
ART 102 — Three-Dimensional Foundation	3
ART 103 — Color Foundation	3

Choose two of three 6

ART 263 — Art History I	
ART 264 — Art History II	
ART 265 — Art History III	

Choose one of two 3

ART 245 — Ceramics I	
ART 294 — Sculpture I	

Choose one of three 3

ART 351 — Intaglio Printmaking	
ART 352 — Lithographic Printmaking	
ART 373 — Basic Black and White Photography	
ART elective	3

Studio Art Minor (minimum) credits **24**

Art History Minor

ART 101 — Two-Dimensional Foundation	3
ART 103 — Color Foundation	3
ART 263 — Art History I	3
ART 264 — Art History II	3
ART 265 — Art History III	3
ART History 300 or above	6

Art History Minor (minimum) credits

21

Department of Communication, Media & Leadership Studies

Calvin Lindell, Interim Chair

111 Breckinridge Hall
(606) 783-2134

The Department of Communication, Media & Leadership Studies prepares students for professional, business, and educational careers in advertising and public relations, electronic media, journalism, speech, and organizational communication.

Recognition of the literary, artistic, psychological, and rhetorical elements of these studies enhances the student's appreciation of expressive achievements and the impact of the mass media and communications on society.

Communication

Faculty

R. Abell, L. Albert, A. Andaloro, J. Atkins, N. Earl, D. Greer, J. Hill, J. Kenney, G. LaFleur, C. Lindell, J. McCoy, J. Modaff, M. Moore, D. Plum, K. Sexton, C. Thomas

Bachelor of Arts in Communication Program Competencies

Students will demonstrate:

1. Understanding of communication theories.
2. Understanding and application of various techniques and technology in effective message production and delivery.
3. Knowledge of the characteristics and capabilities of various media to convey effectively ideas and messages.
4. Understanding of the impact of communication and related media on history, society, and culture.
5. The ability to interpret and analyze critically the characteristics and merits of individual communication artifacts.
6. The ability to research, develop, and deliver cogent messages via various media.
7. The ability to apply legal and ethical standards to the communication process.
8. The ability to communicate effectively in written and oral form.

Assessment Procedures

Capstone Course

The major in Communication with one of the four options will require a total of 42 semester hours including the Integrative Component but not including any required general education class. The four options are: Advertising and Public Relations, Journalism, Organizational and Interpersonal Communication, and Production.

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

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

Advertising/Public Relations Option

Required Courses	24
CMJN 201 — Newswriting and Reporting	3
CMAP 177, 277, 377, 477 — Advertising/Public Relations Practicum — At least one hour at three different levels	3
CMAP 366 — Desktop Publishing II	3
CMAP 382 — Principles of PR	3
CMAP 383 — Principles of Ad	3
CMAP 384 — Ad Copywriting	3
CMAP 385 — PR Research and Techniques	3
CMAP 499C — Senior Seminar	3

Elective Courses	12
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Select two courses from the following:

CMEM 390 — Electronic Media Web Layout and Design	3
CMJN 492 — Media Law and Ethics	3
CMAP 483 — Advertising Design	3

Select one course from the following:

CMAP 482 — PR Campaigns	3
CMAP 486 — Advertising Campaign Strategy and Media Buying	3

Select one course from the following:

CMSP 383 — Small Group Comm.	3
CMSP 385 — Persuasion	3
CMSP 309 — Public Speaking	3
CMSP 367 — Organizational Communication	3
CMSP 371 — Prof. Comm. Practices and Standards	3
CMSP 401 — Communication and Leadership	3
CMSP 405 — Communication Issue Management	3
COMM 320 — Introduction to Research Methods in Communication	3
COMM 464 — Public Opinion and News Media	3

In addition to the above courses, all Advertising/Public Relations majors must complete an internship (with or without credit) to meet program requirements.

Students must provide evidence of the completion of successful internship prior to receiving full credit in 499C. Completion forms are available in the departmental internship application.

Organizational and Interpersonal Communication Option

Required Courses	24
CMSP 230 — Interpersonal Communication	3
CMSP 177, 277, 377, 477 — Organizational and Interpersonal Practicum — At least one hour at three different levels	3
CMSP 385 — Persuasion	3
CMSP 367 — Intro to Organizational Communication	3
CMSP 371 — Professional Communication Practices and Standards	3
CMSP 383 — Small Group Communication	3
CMSP 467 — Advanced Organizational Communication	3
CMSP 499C — Senior Seminar	3

Elective Courses	12
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CMSP 210 — Listening	3
CMSP 309 — Public Speaking	3
CMSP 350 — Communication, Culture & Diversity	3
CMSP 382 — Argumentation & Debate	3
CMSP 390 — Conflict & Communication	3
CMSP 400 — Interviewing	3
CMSP 401 — Communication & Leadership	3
CMSP 405 — Communication Issue Management	3
CMSP 421 — Classical Rhetorical Theory	3
CMSP 422 — Contemporary Rhetorical Theory	3
CMSP 423 — Rhetorical Criticism	3
CMSP 427 — American Public Address	3
CMSP 430 — Contemporary Public Address	3
COMM 411 — Advanced Public Speaking	3
COMM 483 — Advanced Small Group Communication	3

Journalism Option

Required Courses	18
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CMJN 201 — Newswriting & Reporting I	3
CMJN 250 — Newsgathering	3
CMJN 492 — Media Law & Ethics	3
CMJN 301 — Advanced Newswriting & Reporting	3
CMJN 177, 277, 377, 477 — Journalism Practicum — At least one hour at three different levels	3
CMJN 499C — Journalism Senior Seminar	3

Elective Courses	18
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Select three courses from the following:

CMJN 358 — Sportswriting	3
CMJN 364 — Feature Writing	3
CMJN 465 — Editorial Writing	3
CMEM 341 — Writing for Electronic Media	3
CMEM 420 — Feature & Documentary Writing	3
CMEM 444 — Electronic Newsgathering	3

Select one course from the following:

CMJN 204 — Copyreading & Editing	3
CMEM 101 — Elements of Production I	3

Select one course from the following:

CMAP 306 — News Graphics & Production	3
CMAP 366 — Desktop Publishing II	3
CMEM 390 — Elec. Med. Web Layout & Design	3

Select one course from the following:

COMM 462 — Media Criticism	3
COMM 464 — Public Opinion & News Media	3

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

Students must provide evidence of the completion of successful internship prior to receiving full credit in 499C. Completion forms are available in the departmental internship application.

Production Option

Required Courses	24
CMEM 101 — Elements of Production I	3
CMEM 201 — Elements of Production II	3
CMEM 341 — Writing for the Electronic Media	3
CMEM 390 — Electronic Media Web Layout & Design I	3
CMEM 450 — Electronic Media Management	3
CMEM 459 — Media Law & Ethics	3
CMEM 177, 277, 377, 477 — Electronic Media Practicum — At least one hour at three different levels	3
CMEM 499C — Electronic Media Senior Seminar	3

Elective Courses	12
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Select four courses from the following:

CMEM: 320, 338, 340, 350, 357, 358, 379, 381, 399 (up to 9 hours), 420, 440, 444, 451, 452, 460
CMJN: 201, 204, 250, 285, 301, 358, 364
COMM: 339, 347, 439, 447, 476 (up to 6), 462, 482
CMAJ: 366, 382, 383
CMSP: 100, 200, 210, 230, 309, 367

In addition to the above courses, all Production majors must complete an internship (with or without credit) to meet program requirements.

Students must provide evidence of the completion of successful internship prior to receiving full credit in 499C. Completion forms are available in the departmental internship application.

All Communication majors must complete a minor in a degree program other than Communication. Students who major in Communication with an option in Advertising/Public Relations, Organizational and Interpersonal Communication, Journalism or Production MAY NOT minor in Advertising, Electronic Media Journalism, Electronic Media Production, Organizational/Interpersonal Communication, Print Journalism, Print Media Production, or Public Relations

Advertising Minor

CMAJ 166 — Desktop Publishing and Publications Techniques I	3
CMAJ 366 — Desktop Publishing and Publication Techniques II	3
CMAJ 383 — Principles of Advertising	3
CMAJ 483 — Advertising	3
CMEM 390 — Web Layout and Design I	3
Elective	6
Total	21

Electronic Media Journalism Minor

CMEM 101 — Elements of Production I	3
CMEM 444 — Electronic News Gathering	3
CMJN 201 — Newswriting and Reporting I	3
CMJN 250 — News Gathering	3
CMJN 492 — Law and Ethics of the Press	3
Electives	6
Total	21

Electronic Media Production Minor

CMEM 101 — Elements of Production I	3
CMEM 201 — Elements of Production II	3
CMEM 340 — Video Production and Direction I	3
CMEM 341 — Writing for the Electronic Media	3
CMEM 350 — Audio Production and Direction	3
CMEM 390 — Web Layout and Design I	3
Elective	3
Total	21

Organizational/Interpersonal Communication Minor

COMM 220 — Introduction to Communication Theory	3
CMSP 230 — Interpersonal Communication	3
CMSP 367 — Introduction to Organizational Communication	3
CMSP 383 — Small Group Communication	3
CMSP 385 — Persuasion	3
COMM 467 — Organizational Communication	3
Electives	3
Total	21

Print Journalism Minor

CMJN 201 — Newswriting and Reporting I	3
CMJN 204 — Copyreading and Editing II	3
CMJN 250 — News Gathering	3
CMJN 285 — Introduction to Photojournalism	3
CMJN 301 — Adv. Newswriting and Reporting II	3
CMJN 364 — Feature Writing, or CMJN 465 — Editorial Writing	3
CMJN 492 — Law and Ethics of the Press	3
Total	21

Print Media Production Minor

CMAJ 166 — Desktop Publishing and Publication Techniques I	3
CMAJ 366 — Desktop Publishing and Publication Techniques II	3
CMEM 390 — Web Layout and Design I	3
CMJN 201 — Newswriting and Reporting I	3
CMJN 204 — Copyreading and Editing II	3
CMJN 285 — Introduction to Photojournalism	3
Electives	3
Total	21

Public Relations Minor

CMAJ 166 — Desktop Publishing and Publication Techniques I	3
CMAJ 382 — Principles of Public Relations	3
CMAJ 385 — Public Relations Techniques	3
CMAJ 482 — Public Relations Campaigns	3
CMSP 367 — Introduction to Organizational Communication	3
Electives	6
Total	21

Department of English

Layne Neeper, Interim Chair

103 Combs Building
(606) 783-9448

English

Faculty

A. Adams, K. Carlson, C. Coaplen-Anderson, G. Colburn, G. Eklund, M. Graves, F. Helphinstine, S. Henneberg, C. Holbrook, T. Irons, K. Mincey, R. Morrison, S. Morrison, L. Neeper, R. Royar, C. Wilkinson

Program Competencies

Students will develop:

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

Additional Competency for Teaching Majors/Areas:

Knowledge of contemporary pedagogy in English studies.

Assessment Procedures

- Exit examinations
- Survey of graduates

Additional Assessments for Teaching Area of Concentration:

- PRAXIS II
- Student teaching semester, including teaching portfolio
- Survey of graduates

Bachelor of Arts

The English curriculum has a two-fold purpose. It seeks to make a contribution to the general education of all students by providing them with the study of writing so they can use their language as effectively and precisely as possible and by introducing them to the sympathetic understanding of literature so their personal lives will be enriched by literary art. The English degree prepares students for such vocations as teaching, publishing, business, and public relations as well as for further professional studies.

Students seeking secondary certification should select the area of concentration.

Area of Concentration in English with Secondary (8-12) Certification

General Education

48

See general education requirements for the University.

The following specific general education requirements must be completed:

ENG 211 or 212	3
ENG 499C — Senior Seminar in English	3

Literature Cornerstone

Complete the following course:

ENG 300 — Introduction to Literary Studies in English.	3
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Literature Surveys

Complete the following four courses:

ENG 331 — British Literature to 1750	3
ENG 332 — British Literature since 1750	3
ENG 341 — American Literature to 1865	3
ENG 342 — American Literature since 1865	3

Linguistics

Select one course from the following:

ENG 305 — Introduction to Linguistics	3
ENG 315 — Structure of English	3
ENG 404 — Linguistics: Grammar	3

Select one course from the following:

ENG 393 — History of English Language	3
ENG 394 — Language and Society	3
ENG 401 — General Semantics	3
ENG 405 — Introduction to Old English	3

Writing

Select one course from the following:

ENG 390 — Professional Writing	3
ENG 391 — Advanced Expository Writing	3
CMJN 301 — Advanced Newswriting and Reporting II	3
CMJN 460 — Reviews and Criticism	3
CMJN 465 — Editorial Writing	3

Select one course from the following:

ENG 395 — Poetry Writing	3
ENG 396 — Fiction Writing	3
ENG 397 — Writing Creative Nonfiction	3
ENG 483 — Advanced Poetry Writing	3
ENG 484 — Advanced Fiction Writing	3
ENG 485 — Advanced Writing Nonfiction	3
CMJN 358 — Sportswriting	3
CMJN 364 — Feature Writing	3

English Language Arts Pedagogy

12

ENG 280 — Intro to Teaching Secondary Language Arts	3
ENG 381 — Teaching Literature in Secondary Schools	3
ENG 382 — Teaching Writing in Sec. School	3
ENG 400 — Studies in English for Teachers	3

Literature Electives

12

Select one cultural diversity course from the following:

ENG 311 — Global English Literature	3
ENG 320 — Women Writers and Feminist Perspectives	3
ENG 325 — Religious Literature of the World	3
ENG 348 — African-American Literature	3
ENG 360 — Appalachian Literature	3
ENG 365 — Literature of the South	3
ENG 398 — Gay and Lesbian Literature	3

Select one literary period course from the following:

ENG 422 — Studies in American Literature to 1900	
ENG 423 — Studies in American Literature, 1900-1965	
ENG 424 — Studies in Contemporary American Literature	
ENG 436 — The English Renaissance	
ENG 441 — Restoration and Eighteenth Century British Literature	
ENG 442 — Romantic Writers	
ENG 443 — Victorian Writers	
ENG 444 — Twentieth Century British Literature	
ENG 445 — Seventeenth Century British Literature	
<i>Select one major author course from the following:</i>	3
ENG 435 — Shakespeare	
ENG 495 — Seminar: Major Writers	
<i>Select one genre course from the following:</i>	3
ENG 344 — The Short Story and the Novel	
ENG 432 — The English Novel	
ENG 435 — Shakespeare	
ENG 453 — Modern Drama	
ENG 455 — Early Dramatic Literature	
ENG 463 — American Fiction	
ENG 466 — American Poetry	
ENG 470 — Introduction to Film Literature	

Supplementary Requirements

<i>Foreign Language</i>	3
Three semester hours in one foreign language, e.g., French, Spanish, German, Italian, Latin, Russian above the first semester level, or ENG 405, Introduction to Old English	
<i>Professional Education Courses</i>	18
EDF 207 — Foundations of Education	3
EDF 211 — Human Growth and Development	3
EDF 311 — Learning Theories & Assessment in Ed	3
EDSE 312 — Educational Methods and Technology	3
EDSE 483 — Classroom Organ. & Mgt for Sec. Teachers	3
EDSP 230 — Education of Exceptional Children	3

Professional Semester

EDSE 416 — Clinical Practice	12
Total	84

Major

General Education Requirements	48
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See the general education requirements for the University.

The following specific general education requirements must be completed:

ENG 499C — Senior Seminar in English	3
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Semester Hours

1. Literature Cornerstone	3
ENG 300 — Introduction to Literary Studies in English	3
2. Literature Surveys	12
ENG 331 — British Literature to 1750	3
ENG 332 — British Literature since 1750	3
ENG 341 — American Literature to 1865	3

ENG 342 — American Literature since 1865	3
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3. Linguistics **3**

Select one course from the following **3**

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

4. Writing **6**

a. Academic and Professional Writing (select one) **3**

ENG 390 — Professional Writing	
ENG 391 — Advanced Expository Writing	

b. Creative Writing (select one) **3**

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

5. Literature Electives **12**

a. Cultural Diversity (select one) **3**

ENG 311 — Global English Literature	
ENG 320 — Women Writers and Feminist Perspectives	
ENG 325 — Religious Literature of the World	
ENG 348 — African-American Literature	
ENG 360 — Appalachian Literature	
ENG 365 — Literature of the South	
ENG 398 or WST 394 — Gay and Lesbian Literature	

b. Literary Period (select one) **3**

ENG 422 — Studies in American Literature to 1900	
ENG 423 — Studies in American Literature, 1900-1965	
ENG 424 — Studies in Contemporary American Literature	

ENG 436 — English Renaissance	
ENG 441 — Restoration and 18th-Century Literature	
ENG 442 — Romantic Writers	
ENG 443 — Victorian Writers	
ENG 444 — 20th Century British Literature	
ENG 445 — 17th Century British Literature	

c. Major Author (select one) **3**

ENG 435 — Shakespeare	
ENG 495 — Seminar: Major Writers	

d. Genre (select one) **3**

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

6. English Elective (select one) 3

Select any 300-level or higher English course

7. Supplementary Requirements 3

Foreign Language

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

Total 42

English Minor

American Literature Surveys (select one) 3

ENG 341 — American Literature to 1865

ENG 342 — American Literature since 1865

British Literature Surveys 6

ENG 331 — British Literature to 1750

ENG 332 — British Literature since 1750

Linguistics (select one) 3

ENG 305 — Introduction to Linguistics

ENG 315 — Structure of English

ENG 393 — History of the English Language

ENG 394 — Language and Society

ENG 401 — General Semantics

ENG 404 — Linguistics: Grammar

ENG 405 — Introduction to Old English

Writing (select one)

ENG 390 — Professional Writing 3

ENG 391 — Advanced Expository Writing

ENG 395 — Poetry Writing

ENG 396 — Fiction Writing

ENG 397 — Writing Creative Nonfiction

ENG 483 — Advanced Poetry Writing

ENG 484 — Advanced Fiction Writing

ENG 485 — Advanced Nonfiction Writing

English Electives (select three) 9

200-400 level courses in English, six hours of which must be 300-400 level courses

Total 24

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

Linguistics Minor

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

Linguistics Courses 15

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 — General Semantics

ENG 404 — Linguistics: Grammar

ENG 405 — Introduction to Old English

Electives 6

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

English

Any 300-400 level course in ENG

Foreign Language

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

Formal Systems

CIS 205 — Introduction to Programming—C++

CS/MATH 170 — Introduction to Computer Science

MATH 252 — Boolean Algebra

MATH 260 — FORTRAN Programming

MATH 300 — Introduction to Mathematical Proof

PHIL 306 — Introduction to Logic

PHIL 312 — Symbolic Logic

Total 21

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

Creative Writing Minor

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

Writing courses 12

Select four courses from the following:

ENG 391 — Advanced Expository Writing

ENG 395 — Poetry Writing

ENG 396 — Fiction Writing

ENG 397 — Writing Creative Nonfiction

ENG 483 — Advanced Poetry Writing

ENG 484 — Advanced Fiction Writing

ENG 485 — Advanced Nonfiction Writing

THEA 412 — Playwriting

Literature electives (300-400 level courses) 3

Additional electives from 300-400 level courses in literature, linguistics, or foreign languages 6

Total 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.

Literature Minor

American or British Literature 3

Select one of the following:

ENG 331 — British Literature to 1750

ENG 332 — British Literature since 1750

ENG 341 — American Literature to 1865

ENG 342 — American Literature since 1865

ENG 435 — **Shakespeare Literature and literary criticism** 3
Literature and literary criticism 9
Select three electives from 300-400 level courses

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:
 HIS 202 — American Studies
 HIS 220 — Early American History
 HIS 313 — Religion in American History
 HIS 325 — History of the South
 HIS 351 — England to 1688
 HIS 352 — England since 1688
 HIS 357 — The Renaissance and Reformation
Total 21

The minor in literature does not include the general education requirements in composition (six hours).

Bachelor of Fine Arts Major in Creative Writing

Faculty

A. Adams, K. Carlson, C. Coaplen-Anderson, G. Colburn, G. Eklund, M. Graves, F. Helphinstine, S. Henneberg, C. Holbrook, T. Irons, K. Mincey, R. Morrison, S. Morrison, L. Neeper, R. Royar, C. Wilkinson

Program Competencies

In addition to the English competencies, students will develop:

1. Theoretical understanding of elements of craft in multiple genres of creative writing.
2. Ability to write effectively in multiple genres of creative writing.
3. Theoretical understanding of methods of critical appraisal and revision of creative writing in multiple genres.
4. Ability to critically appraise and revise writing in multiple genres.
5. Knowledge of various genres (e.g., short story, drama, novel, poem, essay) and their historical development.
6. Ability to complete all tasks leading to the production of a literary journal.
 - Critical appraisal of submitted manuscripts
 - Journal layout and design
 - Formatting

Proofreading and editing
 Distribution

Assessment Procedures

Survey of graduates
 Annual assessment of original works of creative writing via a cumulative portfolio
 Yearly progress reports
 Assessment of senior thesis - all graduating BFA candidates are required to present a senior thesis in the form of a cumulative portfolio which contains a collection of the student's best writing. This portfolio will be discussed during a 30-minute defense in which the student will be required to discuss the work, its literary influences, ideas toward publication, process, etc.

Bachelor of Fine Arts

The English curriculum has a two-fold purpose. It seeks to make a contribution to the general education of all students by providing them with the study of writing so they can use their language as effectively and precisely as possible and by introducing them to the sympathetic understanding of literature so their personal lives will be enriched by literary art. The English degree prepares students for such vocations as teaching, publishing, business, and public relations as well as for further professional studies.

The BFA in Creative Writing diverges from the BA in English in its significantly greater concentration on the study of creative writing (requiring 18 hours in creative writing and a senior creative thesis).

BFA in Creative Writing

General Education Requirements

See general education requirements for the University.

The following specific general education requirements must be completed:

CMAP 166 — Desktop Publishing	3
ENG 293 — Introduction to Creative Writing	3
CRW 499C — Senior Thesis	3
GENERAL EDUCATION REQUIREMENTS	48

Creative Writing	18
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<i>Complete the following:</i>	9
ENG 395 — Poetry Writing	3
ENG 396 — Fiction Writing	3
ENG 397 — Creative Nonfiction Writing	3
<i>Select three courses from the following:</i>	9
ENG 483 — Advanced Poetry Writing	3
ENG 484 — Advanced Fiction Writing	3
ENG 485 — Advanced Nonfiction Writing	3
THEA 412 — Playwriting	3

Creative Writing

Literature Cornerstone

ENG 300 — Introduction to Literary Studies in English.	3
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Literature Cornerstone

Literature Surveys

Select three of the following:

ENG 331 — British Literature to 1750	3
ENG 332 — British Literature since 1750	3
ENG 341 — American Literature to 1865	3
ENG 342 — American Literature since 1865	3
Literature and Linguistics electives	9
<i>Select three of the following, no more than one course from a specific area:</i>	
<i>Linguistics</i>	
ENG 305 — Introduction to Linguistics	
ENG 315 — Structure of English	
ENG 393 — History of the English Language	
ENG 394 — Language and Society	
ENG 401 — Semantics	
ENG 404 — Linguistics: Grammar	
ENG 405 — Introduction to Old English	
<i>Cultural Diversity</i>	
ENG 311 — Global English Literature	
ENG 320 — Women Writers and Feminist Perspectives	
ENG 325 — Religious Literature of the World	
ENG 348 — African-American Literature	
ENG 360 — Appalachian Literature	
ENG 365 — Literature of the South	
ENG 398 — Gay and Lesbian Literature	
<i>Literary Period</i>	
ENG 422 — Studies in American Literature to 1900	
ENG 423 — Studies in American Literature, 1900-1965	
ENG 424 — Studies in Contemporary American Literature	
ENG 436 — The English Renaissance	
ENG 441 — Restoration and Eighteenth Century British Literature	
ENG 442 — Romantic Writers	
ENG 443 — Victorian Writers	
ENG 444 — Twentieth Century British Literature	
ENG 445 — Seventeenth Century British Literature	
<i>Major Author</i>	
ENG 435 — Shakespeare	
ENG 495 — Seminar: Major Writers	
<i>Genre</i>	
ENG 344 — The Short Story and the Novel	
ENG 432 — The English Novel	
ENG 435 — Shakespeare	
ENG 453 — Modern Drama	
ENG 455 — Early Dramatic Literature	
ENG 463 — American Fiction	
ENG 466 — American Poetry	
ENG 470 — Introduction to Film Literature	
Supplementary Requirements	
Foreign Language	3
Three semester hours in one foreign language, e.g., French, Spanish, German, Italian, Latin, Russian above the first semester level, or ENG 405, Introduction to Old English	
Total	42

Department History, Philosophy, Religion, & Legal Studies

John Ernst, Interim Chair

354 Rader Hall
(606) 783-2655

History

Faculty

J. Ernst, J. Hennen, T. Kiffmeyer, A. Mandzy, A. Scott,
K. DuRocher, I. N'Daiye

Program Competencies

Students are expected to possess:

1. A broad understanding of the events, circumstances, and chronology of world history.
2. The analytical ability and critical thinking skills to interpret historical events.
3. The ability to use methods of historical investigation, to conduct original research using primary sources, and to present findings in written and oral formats.
4. The ability to access and use electronic databases, information sites, and various online resources.

Assessment Procedures

Major Field Achievement Test
Capstone course

Bachelor of Arts

The major and minor in history provide breadth in area coverage and depth in practicing history research. These characteristics of the program prepare students to enter the teaching profession, to enter an applied field such as heritage work, or to go on for graduate education.

General Education Requirements **48**

See general education requirements for the University.

Major

HIS 201 — Global Studies	3
HIS 202 — American Studies	3
HIS 210 — Early World Civilization	3
HIS 220 — Early American History	3
HIS 250 — Practicing History	3
HIS 300-329 — Advanced American History	3
HIS 350-369 — Advanced European History	3
HIS 370-379 — Advanced Non-Western History	3
HIS 399 — Selected Topics in History (Junior Seminar)	3
HIS 499C — Senior Seminar in History	3
Advanced Electives in History	3

Minimum for Major **33**

Minor

HIS 201 — Global Studies	3
HIS 202 — American Studies	3
HIS 210 — Early World Civilization, or HIS 220 — Early American History	3
HIS 250 — Practicing History	3

HIS 300-329 — Advanced American History	3
HIS 350-369 — Advanced European History	3
HIS 370-379 — Advanced Non-Western History	3
Advanced Elective in History	3
Minimum for Minor	24

Supplemental Requirements of each Major and Minor in History:

1. Three hours of any foreign language must be included in the humanities component of the general education requirement for history majors.
2. All majors and minors are encouraged to seek significant international experiences through travel, opportunities on campus, or use of modern information technologies.

Additional Constraints:

Students are permitted to use only one course in the major or minor from each of the following pairs:

1. HIS 322 — Appalachia or HIS 323 — Kentucky
2. HIS 311 — Native American History, or
HIS 321 — The American Frontier

Philosophy/Religious Studies

Faculty

K. Bardsley, 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.

Major

Required Core	18
PHIL 200 — Introduction to Philosophy	3
PHIL 306 — Introduction to Logic	3
PHIL 355 — Ancient and Medieval Philosophy	3
PHIL 356 — Modern and Contemporary Philosophy	3
PHIL 399 - Special Topics	3
PHIL 499C — Senior Seminar in Philosophy	3

Philosophy Option:

12 hours chosen from group A

Religious Studies Option:

REL 221 — World Religions I	3
REL 222 — World Religions II	3
PHIL 307 — Philosophy of Religion	3
Six hours chosen from group B	

Philosophy Minor

PHIL 200 — Introduction to Philosophy	3
PHIL 306 — Introduction to Logic	3
PHIL 355 — Ancient and Medieval Philosophy	3
PHIL 356 — Modern and Contemporary Philosophy	3
Nine hours chosen from group A	

Religious Studies Minor

REL 221 — World Religions I	3
REL 222 — World Religions II	3
PHIL 306 — Introduction to Logic	3
PHIL 307 — Philosophy of Religion	3
12 hours chosen from group B	

Area of Concentration

Core Requirements

PHIL 200 — Introduction to Philosophy	3
PHIL 203 — Social Ethics	3
PHIL 300 — Philosophy of Science	3
PHIL 306 — Introduction to Logic	3
PHIL 307 — Philosophy of Religion	3
PHIL 355 — Ancient and Medieval Philosophy	3
PHIL 356 — Modern and Contemporary Philosophy	3
PHIL 399 — Special Topics	3
PHIL 499C — Senior Seminar in Philosophy	3

Area Requirements, Philosophy Option:

(Choose one of each pair.)

PHIL 320 — Eastern Philosophy or PHIL 321 — The Meaning of Life	3
PHIL 333 — Environmental Ethics or PHIL 403 — Ethical Theory	3
PHIL 420 — Metaphysics or PHIL 430 — Epistemology	3
PHIL 308 — Philosophy of the Arts or PHIL 312 — Symbolic Logic	3

Area Requirements, Religious Studies Option:

REL 221 — World Religions I	3
REL 222 — World Religions II	3
PHIL 320 — Eastern Philosophy	3
PHIL 321 — The Meaning of Life	3

Additional Credits, Philosophy Option:

Nine hours chosen from group A

Additional Credits, Religious Studies Option:

Nine hours chosen from group B.

Group A: Philosophy Option Courses

PHIL 203 — Social Ethics
PHIL 300 — Philosophy of Science
PHIL 307 — Philosophy of Religion
PHIL 308 — Philosophy of the Arts
PHIL 312 — Symbolic Logic
PHIL 313 — American Philosophy
PHIL 320 — Eastern Philosophy

PHIL 321 — The Meaning of Life
 PHIL 333 — Environmental Ethics
 PHIL 341 — Philosophy and Death
 PHIL 351 — Philosophy of Love and Sex
 PHIL 389 — Honors Seminar in Philosophy
 PHIL 399 — Special Courses
 PHIL 403 — Ethical Theory
 PHIL 410 — Current Philosophy
 PHIL 420 — Metaphysics
 PHIL 430 — Epistemology
 PHIL 476 — Special Problems*

Group B: Religious Studies Option Courses

ART 263 — Art History I
 ART 265 — Art History II
 ART 362 — Medieval Art
 ART 363 — Renaissance Art
 ART 467 — Native American Art
 ENG 325 — Religious Literature of the World
 ENG 367 — Old Testament Literature
 ENG 368 — New Testament Literature
 GEO 370 — Geography of World Religions
 HIS 210 — Early World Civilizations
 HIS 313 — Religion in American History
 HIS 356 — Medieval Europe
 HIS 357 — The Renaissance and Reformation
 HIS 374 — The Middle East
 HON 102 — The Age of Faith
 HON 201 — The Age of Enlightenment
 HUM 203 — Introduction to Medieval Culture
 PHIL 300 — Philosophy of Science
 PHIL 321 — The Meaning of Life
 PHIL 341 — Philosophy and Death
 PHIL 355 — Ancient and Medieval Philosophy
 PHIL 356 — Modern and Contemporary Philosophy
 PHIL 399 — Special Courses
 PHIL 476 — Special Problems*
 PHIL 499C — Senior Seminar in Philosophy
 REL 321 — Early and Medieval Christian Thought
 REL 322 — Modern Christian Thought
 REL 323 — 20th Century Christian Thought
 REL 476 — Special Problems*

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

Legal Studies

Faculty

K. Collinsworth, W. Green, D. Murphy

Individuals wishing to pursue law school can select from a variety of majors, although many pursue a major in Paralegal, History, Philosophy, or Government. Students who choose a major other than Paralegal Studies are strongly encouraged to consider the Legal Studies minor. The Legal Studies faculty, all of whom have law degrees, provide students interested in attending law school

with advice pertaining to the Law School Aptitude Test (LSAT), law school admission procedures, 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.
2. The ability to apply the basic principles of law within specialized areas.
3. The ability to function 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.
4. The ability to recognize and value the varied nature of the human condition across individuals and culture groups through paralegal practice.
5. The ability to analyze, recognize, investigate, and coherently summarize legal issues.
6. The skills to use appropriate technology in a professional setting.

Assessment Procedures

Senior capstone project
 Internship evaluations
 Employment and graduate surveys

Bachelor of Arts

The paralegal profession is a fast-growing field in which paralegals perform a variety of essential legal tasks under the supervision of licensed lawyers. Some of the many tasks a paralegal may perform are client and witness interviewing, drafting of legal documents, researching points of law, litigation support, law office management, and representing clients before administrative agencies as allowed by law.

The B.A. in Paralegal Studies is designed to equip graduates with the appropriate applied and theoretical knowledge of law to successfully assist lawyers in providing legal services to clients. The major combines the advantages of a liberal arts education with the development of professional skills necessary to provide legal assistance to attorneys in law offices, corporations, and government agencies.

The Paralegal Studies Program has been approved by the American Bar Association for paralegal training.

Note: Paralegals are prohibited by law from engaging in the practice of law. Completion of this program or receipt of a B.A. in Paralegal 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.

General Education Requirements

48

See general education requirements for the University.

Paralegal Studies Major

* Accredited by the American Bar Association

Program Requirements

General Education Prerequisite

GOVT 141 — United States Government 3

Required Courses

PLS 210 — Introduction to Paralegalism 3

PLS 321 — Legal Research 3

PLS 322 — Legal Writing 3

PLS 325 — Civil Litigation for the Paralegal I 3

PLS 326 — Civil Litigation for the Paralegal II 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

PLS 499C — Senior Paralegal Practice Seminar 3

Required Total 33

Elective Courses

Choose six semester hours from the following approved electives. At least three semester hours must be from courses with a PLS prefix.

GOVT 303 — Comparative Constitutional Law and Politics 3

GOVT 321 — Constitutional Law: Govt Powers 3

GOVT 322 — Courts and Civil Liberties 3

GOVT 324 — Environmental Law and Policy 3

PLS 333 — Family Law 3

PLS 336 — Wills, Trusts, and Estates 3

PLS 337 — Corporate Law 3

PLS 360 — Paralegal Specialty Course 3

PLS 476 — Special Problems in Paralegal Studies 3

Elective total 6

Total 39

Legal Studies Minor

Faculty

W. Green, D. Murphy

The Legal Studies minor is available to all MSU students except students majoring in Paralegal Studies. The minor is designed to provide students with basic legal knowledge and skills, and is designed to prepare 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.

Students in the Legal Studies minor learn how to conduct legal research using the Internet and other computer-based legal reference tools, as well as using the traditional method of legal research in the legal reference section 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 on the law.

Students who graduate with a minor in Legal Studies will have a good basic understanding of law and procedure; however, they will not be considered prepared to be employed as a paralegal, and may not practice law or render legal advice except as provided by applicable law. This program is not part of the ABA approval for the PLS program.

Program Requirements

PLS 321 — Legal Research 3

PLS 325 — Civil Litigation for the Paralegal I 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

Subtotal 18

Plus six semester hours from the following list (at least one elective course must have a PLS prefix):

GOVT 303 — Comparative Constitutional Law and Politics 3

GOVT 321 — Constitutional Law: Government Powers 3

GOVT 322 — Courts and Civil Liberties 3

GOVT 324 — Environmental Law and Policy 3

PLS 333 — Family Law 3

PLS 336 — Wills, Trusts, and Estates 3

PLS 337 — Corporate Law 3

PLS 360 — Paralegal Specialty Course 3

Total for Minor 24

Specific general education courses required by the program:

GOVT 141 — United States Government 3

PLS 226 — Law for the Layperson 3

Social Studies

Faculty

R. Berglee, R. Caric, V. Craig, K. DuRocher, J. Ernst, J. Hennen, J. Holcomb, T. Kiffmeyer, A. Mandzy, J. Masterson, I. N'Diaye, G. O'Dell, E. Ratajeski, A. Scott

Program Competencies

Students are expected to possess:

1. The capacity to teach at the secondary level in at least three social studies disciplines, including history.
2. Awareness of the social, political, and economic systems that comprise contemporary societies as well as the growing interdependencies between societies as mediated by a global economy and shared concern for the physical environment.
3. The ability to integrate and synthesize knowledge across disciplinary boundaries in order to accumulate realistic understanding of global, national, and local issues.
4. The ability to recognize and value the varied nature of the human condition across individuals and culture groups through the practice of social/historical analysis.
5. The ability to express methods of social science investigation, conduct original studies, and present findings of those investigations in written and oral format.

6. The ability to assess and use electronic databases, information sites, and various online resources, and to use various instructional and presentation programs.

Assessment Procedures

- National Teachers Examination (PRAXIS)
- Performance during professional semester
- Capstone course

Bachelor of Arts

The Area of Concentration in Social Studies prepares students for teacher certification at the secondary level (grades 8 through 12) in at least four social studies teaching fields. There is no non-teaching program. This program aligns with trends in teacher certification that foster streamlining of certification requirements and procedures. A minimum of nine semester hours in a teaching field is required for certification in Kentucky. This program consists of 60 hours of credit in history and related social sciences. Students should work closely with an advisor to receive approval for the exact content of their program of study in this area of concentration.

Area of Concentration in Social Studies

General Education Requirements 48

See general education requirements for the University.

History Component 27

- HIS 201 — Global Studies 3
- HIS 202 — American Studies 3
- HIS 210 — Early World Civilization or 300 level 3
European or Nonwestern History
- HIS 220 — Early American History 3
- *HIS 250 — Practicing History 3
- HIS 301-308 3
- HIS 310-319 3
- HIS 351-361 3
- HIS 370-379 3

Geography, Government, and Economics

The student must complete the three clusters listed.

Geography 15

- GEO 101 — Physical Geography 3
- GEO 201 — Map Interpretation and Analysis 3
- GEO 300 — World Geography 3
- Electives from GEO* 6

Government 12

- GOVT 141 — United States Government 3
- GOVT 180 — Introduction to Political Theory or 3
- GOVT 242 — State and Local Government or 3
GOVT 230 — Introduction to Comparative Politics
- GOVT 300-349 3
- GOVT 360-368 3

Economics 6

- ECON 101 — Introduction to Economics 3
- ECON 201 — Principles of Macroeconomics or 3
ECON 202 — Principles of Microeconomics

Content Methods Component 6

- **HIS 499D — Teaching Social Studies 3

**HIS 451 — Curriculum and Instruction for Social Studies 3

***Offered fall semesters only; must be completed prior to professional semester.*

**HIS 250 will satisfy the GOVT 289 prerequisite for advanced courses in government (applies to social studies students only).*

Additional Constraints:

Students are permitted to use only one course in the major or minor from each of the following pairs:

1. HIS 322 — Appalachia or HIS 323 — Kentucky
2. HIS 311 — Native American History, or
HIS 321 — The American Frontier

Department of International & Interdisciplinary Studies

Philip Krummrich, Chair

Honors House
(606) 783-2807

French

Faculty

J. Secor, K. Taylor

Program Competencies

Students completing the French major will be expected to have the following competencies:

1. Proficiency in the four language skills: listening, speaking, reading, and writing.
2. Familiarity with the culture and civilization of France and other Francophone countries.
3. Familiarity with the most significant works of French literature.

Additional competencies for Teacher Education Students:

Students who are seeking additional certification for teaching are expected to possess those competencies determined by the TEP.

Assessment Procedures

Listening and reading exams will be given at the intermediate level. An exit exam testing the four skills will be administered at the advanced level.

The French curriculum at MSU teaches the language, literature, cinema, and civilization of France in depth, and introduces the culture of the Francophone world. Through the study of French, students will develop an awareness of areas of thought and action different from their own.

A French major or minor can lead to employment opportunities in teaching, business, translating, and interpreting, as well as postgraduate study in law, diplomacy, and the humanities.

First-hand knowledge of the target culture is vital to high achievement in the French major. Through its membership in the Kentucky Institute for International Studies, MSU provides students access to a five-week study abroad program in Paris, France. Credits

earned in KIIS automatically transfer to the MSU degree.

Note: French 202 or the equivalent is a prerequisite to all courses numbered 300 or above.

Bachelor of Arts

Major

General Education Requirements 48

(See the general education requirements for the university)

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

Total 30

Teaching (P-12)

Teaching majors must choose FRN/SPA 405 — Linguistics and Language Teaching (6 hours) in addition to the 30 hours of work specified above (36 hours total).

All majors must take the capstone course, FRN 499C, Senior Colloquium in French, in addition to the 30 or 36 hours specified above.

Requirements for P-12 Certification

Professional Education Courses

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 332 — Education of Exceptional Children	2

Professional Semester

EDSE 416 — Clinical Practice	12
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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

Minor

FRN 101 — Beginning French I	3
FRN 102 — Beginning French II	3
FRN 201 — Intermediate French	3
FRN 202 — Conversation and Composition	3
FRN 301 — Advanced Grammar and Composition	3
*Electives above FRN 202	6
Total	21

*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.

Spanish

Faculty

V. Cano, E. Hastings, P. Krummrich, J. Secor, I. Zavala-Garrett

Program Competencies

Students will demonstrate:

1. Proficiency in the four skills (listening, reading, speaking, and writing).
2. A firm command of Spanish grammatical structures.
3. Familiarity with significant aspects of the culture and civilization of the Hispanic world.
4. Familiarity with the most important works and trends of Spanish and Spanish American literature and, especially, an ability to analyze Hispanic literary passages.

Additional Competencies for Teacher Education students

Students seeking certification in Spanish are expected to possess those competencies determined by the TEP.

Assessment Procedures

Exit proficiency exams

The Spanish curriculum at MSU teaches the language and the literature of the Hispanic world, whereby students will perceive areas of thought and action different from their own. More specifically, it surveys Hispanic civilization through its history, geography, and fine arts, as well as political and social institutions. For students interested in international business, the curriculum offers the opportunity to acquire proficiency in Spanish for business and commerce.

Students may receive full credit at MSU for courses taken in summer, semester, and year study abroad programs, including those administered by the Kentucky Institute of International Studies (KIIS). Summer study opportunities are offered in Argentina, Costa Rica, Ecuador, Mexico and Spain. Two semester programs are also available: one for the fall semester in Morelia, Mexico, and one for the spring semester in Segovia, Spain. Participation is strongly encouraged.

The Spanish program prepares students to enter areas of teaching, interpretation, and translation. Further, the study of Spanish aids students seeking employment in areas where knowledge of a second language is beneficial — business and commerce, tourism, social services, and the like.

Note: SPA 300 — Grammar and Composition, is a prerequisite for all other 300-and-above numbered courses except SPA 305 — Conversation.

Bachelor of Arts

General Education Requirements 48

See general education requirements for the University.

Major

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	15
SPA 300 — Grammar and Composition	
6 hours of Hispanic Literature Electives	6
Approved 300-400 level electives	6
Total	30

Teaching (P-12)

Teaching majors must choose FRN/SPA 405 — Linguistics and Language Teaching (6 credit hours) in addition to the 30 semester hours of work specified above (36 hours total).

In addition to the 30 or 36 hours listed above, the teaching and nonteaching majors must complete SPA 499C — Senior Seminar in Spanish (three semester hours) and take the Departmental Spanish Exit Exam. SPA 306 — Latin American Culture and Civilization and/or SPA 304 — Spanish Culture and Civilization are recommended for students who will take the PRAXIS II Exam. All students are encouraged to participate in study abroad programs, especially those sponsored by the Kentucky Institute for International Studies. Please note that the number of hours indicated for the major is a minimum requirement. Students may need to take additional course work to achieve the proper level of competency in the language.

Spanish Minor

Basic Language	15
SPA 101 — Spanish Language and Culture I	
SPA 102 — Spanish Language and Culture II	
SPA 201 — Intermediate Spanish I	
SPA 202 — Intermediate Spanish II	
SPA 208 — Spanish Phonetics and Pronunciation	
Advanced Language	3
SPA 300 — Grammar and Composition	
Approved 300-400 level electives	3
Total	21

Students enrolling at Morehead State University must take a Placement Examination in Spanish if they have studied the language previously and intend to continue their Spanish studies at MSU. The Placement Test is available at any time on the WWW and takes no more than 30 minutes to complete; the score is sent automatically to the student and to the department. We will recommend placement on the basis of the score.

**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.*

Chinese, German, Italian, Latin

Faculty

J. Secor

For questions, please call the department chair, Dr. Philip Krummrich: (606) 783-2726, p.krummrich@moreheadstate.edu. It is strongly recommended that Spanish be started in the freshman year and that the courses be taken without interruption.

No academic programs in these languages are available. Please refer to the course description section for course offerings.

George M. Luckey Academic Honors Program

Dr. Philip Krummrich, Director

To complete the Academic Honors Program, students must complete the following courses:

HON 101 - The Age of Classicism	3
HON 102 - The Age of Faith	3
HON 201 - The Age of Enlightenment	3
HON 202 - The Age of Uncertainty	3
Any approved Honors Seminar courses	6

Appalachian Studies Minor

Faculty

D. Eisenhour, J. Gritton, J. Hennen, T. Irons, T. Kiffmeyer, S. Parkansky, R. Prindle, B. Reeder, E. Reeves, A. Risk, D. Rigsby, D. Smith, J. Stafford, S. Tallichet

Appalachian Studies Core:

APS 201 — Introduction to Appalachian Studies	3
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Choose five of the following for a total of 15 credit hours:

ART 468 — Appalachian Arts	3
ENG 360 — Appalachian Literature	3
GEO 341 — Appalachia	3
HIS 322 — History of Appalachia	3
MUST 104 — Traditional Vocal Harmony	3
SOC 560 — Appalachian Culture	3
Total	18

Electives **6**

Two three-credit hour courses (may include courses not already selected above). These courses will be cross listed in the minor with the APS prefix.

AGR 319 — Herbs	3
BIOL 318 — Local Flora	3
BIOL 351 — Plant Natural History	3
BIOL 352 — Animal Natural History	3
ENG 394 — Language and Society	3
ENG 395 — Poetry	3
GEO 344 — Kentucky	3
GEO 345 — Environmental Geography	3
GOVT 344 — Kentucky Government	3
HS 491 — Creative Foods	3
MUSH 261 — Music Listening (folk element)	3
MUST 103 — Practical Theory for Traditional Music	3
RAPP 201 — Society, Nature, and Development	3

RAPP 202 — Basic Computer Tech in Regional Analysis	3
Total	24

Interdisciplinary International Studies Minor

Adrian Mandzy, Coordinator

BR 003B
(606) 783-9369

The purpose of the International Studies (IST) minor is to provide students with an understanding of the complex relationships that exist in the world today between nation-states and non-governmental organizations. The IST minor will allow students to investigate international issues through an interdisciplinary approach in which they will combine theory with practice.

Students may select courses that will provide them with a concentration in a specific nation (i.e., German, Canadian, or Chinese studies) or in a region/continent (i.e., Southeast Asian, South American, or sub-Saharan Africa). Students may also choose a general approach to international studies. The intention is to equip students to live and work in a world with understanding and respect of other peoples.

Program Competencies

Upon completion of this program the students will:

1. Demonstrate elementary competence in at least one modern language beyond their native tongue.
2. Develop an international context that will develop their personal and professional lives.
3. Develop appreciation for the culture and civilization of other countries.
4. Explain the implications of international issues to their major and/or profession.
5. Navigate successfully in a foreign country.

The senior seminar class will provide the opportunity to analyze and synthesize material from the program.

The IST minor requires 22 hours. These hours are distributed in the following way:

Required Courses

IST 101 — Introduction to International Studies	3
IST 301 — International Studies Study Abroad	1
IST 401 — Seminar in International Studies	3

Electives

Additional courses crosslisted in International Studies 9

Courses currently approved to be crosslisted in the minor include:

IST/HIS 201 — Global Studies	3
IST/AGR 204 — World Food	3
IST/FRN 205 — French Culture and Civilization	3
IST 206/FRN 206 — Business French	3
IST/ENG 211 — Introduction to World Literature I	3
IST/ENG 212 — Introduction to World Literature II	3
IST/REL 221 — World Religions I	3
IST/REL 222 — World Religions II	3
IST 241/GEO 241 - United States and Canada	3

IST/ART 263 — Art History I	3
IST/ART 264 — Art History II	3
IST/ART 265 — Art History III	3
IST/GEO 300 — World Geography	3
IST 302/GOVT 331 — Politics of the Middle East and North Africa	3
IST 303/GOVT 332 — Politics of Latin America and the Caribbean	3
IST 304/GOVT 333 — Politics of Sub-Saharan Africa	3
IST/SOC 305 — Cultural Anthropology	3
IST 306/GOVT 364 — International Relations	3
IST 307/GOVT 367 — Politics of Intern Econ Relations	3
IST/GEO 310 — Australia	3
IST/GEO 311 — Geography of the Global Economy	3
IST 321/PHIL 320 — Eastern Philosophy	3
IST 324/GEO 370 — Geography of World Religions	3
IST/ENG 325 — Religious Literature of the World	3
IST/GEO 328 — Africa	3
IST/GOVT 329 — North Amer Politics: US & Canada	3
IST 330 — Perspectives on Canada	3
IST 331/HIS 336 — History of Canada	3
IST 332 — First Nations of Canada	3
IST 333 — Govt & Politics of Britain and Canada	3
IST 334/GOVT 303 — Comp Const Law & Politics	3
IST 335 — Political Econ & Envir Policy in Canada	3
IST 336 — Politics of the American Auto Industry	3
IST/GOVT 337 — Politics of Asia	3
IST 338/GOVT 334 — Russia and East European Govt	3
IST 340/SPAN 304 — Spanish Culture and Civilization	3
IST 341/SPAN 306 — Latin American Cult & Civil	3
IST/NAHS 345 — Global Health	3
IST/CMSP 350 — Comm, Culture, & Diversity	3
IST/HIS 351 — England to 1688	3
IST/HIS 352 — England since 1688	3
IST/HIS 353 — Russia to 1917	3
IST/HIS 354 — Russia since 1917	3
IST/HIS 355 — Modern Germany	3
IST/HIS 358 — Revolutionary Europe	3
IST/HIS 359 — Nineteenth Century Europe	3
IST/GOVT 360 — United Nations and World Organizations	3
IST/HIS 361 — 20th Century Europe	3
IST/GOVT 362 — Current World Problems	3
IST/GOVT 368 — Human Rights and Global Justice	3
IST/HIS 370 — African History	3
IST/HIS 371 — Traditional China	3
IST/HIS 372 — Modern China	3
IST/HIS 373 — Japanese Civilization	3
IST/HIS 374 — The Middle East	3
IST/HIS 379 — Latin American History	3
IST/GEO 383 — Asia	3
IST 399 — Selected Topics in International Studies	3
IST/MNGT 409 — International Management	3
IST 430 — Canadian Parliament Internship	3
IST/ECON 447 — International Economics	3
IST/MKT 469 — International Marketing	3

IST/ART 481 — German Art of the 20th Century	3
IST/ART 482 — Contemporary World Art	3
Special topics will be approved for cross listing on an individual basis.	

Foreign Language Competency 6

Six hours of study in one foreign language or its equivalent as approved by the Associate Dean for International Education.

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 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 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 accessing the international education Web page (www.moreheadstate.edu/oie).

Canadian Studies Minor

Canadian Studies Emphasis

Required Courses	13
FRN 101 — Beginning French I	3

FRN 102 — Beginning French II	3
IST 101 — Introduction to International Studies	3
IST 301 — Study Abroad-Internship	1
IST 401 — Senior Seminar	3

Note: Canadian-related studies may include IST 301 for a two-week period of study in Canada and IST 401 for a Canada-related seminar subject in comparative and international perspective.

Canadian Studies Required Courses	3
IST 330 — Perspectives on Canada	3

Canadian Studies Electives 6

IST 231 — Geography of the United States and Canada	
IST 329 — North American Politics: United States and Canada	
IST 331 — History of Canada	
IST 332 — First Nations of Canada	
IST 333 — Government and Politics of Britain and Canada	
IST 334 — Comparative Constitutional Law and Politics	
IST 335 — Political Economy and Environmental Policy in Canada	
IST 336 — Politics of the North American Auto Industry	
IST 339 — Selected Topics in Canadian Studies	
Study in Canada elective	3
IST 430 — Canadian Parliament Internship Program	
Total	22

Interdisciplinary Women's Studies Minor

Ann Andaloro, Director

BR 303F
(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.

Required Courses

WST 273 — Introduction to Women's Studies	3
WST 490 — Integrative Capstone in Women's Studies	3

Electives

Additional courses cross listed in Women's Studies 15

Some courses currently approved to be cross listed in the minor are:

WST 120/ENG 120 — Approaches to Literature
WST 210/GOVT 180 — Introduction to Political Theory
WST/SWK 230 — Social Welfare, History, and Ethics
WST 302/CRIM 300 — Criminogenic Family
WST 303/SWK 301 — Comparative Family Violence
WST/SOC 305 — Cultural Anthropology
WST/HIS 312 — Women in American History
WST/GOVT 317 — Feminist Political Thought
WST/ENG 320 — Women Writers and Feminist Perspectives
WST/EDF 322 — Gender and Education
WST/SOC 333 — Sociology of Gender Violence
WST/SOC 335 — The Family
WST/SWK 340 — Community Mental Health
WST/SOC 350 — Human Experience of Sex and Gender
WST/PHIL 351 — Philosophy of Love and Sex
WST/SOC 354 — The Individual and Society
WST/GOVT 355 — Women and Politics
WST/SOC/CRIM 363 — Cross Cultural Perspectives on the Sex Industry
WST/SOC 374 — American Minority Relations
WST 375/HIS 374 — History of the Middle East
WST/HIS 377 — 20th Century Asian Wars
WST/CRIM 380 — Race, Class, Gender & Crime
WST/ENG 391 - Advanced Expository Writing
WST 397/SOC 300 — Social Stratification
WST/HS 457 — Parenting
WST 474/NAHS 303 — Women's Health Care
WST/CMEM 452 — Problems in Contemporary Broadcasting
WST/COMM 482 — American Popular Culture & Com. Tech.

New courses and special topics will be approved for cross listing on an individual basis.

For additional information on the Interdisciplinary Women's Studies Program (IWSP), contact the IWSP Coordinator at (606) 783-5288. You may also contact or visit the Women's Studies Office at 204 Rader Hall, Morehead, KY 40351 or by telephone at (606) 783-5414.

Department of Military Science

LTC Maxwell Ammons, Chair

Button Auditorium
(606) 783-5225

Faculty

LTC M. Ammons, CPT V. Cesaro, CPT C. Flannery, MSG D. Curfman, SFC B. Morra

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 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

Scholarships. 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 (bachelors degree or higher), complete all General Education requirements and complete three (3) hours of a military history-related course from the selection below (or approved by the Department Chair); while maintaining at least a 2.0 GPA (2.5 for scholarship students). Those students completing the program will receive a commission as a Second Lieutenant in the U.S. Army, U.S. Army Reserves (USAR), or the Army National Guard (ARNG).

Four-Year Program

The four-year program is divided into two phases, the basic course and the advanced course.

The basic course (MS 100 and 200) is open to all students and begins the leadership development process. It is designed to acquaint students with the Army, introduce fundamental individual skills, introduce time management skills and teach students to develop their own capabilities. There is no military service obligation for students to participate in basic course classes.

The advanced course (MS 300 and 400) accepts students of high moral character who meet required medical, aptitude, and GPA requirements. The Military Science Advanced Course is normally taken during the junior/senior or graduate years. Students learn land navigation, communications, small unit tactics, patrolling, military management, staff operations, logistics, army administration, military law, ethics, and the Army system and culture. Students must meet eligibility requirements and sign a contract for commissioning with the U.S. Army. The general objective of these courses is to produce junior officers who will be the future officer leadership of the U.S. Army, U.S. Army Reserve, or the Army National Guard. Contracted Advanced Course students are required to attend the Leadership Development and Assessment Course (LDAC), normally between their junior and senior academic years. This course is mandatory for all students seeking a commission in the U.S. Army but registration for university credit is optional. Students attending this camp are paid and given travel allowance from their home to camp and back.

Two-Year Program

The two-year program is designed for transfer students and MSU students who wish to earn a commission as an Army officer, but did not participate in the four-year program. Students desiring to participate in the two-year program must first gain credit for basic military science courses. Qualified veterans, USAR and ARNG personnel may receive basic course credit for their prior service. College freshmen and sophomores, or other students with at least two years remaining in college, may gain credit for basic military science courses by completing a four-week ROTC leadership practicum at Fort Knox, Ky., conducted during the summer. Once the student receives basic course credit, he/she enrolls in the advanced course (see advanced course, above, in Four-Year Program) to complete the requirements of the program.

Program Competencies

1. Medically qualified men and women must meet the pre-commissioning requirements as established by Headquarters, Department of the Army. Those personnel completing the program will receive a commission as a Second Lieutenant in the U.S. Army, U.S. Army Reserves (USAR), or the National Guard (NG).
2. Baccalaureate degrees will vary among graduates, but all personnel must meet Military Science requirements and those of their academic major.

Assessment Procedures

Military Qualifications Standard I

Communications - three hours from

- CMEM 210 — Media Literacy
- CMEM 390 — Electronic Media Web Layout and Design I
- CMJN 492 — Media Law and Ethics
- CMSP 300 — Oral Communication
- CMSP 309 — Public Speaking
- CMSP 350 — Communication, Culture, & Diversity
- CMSP 367 — Introduction to Organizational Comm.
- CMSP 371 — Professional Comm. Practices & Standards
- CMSP 382 — Argumentation and Debate
- CMSP 383 — Small Group Communication

CMSP 385 — Persuasion

Military History - 3 hours from:

- HIS 306 — The United States, 1939 - Present
- HIS 307 — Vietnam and Watergate
- HIS 317 — United States Foreign Relations
- HIS 318 — American Military History
- HIS 354 — Russia since 1917
- HIS 355 — Modern Germany
- HIS 359 — 19th Century Europe
- HIS 361 — 20th Century Europe
- HIS 370 — African History
- HIS 371 — Traditional China
- HIS 372 — Modern China
- HIS 373 — Japanese Civilization
- HIS 374 — The Middle East
- HIS 376 — Ancient History
- HIS 377 — 20th Century Asian Wars
- HIS 379 — Latin American History
- GEO 366/GOVT 372 — Political Geography

Computer Literacy - three hours from

- CIS 101 — Computers for Learning
- CIS 203 — PC Productivity Tools
- CIS 211 — Advanced Microcomputer Applications

Military Science Minor

**Six to eight credit hours from the following MS courses denoted by an asterisk (*). All other MS courses are required. Enrolled students may pursue a minor in military science by completing the following courses:*

*MS 101 — Introduction to Military Science, and	
*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 2 nd Lieutenant	
Electives of particular interest and value to military science as approved by military science advisor (300 level courses or above)	6

Minimum for minor 24

**Placement credit for these courses may be given to veterans, graduates of the college level ROTC summer programs, and participants in high school level ROTC programs.*

***Require prior approval/permission by the Department Chair.*

The following criteria must be met by all students in order to minor in military science:

1. Acceptance into the advanced course.
2. A cumulative GPA of 2.0 or better.
3. A GPA of 2.0 or better in the major field or area of concentration.
4. A GPA of 3.0 or better in military science.

The above standards may be waived, providing the cadet has a cumulative GPA of 2.25 or better, with the approval of a board consisting of the Professor of Military Science, the Dean of the Caudill College of Arts, Humanities & Social Sciences and an MS IV cadet who has the rank of cadet major or above.

Department of Music, Theatre, & Dance

L. Curtis Hammond, Interim Chair

106 Baird Music Hall
(606) 783-2473

Faculty

S. Baker, L. Baruth, S. Blair, S. Creasap, N. Davis, P. Denayer, G. Detweiler, R. Escalante, G. Ginn, J. Grice, C. Hammond, L. Keenan, R. Little, W. Mann, B. Mason, S. McBride, R. Miles, N. Nabb, F. Oddis, D. Oyen, R. Prindle, J. Roseman, S. Snyder, P. Taylor, G. Towell, J. Viton, D. Watkins, G. Wing

The Department of Music has a distinguished history in the education of musicians. The music faculty represents all major performance areas, music education, jazz studies, theory, composition, and history. The members of the faculty hold advanced degrees from many of the nation's most highly regarded schools of music. Many are active in solo and chamber music performance. The department also has been widely recognized for the excellence of its student performing groups. A full schedule of recitals, concerts, clinics, and other special events is maintained each year. The MSU Department of Music has been an accredited institutional member of the National Association of Schools of Music since 1965.

Opportunities in Music

The Department of Music 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, Minor in Traditional Music Studies, and 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 & II, Concert Choir, University Chorus, Chamber Singers, OperaWorks, 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 certain courses in the Music Theory and Class Piano sequences must be validated by the faculty and processed through the Department of Music and the Office of the Registrar.

Transfer Student Admission

The music major entering the Department of Music, Theatre & 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 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 & 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 that the student meets the expectations of the scholarship agreement.

Program Competencies for the Bachelor of Music and 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

Program Competencies for the Bachelor of Arts Degree in 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 "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, and Exit Interview

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 & 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 go to the Testing Center to receive "K" credit on their transcripts.

Students pursuing the Bachelor of Music Education degree who achieve advanced placement or exemption from the Class Piano sequence may substitute music electives to fulfill the exempted Class Piano credit requirements or receive credit for the exempted course(s) by application to the Registrar. Students pursuing the Bachelor of Music or Bachelor of Arts in Music degree who achieve advanced placement or exemption from the Class Piano sequence prior to the completion of MUSG 224 — Class Piano IV must fulfill the remaining required credit hours in the piano/keyboard area as specified in the program of study.

Ensembles

All students are required to enroll each semester in residence in the ensemble course appropriate to the 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 credit hours beyond those listed in the program requirements. These ensemble enrollment requirements are considered the minimum for music-major students; all music students are encouraged to participate in additional large and small ensembles, including chamber and jazz ensembles, in order to receive a more extensive performance experience and professional preparation.

Private Applied Music

Music majors and minors are required to designate a principal area of Private Applied music study and enroll each semester in residence for credit in this area as required by the program of study. Students who are in residence for more than four full academic years are required to enroll for additional credit hours beyond those listed in the program requirements. Credit may also be earned in secondary applied areas with permission of the instructor. Private Applied in principal instrument requires a performance examination before a jury of faculty members in their principal applied area at the end of each semester, except as excused by the Private Applied instructor after recital appearances. In addition, music major and minor students must register for MUSP 200/400 — Performance Class concurrently with Private Applied lessons in the principal applied area. Performance Class receives no credit and is graded pass/fail, but attendance and performance in this course may affect the student's grade in Private Applied lessons.

Credit hours for Private Applied music are variable. Normally, students enroll for two-three hours of credit depending on the requirements of the degree program and the advice of the Private Applied instructor. Students studying a secondary applied

instrument normally enroll for one credit hour. Students are expected to practice at least one hour per day for each credit hour earned in Private Applied lessons.

One credit = .5 hour lesson per week (intended for approved nonmusic majors), one hour practice daily

Two credits = .5 hour lesson per week and concurrent enrollment in MUSP 200/400, two hours practice daily

Three credits = 1 hour lesson per week and concurrent enrollment in MUSP 200/400, three hours practice daily

Four credits = 1.5 hour lesson per week and concurrent enrollment in MUSP 200/400, four hours practice daily

Degree Recitals and Hearings

Students seeking the Bachelor of Music Education or Bachelor of Music degree must complete the Senior Recital on their principal performing instrument. Successful completion of the Senior Recital satisfies the integrative component in the General Education curriculum as the capstone course for the degree.

Music Education majors complete MUSP 499C — Senior Recital, a three-credit hour course that requires a formal recital with an accompanying research paper and oral presentation covering the works and composers to be performed. Students in the Bachelor of Music program complete MUSP 360 — Junior Recital, a two-credit hour course that requires a formal recital, and MUSP 499C — Senior Recital, a three-credit hour course that requires a formal recital. The Senior Recital also requires an accompanying research paper and oral presentation covering the works and composers to be performed.

Prior to scheduling a recital, the proposed program must be presented for approval by a committee of applied faculty. Students receive approval by successfully completing a recital hearing.

Music Fees

Private Applied: \$30 per credit hour

Recital Fee: \$30 per credit hour

MUSP 360 — Junior Recital (two credit hours): \$60

MUSP 498C — Senior Recital (two credit hours): \$60

MUSP 660 — Graduate Recital (two credit hours): \$60

MUSP 499C — Senior Recital (three credit hours): \$90

MUSP 470 Composition Recital (three credit hours): \$90

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, Ensemble, and Private Applied lesson courses are appropriate for students with freshman and sophomore standing; upper division (300 and 400-level) Performance Class, Student Recital and Ensemble courses are appropriate for students with junior or senior standing.

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 passing grade of "K", and two of the following: MUSH 161, MUSH 162, MUSH 361, MUSH 362, MUSE 230 (BME majors only), eight credits of 200-level Private Applied in principal instrument with grade of "C" or better (BME and BA in Music majors only), 12 credits of 200-level Private Applied in principal instrument with grade of "C" or better (BM majors only). To complete the performance component, students must meet the criteria set for their primary applied area during their end of semester jury performances.

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 48-credit hours of General Education courses common to all baccalaureate programs. Certain requirements in the General Education curriculum are met through courses required in the music major program of study. A framework of the General Education curriculum and the courses that satisfy General Education and major program requirements appear below.

I. Required General Education Core (15 credit hours)

CMSP 108 — Fundamentals of Speech Communication*	3
ENG 100 — Writing I*	3
ENG 200 — Writing II*	3
MUSE 215 — Microcomputers and Music*.	0-3
Math Reasoning	3

II. Required General Education Area Studies (30 credit hours)

(May choose no more than one from the same course prefix)

A. Humanities	6-9
<i>(Must include: MUSH 361 — History of Music I, or MUSH 362 — History of Music II)+</i>	
B. Natural and Mathematical Sciences	9
C. Social and Behavioral Sciences (may include: EDF 211 for BME students)+	9
D. Practical Living	3
<i>(FIN 264 — Personal Finance required General Education course for BM in Jazz Studies)+</i>	

III. Integrative Component (Three credit hours)

MUSP 499C — Senior Recital (capstone course)+	3
Total	48

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

*** The balance of the three hours of required credits in GE must be earned in upper-division Private Applied.*

+ Denotes courses that also fulfill music major requirements.

MSU 101 Discovering University Life

MSU 101 is a one-credit-hour course required in the first semester of enrollment of all new freshman and transfer students with less

than 24 earned credit hours. This course is designed to orient students to MSU. The music faculty teaches special course sections specifically for music-major students. Course credit for class is not calculated into total required hours for the program.

Bachelor of Music Education (BME)

Common Program Requirements

This program is designed for students who are planning for careers as music teachers in the public schools. The BME program meets the requirements for the Integrated Music P-12 initial certificate. The Integrated Music P-12 certificate is the Kentucky license to teach general, instrumental, and vocal music, primary through 12th grade levels.

Teacher Certification

In order to fulfill state of Kentucky certification guidelines, the student must complete the departmental and University education requirements. A minimum of 68-70 semester hours in the area of music and 28 hours in professional education must be completed. Also, specific standards must be met for admission to the Teacher Education Program (TEP).

IMPORTANT: Consult the TEP section of the Undergraduate Catalog for additional specific information about the requirements for entry into the TEP and completion of the teacher certification program.

Professional Education Requirements

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
EDSP 332 — Teaching the Exceptional Student**	2
EDSE 416 — Clinical Practice***	12
EDSE 483 — Classroom Organization and Management**+	3
Total	29

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

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

***Application for Clinical Practice submitted one semester in advance to Educational Services Unit.

+Required of Music Education majors who have been admitted to the TEP from the 2003-04 academic year onward. Those students admitted to the TEP before 2003-04 are not required to take this course.

Core Music Requirements

Music Theory (16 credit hours)

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

MUST 430 — Arranging	2
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Class Applied (Four credit hours)

MUSG 123 — Class Piano I*	1
MUSG 124 — Class Piano II*	1
MUSG 223 — Class Piano III*	1
MUSG 224 — Class Piano IV*	1

Music History and Literature (Seven-10 credit hours)

MUSH 161 — Literature of Music I	2
MUSH 162 — Literature of Music II	2
MUSH 361 — History of Music I**	3
MUSH 362 — History of Music II**	3

Total **30**

* Students may exempt these courses by examination.

**Denotes courses that also fulfill General Education requirements.

Area of Specialization Requirements

BME: Woodwind, Brasswind, Percussion

Woodwind, brasswind, and percussion Music Education majors are required to enroll in and participate in all activities of the Marching Band each fall semester and in the Concert or Symphony Band each spring semester (enrollment in a concert band is determined by audition). Those students who perform in the Marching Band on an instrument other than their principal applied instrument must also participate in the Concert or Symphony Band on their principal applied instrument each fall semester. In addition, woodwind, brasswind, and percussion music education majors are required to take two semesters of a choral ensemble (University Chorus, Concert Choir, or Chamber Singers).

Private Applied (14-16 credit hours)

MUSP 2XX — Private Applied Area (principal instrument course number)	8
MUSP 4XX — Private Applied Area (principal instrument course number)+	6
MUSP 200, 400 Performance Class (principal instrument section number)+	0
MUSM 200, 400 Student Recital (complete seven semesters with a grade of "K")	0
MUSP 499C — Senior Recital#	0-3

Ensembles (Nine credit hours)

MUSM 170 — Concert Band, or MUSM 171 — Symphony Band+	2
MUSM 172 — Marching Band+	2
MUSM 370 — Concert Band, or MUSM 371 — Symphony Band+	1
MUSM 372 — Marching Band+	2
MUSM 191/391 — University Chorus, MUSM 192/392 — Concert Choir, or MUSM 193/393 — Chamber Singers	2

Class Applied (Six credit hours)

MUSG 239 — Class Voice (instrumental section)	1
MUSG 211 — Class Woodwinds*	0-1

MUSG 213 — Class Brasswinds*	0-1
MUSG 217 — Class Percussion*	0-1
MUSG 226 — Class Strings	1
MUSG 212 — Advanced Woodwinds Techniques	1
MUSG 214 — Advanced Brasswinds Techniques	1

Conducting (Four credit hours)

MUSC 271 — Basic Conducting	2
MUSC 472 — Instrumental Conducting (taken concurrently with MUSE 376 — Instrumentals Materials and Methods and University Band)	2

Music Education and Technology (Seven-10 credit hours)

MUSE 215 — Microcomputers and Music**	0-3
MUSE 230 — Introduction to Music Education	1
MUSE 325 — Materials and Methods for Elementary Grades	3
MUSE 376 — Instrumental Methods and Materials (taken concurrently with MUSC 472 — Instrumental Conducting and University Band)	2
MUSE 335 — Field Experience	1

Total 40

+Enroll each semester in residence (except the semester of Clinical Practice) in the course appropriate to the results of the placement audition, Private Applied instrument area, upper-division assessment and class standing. Students who are in residence for more than four full academic years are required to enroll for additional credit hours beyond those listed. 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.

#Successful completion of MUSP 499C — Senior Recital satisfies the integrative component in General Education curriculum as the capstone course for the BME degree. The Senior Recital also requires an accompanying research paper and oral presentation covering the works and composers to be performed.

*Students are exempt from these courses if in their major instrument family or by examination.

**Fulfills General Education and Professional Education technology requirement.

BME: Voice

Vocal Music Education 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.

Private Applied (14-16 credit hours)

MUSP 240 — Private Applied Voice+	8
MUSP 200, 400 — Performance Class+ (taken concurrently with Private Applied Voice each semester)	0
MUSM 200, 400 — Student Recital (complete seven semesters with a grade of "K")	0
MUSP 440 — Private Applied Voice+	6
MUSP 499C — Senior Recital*	0-

Ensemble (Seven credit hours)

MUSM 191 — University Chorus, or MUSM 192 — Concert Choir+	4
MUSM 391 — University Chorus, or MUSM 392 — Concert Choir+	3

Class Applied (Six credit hours)

MUSG 135 — Class Guitar I	1
MUSG 211 — Class Woodwinds*	1
MUSG 213 — Class Brasswinds*	1
MUSG 217 — Class Percussion*	1
MUSG 226 — Class Strings	1
MUSG 240 — Diction for Singers I**	1

Conducting (Four credit hours)

MUSC 271 — Basic Conducting	2
MUSC 471 — Choral Conducting	2
MUSE 375 — Vocal Materials & Methods)	2

Music Education and Technology (Seven-10 credit hours)

MUSE 215 — Microcomputers and Music**	0-3
MUSE 230 — Introduction to Music Education	1
MUSE 325 — Elementary Methods and Materials	3
MUSE 335 — Field Experience	1
MUSE 375 — Vocal Materials and Methods (taken concurrently with MUSC 471 — Choral Conducting)	2

Total 38

+Enroll each semester in residence (except the semester of Clinical Practice) in the course appropriate to the results of the placement audition, Private Applied area, upper-division assessment and class standing. Students who are in residence for more than four full academic years are required to enroll for additional credit hours beyond those listed. 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.

#Successful completion of MUSP 499C — Senior Recital satisfies the integrative component in General Education curriculum as the capstone course for the BME degree. The Senior Recital also requires an accompanying research paper and oral presentation covering the works and composers to be performed.

*Students are exempt from these courses if in their major instrument family or by examination.

**Fulfills General Education and Professional Education technology requirement.

BME: Keyboard and Guitar

Keyboard and guitar Music Education majors are required to enroll in and participate in all activities of the University Chorus, Concert Choir, Concert Band, Symphony Band, or Marching Band (enrollment in a concert band or choral ensemble is determined by audition).

Private Applied (14-16 credit hours)

MUSP 243 — Private Applied Piano, or	
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MUSP 236 — Private Applied Guitar+	8
MUSP 443 — Private Applied Piano, or MUSP 436 — Private Applied Guitar +	6
MUSP 200, 400 — Performance Class+	0
MUSM 200, 400 — Student Recital (complete seven semesters with a grade of "K")	0
MUSP 499C — Senior Recital#	0-3

Ensemble (Seven credit hours)

MUSM 170 — Concert Band	
MUSM 171 — Symphony Band	
MUSM 172 — Marching Band	
MUSM 191 — University Chorus	
MUSM 192 — Concert Choir+	4
MUSM 370 — Concert Band	
MUSM 371 — Symphony Band	
MUSM 372 — Marching Band	
MUSM 391 — University Chorus	
MUSM 392 — Concert Choir+	3

Class Applied (Six credit hours)

MUSG 135 — Class Guitar I*	1
MUSG 211 — Class Woodwinds*	1
MUSG 213 — Class Brasswinds*	1
MUSG 217 — Class Percussion*	1
MUSG 226 — Class Strings	1
MUSG 239 — Class Voice (instrumental section)	1

Conducting (Four credit hours)

MUSC 271 — Basic Conducting	2
MUSC 471 — Choral Conducting (<i>taken concurrently with</i> MUSE 375 — Vocal Methods & Materials) or	
MUSC 472 — Instrumental Conducting (<i>taken concurrently</i> <i>with</i> MUSE 376 — Instrumental Methods & Materials and University Band)	2

Music Education and Technology (Seven-10 credit hours)

MUSE 215 — Microcomputers and Music**	0-3
MUSE 230 — Introduction to Music Education	1
MUSE 325 — Elementary Methods and Materials	3
MUSE 335 — Field Experience	1
MUSE 375 — Vocal Materials and Methods (<i>taken</i> <i>concurrently with</i> MUSC 471 — Choral Conducting), or	
MUSE 376 — Instrumental Materials and Methods (<i>taken concurrently with</i> MUSC 472 — Instrumental Conducting and University Band)	2

Total 38

+Enroll each semester in residence (except the semester of Clinical Practice) in the course appropriate to the results of the placement audition, Private Applied instrument area, upper-division assessment and class standing. Students who are in residence for more than four full academic years are required to enroll for additional credit hours beyond those listed. 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.

#Successful completion of MUSP 499C satisfies the integrative component in General Education curriculum as the capstone course for the BME degree. The Senior Recital also requires an accompanying research paper and oral presentation covering the works and composers to be performed.

*Students are exempt from these courses if in their major instrument family or by examination.

**Fulfills General Education and Professional Education technology requirement.

BME: Orchestral Strings

Orchestral String Music Education majors are required to enroll in and participate in all activities of the Orchestra. In addition, orchestral string Music Education majors are required to take two semesters of a choral ensemble (University Chorus, Concert Choir, or Chamber Singers).

Private Applied (14-16 credit hours)

MUSP 2XX — Private Applied Area (principal instrument course number)+	8
MUSP 4XX — Private Applied Area (principal instrument course number)+	6
MUSP 200, 400 — Performance Class (principal instrument section number)+	0
MUSM 200, 400 — Student Recital (complete seven semesters with a grade of "K")	0
MUSP 499C — Senior Recital#	0-3

Ensemble (Nine credit hours)

MUSM 178 — String Ensemble, or MUSM 179 — Orchestra+	4
MUSM 378 — String Ensemble, or MUSM 379 — Orchestra+	3
MUSM 191/391 — University Chorus, MUSM 192/392 — Concert Choir, or MUSM 193/393 — Chamber Singers	2

Class Applied (Six credit hours)

MUSG 211 — Class Woodwinds*	1
MUSG 212 — Advanced Woodwinds Techniques	1
MUSG 213 — Class Brasswinds*	1
MUSG 214 — Advanced Brasswinds Techniques	1
MUSG 217 — Class Percussion*	1
MUSG 226 — Class Strings*	0-1
MUSG 239 — Class Voice (instrumental section)	1

Conducting (Four credit hours)

MUSC 271 — Basic Conducting	2
MUSC 472 — Instrumental Conducting (<i>taken</i> <i>concurrently with</i> MUSE 376 — Instrumental Materials and Methods and University Band)	2

Music Education and Technology (Seven-10 credit hours)

MUSE 215 — Microcomputers and Music**	0-3
MUSE 230 — Introduction to Music Education	1
MUSE 325 — Materials and Methods for Elementary Grades	3

MUSE 335 — Field Experience	1
MUSE 376 — Instrumental Methods and Materials (taken concurrently with MUSC 472 — Instrumental Conducting and University Band)	2

Total 40

+Enroll each semester in residence (except the semester of Clinical Practice) in the course appropriate to the results of the placement audition, Private Applied instrument area, upper-division assessment and class standing. Students who are in residence for more than four full academic years are required to enroll for additional credit hours beyond those listed. 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.

#Successful completion of MUSP 499C satisfies the integrative component in General Education curriculum as the capstone course for the BME degree. The Senior Recital also requires an accompanying research paper and oral presentation covering the works and composers to be performed.

*Students are exempt from these courses if in their major instrument family or by examination.

**Fulfills General Education and Professional Education technology requirement.

Bachelor of Music (BM)

Core Music Requirements

Music Theory (18 credit hours)

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
MUST 430 — Arranging	2
MUST 465 — Form and Analysis	2

Music History and Literature (Seven-10 credit hours)

MUSH 161 — Literature of Music I	2
MUSH 162 — Literature of Music II	2
MUSH 361 — History of Music I*	3
MUSH 362 — History of Music II*	3

Conducting (Two credit hours)

MUSC 271 — Basic Conducting	2
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Technology (Zero-Three credit hours)

MUSE 215 — Microcomputers and Music*	3
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Total 33

* Denotes courses that also fulfill General Education requirements.

Area of Specialization Requirements

BM: Woodwind, Brasswind (Area of Concentration)

Woodwind and brasswind majors are required to enroll in and participate in all activities of the Concert Band, Symphony Band, or Marching Band. Those students who perform in the Marching Band on an instrument other than their principal applied instrument must also participate in the Concert or Symphony Band on their principal applied instrument each fall semester (enrollment in a concert band is determined by audition).

MUSC 271 — Basic Conducting	2
MUSC 472 — Instrumental Conducting	2
MUSE 215 — Microcomputers and Music	3
MUSW 310 — Music Business	2
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 I	3
MUSH 362 — History of Western Music II	3
MUSM 370 — Concert Band or	8
MUSM 371 — Symphony Band	
MUSM 335 — Clarinet Choir	4
MUSM 336 — Woodwind Ensemble	
MUSM 361 — Trumpet Choir	
MUSM 362 — Trombone Choir	
MUSM 363 — Tuba/Euphonium Ensemble or	
MUSM 368 — Brasswind Ensemble	
MUSM 379 — Orchestra or	2
MUSM 381 — Jazz Ensemble II	
MUSM 3XX — Choose from all ensembles	2
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
MUSP 499C — Senior 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 483 — Comprehensive Exit Examination	0
MUSC, MUSE, MUSG, MUSH, MUSM, MUSP, MUST, or MUSW (Music Electives - courses chosen from the 300+ level)	5

BM: Percussion (Area of Concentration)

MUSC 271 — Basic Conducting	2
MUSC 472 — Instrumental Conducting	2
MUSE 215 — Microcomputers and Music	3
MUSW 310 — Music Business	2
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 I	3
MUSH 362 — History of Western Music II	3
MUSM 369 — Percussion Ensemble	8
MUSM 372 — Marching Band	4
MUSM 370 — Concert Band or	4
MUSM 371 — Symphony Band	
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
MUSP 499C — Senior 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
MUSC, MUSE, MUSG, MUSH, MUSM, MUSP, MUST, or MUSW (Music Electives - courses chosen from the 300+ level)	4

BM: Voice (Area of Concentration)

Voice majors are required, upon successful audition, to enroll in and participate in all activities of the Concert Choir. Students with an unsuccessful audition for Concert Choir enroll in the University Chorus.

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 383 — Jazz Vocal Ensemble,	4
MUSM 393 — Chamber Singers, or	
MUSM 394 — Opera Works	
MUSM 200 — Student Recital	0
MUSM 400 — Student Recital	0
MUSP 200 — Performance Class	0
MUSP 400 — Performance Class	0
MUSP 240 — Private Voice	10
MUSP 440 — Private Voice	6
MUSP 360 — Junior Recital	3
MUSP 499C — Senior 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 465 — Form and Analysis	2
Music Electives	4
MUSC, MUSE, MUSG, MUSH, MUSM, MUSP, MUST, or MUSW (Music Electives at 300+ level)	
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: Piano (Area of Concentration)

Piano majors are required to enroll in collaborative and ensemble keyboard courses.

Private and Class Applied (29-32 credit hours)

MUSG 239 — Class Voice (instrumental section)	1
MUSM 200, 400 — Student Recital (complete eight semesters with a grade of "K")	0
MUSP 200, 400 — Performance Class+	0
MUSP 243 — Private Piano+	12
MUSP 241/441 — Private Harpsichord, or	
MUSP 242/442 — Private Organ, and/or MUSP 243/443 — Private Piano	7
MUSP 443 — Private Piano+	7
MUSP 360 — Junior Recital#	2
MUSP 499C — Senior Recital#	0-3

Ensemble (Eight credit hours)

MUSM 387 — Accompanying I,	
MUSM 388 — Accompanying II,	
MUSM 389 — Keyboard Ensemble,	
MUSM 487 — Recital Accompanying I, or	

MUSM 488 — Recital Accompanying II+	8
Conducting (Two credit hours)	
MUSC 471 — Choral Conducting	2
Literature and Pedagogy	
MUSE 378 — Keyboard Pedagogy	2
MUSH 481 — Literature of the Piano	3
Electives in Music (Five credit hours)**	
MUSC, MUSE, MUSG, MUSH, MUSM, MUSP, MUST, or MUSW	5

Electives (Three credit hours)** **3**
 +Enroll each semester in residence in the course appropriate to the results of the placement audition, Private Applied instrument area, upper-division assessment and class standing. Students who are in residence for more than four full academic years are required to enroll for additional credit hours beyond those listed. 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.

#MUSP 360 — Junior Recital requires a formal recital and MUSP 499C — Senior Recital requires a formal recital. Successful completion of MUSP 499C satisfies the integrative component in General Education curriculum as the capstone course for the BM degree and satisfies three credit hours of upper-division Private Applied. The Senior Recital also requires an accompanying research paper and oral presentation covering the works and composers to be performed.

**Credit hours must be at the upper-division level (300-level courses or above).

BM: Collaborative Piano (Area of Concentration)

MUSC 271 - Basic Conducting	2
MUSE 215 - Microcomputers and Music	3
MUSW 310 - Music Business	2
MUSG 125 - Score Reading	2
MUSG 183 - Studio Improvisation or	1
MUSP 334 - Private Jazz	
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 Music II.	3
MUSH 481 - Keyboard Literature	3
MUSH 492 - Solo Vocal Literature	2
MUSM 389 - Keyboard Ensemble or MUSM 345 - Keyboard Chamber Music	2
MUSM 387 - Accompanying I	4
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 243 - Private Piano	12
MUSP 443 - Private Piano	*8
MUSP 360 - Junior Recital	3
MUSP 499C - Senior Recital	3

MUSP 3XX - Private Applied on any Secondary Instrument	4
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
MUSC, MUSE, MUSG, MUSH, MUSP, MUST, or MUSW	3

*Six credits of lessons, two credits of collaborative lessons.

BM: Keyboard (Area of Concentration)

Organ or Harpsichord majors are required to enroll in collaborative and ensemble keyboard courses.

MUSC 271 — Basic Conducting	2
MUSE 215 — Microcomputers and Music	3
MUSW 310 — Music Business	2
MUSE 378 — Keyboard Pedagogy	2
MUSG 125 — Score Reading	2
MUSG 183 — Studio Improvisation or	1
MUSP 334 — Private Jazz	
MUSH 171 — Global Perspectives in Music	3
MUSH 361 — History of Western Music I	3
MUSH 362 — History of Western Music II	3
MUSH 481 — Keyboard Literature	3
MUSM 389 — Keyboard Ensemble or	4
MUSM 345 — Keyboard Chamber Music	
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 241 — Private Harpsichord,	12
MUSP 242 — Private Organ, or	
MUSP 243 — Private Piano	
MUSP 441 — Private Harpsichord,	6
MUSP 442 — Private Organ, or	
MUSP 443 — Private Piano	
MUSP 360 — Junior Recital	3
MUSP 499C — Senior Recital	3
MUSP 3XX — Private Applied or any Secondary Instrument	4
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
MUSC, MUSE, MUSG, MUSH, MUSM, MUSP, MUST, or MUSW	7

BM: Orchestral Strings (Area of Concentration)

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

MUSC 271 — Basic Conducting	2
MUSC 472 — Instrumental Conducting	2
MUSE 215 — Microcomputers and Music	3
MUSW 310 — Music Business	2
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
MUSP 499C — Senior 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
Music Electives	5
MUSC, MUSE, MUSG, MUSH, MUSM, MUSP, MUST, or MUSW	

BM: Jazz Studies (Area of Concentration)

Jazz Studies majors are required to enroll in and participate in all activities of the Jazz and/or Guitar Ensembles (enrollment in a jazz ensemble is determined by audition).

MUSC 271 — Basic Conducting	2
MUSC 473 — Rehearsal Techniques for Jazz Ensembles	2
MUSW 310 — Music Business	2
MUSW 325 — Music Recording and Sound Reinforcement	3

MUSG 123 — Class Piano I,	2
MUSG 124 — Class Piano II,	
MUSG 223 — Class Piano III,	
MUSG 224 — Class Piano IV,	
MUSG 345 — Jazz Keyboard III or	
MUSG 346 — Jazz Keyboard IV	
(Pianists must do 345, 346)	
MUSG 245 — Jazz Keyboard I	1
MUSG 246 — Jazz Keyboard II	1
MUSG 183 — Studio Improvisation or	4
MUSG 383 — Studio Improvisation	
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,	8
MUSM 381 — Jazz Ensemble II,	
MUSM 382 — Jazz Vocal Ensemble or	
MUSM 384 — Guitar Ensemble	
MUSM 337 — Jazz Combo	4
MUSM 200 — Student Recital	0
MUSM 400 — Student Recital	0
MUSP 200 — Performance Class	0
MUSP 400 — Performance Class (Jazz Section)	0
MUSP 2XX — Private Applied	12
MUSP 4XX Private Applied (Principal Instrument) or	6
MUSP 434 — Private Jazz	
MUSP 360 — Junior Recital	3
MUSP 499C — Senior 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 240 — Jazz Theory	2
MUST 433 — Arranging for Jazz Ensembles	2
MUST 434 — Arranging for Jazz Ensembles	2
Music Electives	2
MUSC, MUSE, MUSG, MUSH, MUSM, MUSP, MUST, or MUSW	

Bachelor of Arts in Music (BA in Music)

Program Requirements

The Bachelor of Arts degree in Music provides for the study of music within a liberal arts curriculum. The program is suitable for preparing for careers in music other than performance and certified teaching in the schools.

Bachelor of Arts degree in Music majors are required to enroll in and participate in activities of the University Chorus, Concert Choir, Concert Band, Symphony Band, Marching Band, or Orchestra (enrollment in a concert or choral ensemble is

determined by audition). Voice majors are required, upon successful audition, to enroll in and participate in all activities of the Concert Choir. Students with an unsuccessful audition for Concert Choir enroll in the University Chorus. Woodwind, brasswind, and percussion majors are required to enroll in and participate in all activities of the Concert Band, Symphony Band, or Marching Band. Those students who perform in the Marching Band on an instrument other than their principal applied instrument must also participate in the Concert or Symphony Band each fall semester (enrollment in a concert band is determined by audition).

MUSE 215 — Microcomputers and Music	3
MUSG 123 — Class Piano I,	4
MUSG 124 — Class Piano II,	
MUSG 223 — Class Piano III, or	
MUSG 224 — Class Piano IV	
MUSH 171 — Global Perspectives in Music	3
MUSH 361 — History of Western Music I	3
MUSH 362 — History of Western Music II	3
*MUSM 3XX	4
(Choose one area)	
4 credits Bands,	
4 credits Choirs,	
4 credits Traditional Music/Guitar,	
4 credits Orchestras,	
4 credits Keyboard Ensembles, or	
4 credits Jazz Ensembles	
MUSM 200 — Student Recital	0
MUSM 400 — Student Recital	0
MUSP 200 — Class Performance	0
MUSP 400 — Class Performance	0
MUSP 2XX — Private Applied	8
MUSP 4XX — Private Applied	6
MUSW 499C — Senior Project	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
MUSW 483 — Comprehensive Exit Examination	0
Electives - chosen from 300+ level	15

Minor Area - curriculum required by minor area 21
 Total - Non-music credits 21

**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.*

Ensembles (four credit hours)

MUSM 370 - Concert Band, MUSM 371 - Symphony Band, MUSM 372 - Marching Band or	4
MUSM 391 - University Chorus, MUSM 392 - Concert Choir or	4
MUSM 383 - Traditional Music Ensemble, MUSM 384 - Guitar Ensemble, or	4
MUSM 378 - String Ensemble, MUSM 379 - Orchestra or	4
MUSM 389 - Keyboard Ensemble, MUSM 345 - Chamber Music, MUSM 387 - Accompanying	4

Bachelor of Arts: Minor in Music

Program Requirements

MUSG 123 — Class Piano I,	
MUSG 124 — Class Piano II,	
MUSG 223 — Class Piano III, or	
MUSG 224 — Class Piano IV	2
MUSH 171 — Global Perspectives in Music	3
MUSM 3XX	4
Choice of: four credits Bands, four credits Choirs, four credits Trad/Guitar, four credits Orchestras, four credits Piano Ensembles, or four credits Jazz Ensembles	
MUSM 200 — Student Recital	0
MUSP 200 — Student Performance	0
MUSP 2XX — Private Applied	8
MUST 131 — Music Theory I	3
MUST 132 — Music Theory II	3
MUST 133 — Music Reading I	1
MUST 135 — Music Reading II	1

Traditional Music Studies Minor

Program Requirements

The Minor in Traditional Music Studies program renders to the University community an intellectual experience as related to the creative cultural interaction in Appalachia that has produced a wealth of distinctive styles of music. Of particular focus is the dynamic exchange between Celtic and other European aesthetics that have affected everything from the blues to Bluegrass music. The Traditional Music Studies program addresses issues of community, style, commercialism, and revival. Some of the regionally affected genres that are examined are: 1) string band music, 2) Bluegrass, 3) blues, 4) shape-note singing, and 5) gospel. No formal musical background is necessary for enrollment in this program.

Private Applied (10 credit hours)

MUSP 2XX — Private Applied Area	10
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Ensembles (Four credit hours)

MUSM 2XX/4XX — Ensembles	4
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Music Theory (Four credit hours)

MUST 103 — Practical Theory for Traditional Music	2
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MUST 104 — Traditional Vocal Harmony	2
Music History and Literature (Three credit hours)	
MUSH 261 — Music Listening (Folk and Country Music section)	3
Total	21

Music Teachers National Association

Program Requirements

In order to provide specialized musical instruction to individuals pursuing a career as full- or part-time studio teachers, MSU offers course work leading to the Music Teachers National Association (MTNA) Certificate at two levels: Associate and Professional. By offering courses in this curriculum, MSU endorses and supports a major MTNA mandate "that professional studio teaching is a worthwhile career, and as such, deserves to be accountable by a regulatory agency."

After completing the program, the candidate must present a teaching and performing demonstration before a jury chosen by the MTNA National Certificate chairperson. This program leads to MTNA professional certification. No credential is granted by MSU.

MTNA Associate Certificate

MUSP 2XX/4XX — Private Applied Area+	12
MUST 131 — Music Theory I	3
MUST 132 — Music Theory II	3
MUST 133 — Music Reading I	1
MUST 135 — Music Reading II	1
MUSH 161 — Literature of Music I	2
MUSH 162 — Literature of Music II	2
MUSE 378 — Piano Pedagogy	2
MUST 476 — Special Problems in Music	2
Total	28

+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 161 — Literature of Music I	2
MUSH 162 — Literature of Music II	2
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	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.

Theatre

Faculty

P. Denayer, D. Watkins

Program Competencies

Students will demonstrate:

1. A general familiarity with all aspects of theatre.
2. A proficiency in at least two specific areas of theatre production such as acting, directing, set design and construction, costume design and construction, lighting, properties, makeup, publicity, sound design, and stage movement.
3. Familiarity with significant periods and styles of dramatic literature.
4. Basic knowledge of the chronological history of theatre.

Assessment Procedures

Capstone Course

Bachelor of Arts Theatre Major

The theatre major will require 45 credit hours in Theatre courses. These courses are as follows:

Core Courses	27
THEA 100 — Fundamentals of the Theatre	3
CMSP 100 — Voice and Articulation	3
THEA 177, 277, 377, 477 — Practicum	3
— At least one hour at three different levels	
THEA 200 — Introduction to Dramatic Literature	3
THEA 210 — Technical Production	3
THEA 225 — Introduction to Design	3
THEA 284 — Acting Techniques	3
THEA 380 — Play Directing	3
THEA 499C — Senior Seminar in Theatre	3
Required Courses	6
THEA 354 — Theatre History I	3
THEA 355 — Theatre History II	3
<i>Choose two of the following for a total of six hours:</i>	
THEA 321 — Stage Lighting	3
THEA 322 — Scene Design	3
THEA 326 — Stage Costume Design	3
<i>Choose two of the following for a total of six hours:</i>	
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 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 327 — Creative Sewing for the Theatre I	3
THEA 328 — Creative Sewing for the Theatre II	3
THEA 375 — Creative Dramatics	3
THEA 408 — Advanced Ballet	3
THEA 412 — Playwriting	3
THEA 413 — Advanced Play Direction	3
THEA 430 — Summer Theatre III	1-4
THEA 452 — Early Dramatic Literature	3
THEA 453 — Modern Dramatic Literature	3
THEA 455 — Dramatic Criticism	3
THEA 462 — Advanced Acting	3
THEA 463 — Advanced Costuming	3
THEA 464 — Advanced Scene Design	3
THEA 465 — Advanced Stage Lighting	3
THEA 470 — Children's Theatre	3
THEA 484 — Styles of Acting	3
Total	45

Additional Requirements:

Annual Progress Meeting with the faculty

Theatre Minor

The revised theatre minor will require 21 credit hours in Theatre courses. The courses required are as follows:

THEA 100 — Fundamentals of the Theatre	3
THEA 284 — Acting Techniques	3
THEA 200 — Introduction to Dramatic Literature	3
THEA 210 — Technical Production	3
THEA 225 — Introduction to Design	3
THEA 380 — Play Directing	3

Choose one of the following for a total of three credit hours:

THEA 321 — Lighting	3
THEA 322 — Scene Design	3
THEA 326 — Stage Costume Design	3

Total **21**

Additional Requirements:

Annual Progress Meeting with the faculty

Major in Theatre with Teaching Certification

The Theatre Major with a Teaching Certification Option requires a total of 67 hours. Thirty-six of these hours are theatre course requirements, and 31 are courses from the Professional Education Core. They are as follows:

Core Courses	27
THEA 100 — Fundamentals of Theatre	3
CMSP 100 — Voice & Articulation	3

THEA 177, 277, 377, 477 — Practicum	3
— At least one hour at three different levels	
THEA 200 — Introduction to Dramatic Literature	3
THEA 210 — Technical Production	3
THEA 225 — Introduction to Design	3
THEA 284 — Acting Techniques	3
THEA 380 — Play Directing	3
THEA 499C — Senior Seminar in Theatre	3

Required Courses **12**

THEA 354 — Theatre History I or	3
THEA 355 — Theatre History II	3
THEA 375 — Creative Dramatics	3
THEA 470 — Children's Theatre	3
CMSP 495 — Teaching Methods Course	3

Choose of any two of the following courses for six credit hours:

THEA 321 — Stage Lighting	3
THEA 326 — Costume Design	3
THEA 322 — Scene Design	3

Total **45**

Professional Education Core

EDF 207 — Foundations of Education	3
EDF 211 — Human Growth & Development	3

Choose one of the following for three credit hours:

EDF 311 — Learning Theories & Assessment in Education	3
EDEE 305 — Learning Theories & Practices in Early	3

Elementary

Choose one of the following for three credit hours:

EDSE 312 — Educational Methods & Technology	3
EDEL 302 — Media Strategies	3

Choose one of the following for three credit hours:

EDSP 230 — Education of Exceptional Children	3
EDSP 322 — Teaching for Exceptional Student	2

Required Courses:

EDSE 483 — Class Organ & Mgt for Second Teachers	3
EDSE 499C — Teacher in Today's Schools	2
EDSE 416 — Student Teaching	12

Dance Minor

The Dance Minor will require 21 credit hours. The courses required are as follows:

THEA 105 — Modern Dance Technique	3
THEA 107 — Introduction to Dance	3
THEA 208 — Beginning Ballet	3
THEA 324 — Dance History	3
<i>Basic Dance Technique Elective</i>	3

Choose one of the following:

THEA 205 — Intermediate Ballet,	
THEA 305 — Advanced Modern Dance Technique,	
THEA 308 — Intermediate Ballet, or	
THEA 408 — Advanced Ballet	
<i>Performance Process Oriented</i>	3

Choose one of the following:

THEA 207 — Dance Improvisation or THEA 307 — Dance Composition <i>Alternative Elective</i>	3
<i>Choose one of the following:</i>	
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	21

Department of Sociology, Social Work, & Criminology

Clarenda M. Phillips, Chair

347 Rader Hall
(606) 783-2656

Social Work

Faculty

E. Bishop, C. Faulkner, J. Groeber, L. Guerin, L. Hesterberg,
M. Just, C. Olson, N. Preston, M. Seelig, J. Stafford, E. Swank

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 judgement.
4. Engage diversity and difference in practice.
5. Advance human rights and social and economic justice.
6. Engage in research informed practice and practice informed research.
7. Apply knowledge of human behavior and the social environment.
8. Engage in policy practice to advance social and economic well-being and to deliver effective social work services.
9. Respond to contexts that shape practice.
10. Engage, assess, intervene, and evaluate with individuals, families, groups, organizations, and communities.

Assessment Procedures

Surveys of graduates
Employer Survey

Bachelor of Social Work (BSW)

Social work is a human service profession that assists the needs of society in several areas, including gerontology, health care, mental retardation, child welfare, correctional rehabilitation, mental health, income maintenance, home health, hospice, domestic violence, homelessness, and alcoholism/substance abuse. The BSW Program is fully accredited by the Council on Social Work Education and prepares students as generalist practitioners for entry-level professional practice with individuals, marital couples, families, small groups, organizations, practitioners, and entire communities.

Admission Requirements and Procedures

The BSW Program has a selective admission procedure.

1. Application Procedure.
2. Be unconditionally admitted to MSU through the University's Office of Enrollment Services.
3. Declare social work as an area of concentration.
 - a. Meet with assigned faculty advisor.
 - b. While enrolled in SWK 320 and 324, obtain and complete the application and checksheet and obtain two references: one from a social work faculty member other than the student's advisor, and one from a non-social work faculty member.
 - c. File the application, transcript, checksheet, and autobiographical sketch with advisor one week prior to the interview with the faculty advisor.
4. Social Work Faculty Committee will meet to discuss each application after all material has been handed in and the advanced advising interview with the advisor or off-site coordinator is completed.

Admission Criteria

Applicants to the BSW Program are selected based upon the following criteria:

1. Completion of 64 credit hours of the required pre-social work courses as listed on the curriculum sequence;
2. Completion of, or enrollment in SWK 210 — Orientation to Social Work, SWK 230 — Social Welfare History and Ethics, SWK 320 — Human Behavior in the Social Environment, Conception to Young Adulthood, and SWK 324 — Social Work Research; and
3. Achievement of an overall GPA of 2.5 and grade of "C" or above in all Social Work Core courses.

Program Requirements

BIOL 105 — Introduction to Biological Sciences, or BIOL 155 — Introduction to Environmental Science	3
GOVT 141 — United States Government, or HIS 202, or HIS 220	3
SWK 345 — Law and Social Work	3
MATH 123, or higher	3
PHIL 200 — Introduction to Philosophy, or PHIL 203 — Social Ethics	3
PSY 154 — Introduction to Psychology	3
SOC 101 — General Sociology	3
SOC 200 or above	3

SOC 374 — American Minority Relations	3
SWK 210 — Orientation to Social Work	4
SWK 230 — Social Welfare History and Ethics	3
SWK 320 — Human Behavior in the Social Environment Conception to Young Adulthood	3
SWK 321 — Human Behavior in the Social Environment Middle Adulthood to Death	3
SWK 324 — Social Work Research	3
SWK 325 — Generalist Social Work Practice	3
SWK 326 — Generalist Practice	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
SWK 499C — Senior Seminar	1
Social Work Electives (only courses taught by someone with SWK degree will be accepted)	12

General Electives 16
Other General Education Requirements 30

Recommended Course Sequence

Freshman Year

First Semester

ENG 100 — Writing I	3
*PSY 154 — Introduction to Psychology	3
*SOC 101 — General Sociology	3
Practical Living Course	3
Natural & Mathematical Science Course	3
MSU 101 — Discovering University Life	1

Semester Total 16

Second Semester

*BIOL 105 — Introduction to Biological Sciences, or BIOL 155 — Introduction to Environmental Science	3
CIS 101 — Computers for Learning	3
GOVT 141 — United States Government, or HIS 202 — American Studies	3
MATH 123 — Introduction to Statistics or higher	3
PHIL 200 — Introduction to Philosophy, or PHIL 203 — Social Ethics	3

Semester Total 15

Sophomore Year

First Semester

ENG 200 — Writing II	3
**SWK 210 — Orientation to Social Work	4
Any Sociology 200 or higher	3
General Education (Humanities)	3
General Electives	3

Semester Total 16

Second Semester

CMSP 108 — Fundamentals of Speech Communication	3
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SOC 374 — American Minority Relations	3
**SWK 230 — Social Welfare History and Ethics	3
Natural & Mathematical Science	3
General Education (Humanities)	3
General Electives	3
Semester Total	18

Junior Year

First Semester

Social Work Elective	3
Social Work Elective, or SWK 345	3
**SWK 320 — Human Behavior in the Social Environment Conception to Young Adulthood	3
**SWK 324 — Social Work Research	3
**SWK 325 — Generalist Social Work Practice	3
General Electives	3
Semester Total	18

Second Semester

Social Work Electives	9
**SWK 321 — Human Behavior in the Social Environment Middle Adulthood to Death	3
**SWK 451 — Social Science Data Analysis	3
SWK 326 — Generalist Practice	3
Semester Total	18

Senior Year

First Semester

**SWK 424 — Social Work Micro Practice	3
**SWK 426 — Social Work Mezzo Skills	3
**SWK 430 — Social Policy and Planning	3
SWK Electives	3
General Electives	3
Semester Total	15

Second Semester

**SWK 497 — Practicum in Social Work	8
**SWK 498 — Social Work Macro Practice	3
**SWK 499C — Senior Seminar	1
Semester Total	12

Total for Degree 12
8

**Denotes Specific General Education Requirements mandated for BSW Students.*

***Denotes Core Social Work Course requiring a grade of "C" or higher.*

Certification in Public Child Welfare

All BSW students are trained in the generalist approach, but if students select their electives carefully and are admitted into the PCWCP, they can also earn Certification in Public Child Welfare. This is a statewide certification created in collaboration with eight other universities and the Commonwealth Cabinet for Families and Children.

Public Child Welfare Certification Program

SWK 345 — Law and Social Work

- SWK 358 — Child Abuse and Neglect
- SWK 458 — Child Abuse and Neglect Practice Skills
- SWK 497 — Practicum in Social Work (must be done in Community Based Service Office-Protective Services)

Emphasis in Regional Analysis

If a BSW student is interested in macro policy and planning, in addition to the BSW, the student may select an emphasis in RAPP (Regional Analysis and Public Policy). Acceptance into RAPP requires a minimum ACT composite of 20.

Social Work-Regional Analysis Program

The Institute for Regional Analysis & Public Policy, MSU's Program of Distinction, offers a core of courses (18 hours) in regional analysis that can be combined with the Social Work Program.

Program Competencies

Students will:

1. Identify as a professional social worker and conduct one's self accordingly.
2. Apply social work ethical principles to guide professional practice.
3. Apply critical thinking to inform and communicate professional judgment.
4. Engage diversity and difference in practice.
5. Advance human rights and social and economic justice.
6. Engage in research informed practice and practice informed research.
7. Apply knowledge of human behavior and the social environment.
8. Engage in policy practice to advance social and economic well-being and to deliver effective social work services.
9. Respond to contexts that shape practice.
10. Engage, assess, intervene, and evaluate with individuals, families, groups, organizations, and communities.

Assessment Procedures

Survey of graduates

Program Requirements

SWK 345 — Law and Social Work	3
RAPP 201 — Society, Nature, & Development	3
RAPP 202 — Basic Computer Tech in Regional Analysis	3
RAPP 300 — Seminar in Regional Issues I	3
RAPP 350 — Practicing Regional Analysis I	3
RAPP 490 — Seminar in Regional Issues II	3
SOC 101 — General Sociology	3
SOC 200 or higher	3
SOC 374 — American Minority Relations	3
SOC 459 — Appalachian Culture	3
SWK 210 — Orientation to Social Work	4
SWK 230 — Social Welfare History and Ethics	3
SWK 320 — Human Behavior in the Social Environment- Conception to Young Adulthood	3
SWK 321 — Human Behavior in the Social Environment- Middle Adulthood to Death	3

SWK 324 — Social Work Research	3
SWK 325 — Generalist Social Work Practice	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
SWK 499C — Senior Seminar	1
Social Work Electives (only courses taught by someone with SWK degree will be accepted)	12

Supplemental Requirements

ECON 401 — Environmental Economics, or GEO 349 — Introduction to CIS/Cartography	3
GOVT 324 — Environmental Law and Policy	3

Social Work Minor

The Minor in Social Work provides majors in related fields an understanding of the social work profession, an introduction to basic practice skills, and an opportunity to gain actual experience in a field setting. Students must earn a "C" or higher in all of the courses listed in order to earn a Minor in Social Work.

SWK 210 — Orientation to Social Work	4
SWK 230 — Social Welfare History and Ethics	3
SWK 310 — Field Experience in Social Work	3
SWK 333 — Beginning Skills for Human Service Professionals, or SWK 360 — Crisis Intervention	3
SWK Electives	9

Sociology & Criminology

Faculty

B. Barton, E. Breschel, R. Bylund, R. Hall, C. Hardesty, R. Katz, H. Kindell, S. Nash, C. Phillips, E. Reeves (IRAPP), P. Steele (IRAPP), S. Tallichet

Program Competencies

Students will develop:

1. A working knowledge of the general concepts of sociological analysis, including exposure to selected substantive areas of sociology.
2. Skills in sociological research, including research design, data analysis, report writing, and computer literacy.
3. Reasoning skills and writing abilities so that they can apply sociological principles to their occupational roles.
4. The ability to understand themselves and their society from a general liberal arts tradition.

Assessment Procedures

- Exit examination required of all majors
- Survey of graduates
- Senior seminar

The sociology program provides students with broad critical and analytical skills that can be applied on the individual, organizational, and societal levels. Combined with other skills

and courses, a sociology major can prepare for careers in human service, planning, personnel, public relations, college teaching, and more.

Sociology majors seeking teacher certification must also complete a teaching minor. See "Teacher Education Program" and "Professional Experiences" requirements.

Program Standards

Students must earn a grade of "C" or higher in all required core courses in the Sociology, and the Sociology with an Area of Concentration in Criminology major, and in the Sociology and Criminology minor.

To successfully complete the Sociology and Sociology (Criminology) majors as well as the Sociology and Criminology minors, students must earn a cumulative GPA of 2.25 in all courses included in these respective programs.

Bachelor of Arts in Sociology

Sociology Major

SOC 101 — General Sociology	3
SOC 305 — Cultural Anthropology	3
Choose two of the following: SOC 300, SOC 350, SOC 374	6
SOC 405 — Sociological Theory	3
SOC 450 — Research Methodology	3
SOC 451 — Social Science Data Analysis	3
SOC 499C — Senior Seminar	3
SOC — electives of which nine hours must be at the 300 level or above	12
Total Hours	36

Sociology Minor

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 Hours	24

Sociology with an Area of Concentration in Criminology

Program Competencies

Students will develop:

1. Knowledge of the criminal justice system, basic skills in working with the offenders, familiarity with more complex theoretical explanations of crime and delinquency, the ability to read and understand criminological research methods and findings of such research, and to understand the effects of social institutions, social policies and social and economic inequality on crime and criminal justice. International crime will also be introduced to students.
2. A working knowledge of the general concepts of sociological analysis, including exposure to selected substantive areas of sociology.
3. Skills in sociological research and reasoning, including research design, data analysis, report writing, and computer literacy.

4. Reading skills and writing abilities so that they can apply sociological principles to criminal justice roles and explanations of criminal behavior.
5. Applied skills through practicum experiences.

The Criminology Program prepares students for a wide range of career opportunities in local, state, and federal criminal justice agencies. Specific examples include correctional officer, probation and parole officer, counselor, case manager, police officer, youth officer, and others.

Program Requirements

CRIM/SOC 210 — The Sociology of Deviance	3
CRIM 250 — Introduction to the Criminal Justice System	3
CRIM 300 — The Criminogenic Family	3
CRIM/SOC 306 — Juvenile Delinquency, or CRIM/SOC 401 — Criminology	3
CRIM 380 — Race, Class, Gender, and Crime	3
CRIM 490 — Practicum in Criminology (Prerequisite nine hours of Criminology)	5
CRIM 491 — Senior Seminar (to be taken with CRIM 490)	1
CRIM 499C — Senior Criminology Capstone	3
<i>(Prerequisites for 499C include CRIM 306 or CRIM 401, SOC 450, SOC 451, six additional hours of Criminology, and senior standing or consent of instructor.)</i>	
CRIM 416 — Working with Offenders	3
SOC 101 — General Sociology	3
SOC 405 — Sociological Theory	3
SOC 450 — Research Methodology	3
SOC 451 — Social Science Data Analysis	3
Required Hours	39
Elective Hours	9
Total Hours	48

Sociology with an Emphasis in 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 and reasoning including research design, data analysis, report writing, and computer literacy.
3. Knowledge of the criminal justice system, familiarity with theoretical explanations of crime and delinquency, the ability to read and be familiar with theoretical explanations of crime and delinquency, to read and understand criminological research methods and findings of such research, and to understand the effects of social institutions, social policies and social and economic inequality on crime and criminal justice. International crime will also be introduced to students.
4. Reading skills and writing abilities so that they can apply sociological principles to criminal justice roles and explanations of criminal behavior.
5. Applied skills through practicum experiences.

Program Requirements

CRIM/SOC 210 — The Sociology of Deviance	3
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CRIM 250 — Introduction to the Criminal Justice System	3	RAPP 350 — Practicing Regional Analysis I	3
CRIM 300 — The Criminogenic Family	3	RAPP 450 — Practicing Regional Analysis II	3
CRIM 380 — Race, Class, Gender and Crime	3	RAPP 490 — Seminar in Regional Issues II	3
CRIM/SOC 401 — Criminology or CRIM/SOC 306 — Juvenile Delinquency	3	SOC 101 — General Sociology	3
CRIM 490 — Practicum in Criminology (Prerequisite nine hours of Criminology)	5	SOC 300 — Social Stratification	3
CRIM 491 — Senior Seminar (to be taken with CRIM 490)	1	SOC 305 — Cultural Anthropology	3
CRIM 499C — Senior Criminology Capstone	3	SOC 350 — The Human Exp. of Sex and Gender, or SOC 374 — American Minority Relations	3
<i>(Prerequisites for 499C include CRIM 306 or CRIM 401, SOC 450, SOC 451, six additional hours of Criminology and senior standing or consent of instructor.)</i>		SOC 405 — Sociological Theory	3
SOC 101 — General Sociology	3	SOC 450 — Research Methodology	3
SOC 405 — Sociological Theory	3	SOC 451 — Social Science Data Analysis	3
SOC 450 — Research Methodology	3	SOC 499C — Senior Seminar	3
SOC 451 — Social Science Data Analysis	3	SOC — electives of three hours must be on the 300 level or above	6
Required Hours	36	Total Hours	48
Elective Hours	3	Supplemental Requirements	
Total Hours	39	ECON 401 — Environmental Economics, or GEO 349 — Introduction to GIS/Cartography	3
		GOVT 324 — Environmental Law and Policy	3

Criminology Minor

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 Hours	24

Sociology-Regional Analysis Emphasis Program

Program Competencies

Students will:

1. Develop a working knowledge of the general concepts of sociological analysis, including exposure to selected substantive areas of sociology.
2. Learn skills in sociological research including research design, data analysis, report writing, and computer literacy.
3. Establish reasoning skills and writing abilities so that they can apply sociological principles to their occupational roles.
4. Develop the ability to understand themselves and their society from a general liberal tradition.
5. Develop applied skills through practicum experiences.
6. Have the ability to carry out studies in their areas of expertise that include a significant analysis of regional resources and issues.
7. Possess the ability to present research and policy reports that are comprehensible to audiences of various public policymakers.
8. Demonstrate the ability to interpret the output of regional resource analysis and their potential uses in formulating public policy.

Program Requirements

RAPP 201 — Society, Nature, & Development	3
RAPP 202 — Basic Computer Tech in Reg. Analysis	3
RAPP 300 — Seminar in Regional Issues I	3

College of Science & Technology

College of Science & Technology at a Glance

Gerald DeMoss, Dean

246 Reed Hall
(606) 783-2023
E-mail: g.demoss@moreheadstate.edu

Department of Agricultural Sciences

BS - Agricultural Science with options
AAS - Agricultural Technology with options
Pre-Forestry
Pre-Veterinary Medicine
AAS - Veterinary Technology

Department of Biology and Chemistry

BS - Biology with options
BS - Biological Science Teaching
BS - Chemistry
Pre-Chiropractic
Pre-Dentistry
Pre-Medical Technology
Pre-Medicine
Pre-Optometry
Pre-Pharmacy
Pre-Physical Therapy
Pre-Physician Assistant
Pre-Podiatric Medicine

Department of Earth & Space Science

BS - Earth Systems Science
BA - Geography
BS - Space Science

Department of Industrial & Engineering Technology

BS - Engineering Technology
AAS - Industrial Technology with options
BS - Industrial Technology with options
BS - Industrial Education with options
BS - Technology Management

Department of Mathematics, Computer Science, & Physics

BS - Mathematics
BS - Computer Science
BS - Physics
Pre-Engineering

Department of Psychology

BS - Psychology
BA - Psychology

School of Health Sciences

Department of Imaging Sciences

AAS - Radiologic Science

BS - Imaging Sciences with options

Department of Health, Wellness, & Human Performance

BA - Physical Education P-12

BS - Exercise Science

BA - Health and Physical Education P-12

BA - Health P-12

BA - Health Promotion

AAS - Respiratory Care

Department of Nursing

AAS - Associate Degree Nursing

BSN - Baccalaureate Nursing

Department of Agricultural Sciences

Mike Phillips, Chair

325 Reed Hall
(606) 783-2662

Agricultural Sciences Degrees

Faculty

L. Carson, J. Fraley, D. Johnson, E. LeCompt, B. Lewis, R. Miculinich, K. Peterson, J. Platt, P. Prater, B. Rogers, A. Staton, J. Stubbs, J. Willard, T. Wistuba

Program Competencies

Students graduating from the Bachelor of Science degree program should possess the following:

1. Written, oral, and interpersonal communication skills; and basic math skills that will allow the individual to collect, analyze, interpret, and present information that is used within the agricultural industry.
2. An understanding of the basic concepts of the physical and biological sciences and how these sciences are applicable to the field of agriculture.
3. An understanding of the importance of the arts, humanities, social and behavioral sciences, and health sciences to humankind.
4. An understanding and literacy of all disciplines of agriculture especially to include the disciplines of animal science, agronomy, soils, horticulture, agricultural mechanics, pest management, agricultural economics, and farm management.

Additional Competencies for Specific Options

Agribusiness Option

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

Agricultural Economics Option

An understanding of the principles of economics and how they are used in agricultural economics.

Agricultural Education Option

1. The ability to use effective planning in course organization in agricultural education.
2. The ability to plan daily instructional programs in agricultural education.
3. An understanding of occupational experience programs and their role in agricultural education.
4. An understanding of FFA and SAE and their role in agricultural education.
5. An understanding of effective management of instructional programs in agricultural education.

Agronomy Option

An understanding of and the ability to apply the principles of soil conservation and weed science to crop production and also an understanding of how certain crops are utilized by farm animals.

Animal Science Option

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

Golf Course Management Option

1. An understanding of the selection, establishment, and maintenance of plants used on the golf course.
2. An understanding of the business, horticultural, and recreational aspects of golf course management.

Horticulture Option

An understanding of the basic principles involved in the production and propagation of horticultural plants.

Assessment Procedures

- Exit examination
- Surveys of graduating students, alumni, advisory groups, and employers
- Teacher certification examination for Agricultural Education

Bachelor of Science

General Education Requirements 48

See general education requirements for the University.

Area of Concentration

To complete an area of concentration in Agricultural Sciences, the student must complete the Agricultural Sciences core requirements plus one of the following options: Agricultural Education, Agribusiness, Agricultural Economics, Agronomy, Animal Science, General Agriculture, Golf Course Management, Horticulture, Veterinary Science, or Veterinary Technology. General course electives may also be taken in agriculture and related fields by students wishing greater depth in an agricultural field.

Agricultural Sciences Core Requirements

AGR 101 — Orientation to Agriculture 1
AGR 102 — Agricultural Experience 2

AGR 133 — Introduction to Animal Science	3
AGR 180 — Introduction to Field Crops, or AGR 143 — Anatomy & Physiology of Livestock, or VET 108 — Veterinary Clinical Anatomy	3
AGR 211 — Soils	3
AGR 215 — Horticultural Science, or AGR 233 — Animal Diseases and Parasites	3
AGR 251 — Introduction to Agricultural Mechanics, or AGR 243 — Equine Health and Disease	3
AGR 300 — Pest Management, or AGR 316 — Feeds and Feeding	3
AGR 301 — Farm Management	3
*AGR 402 — Advanced Agricultural Experience (or approved cooperative education), or VET 363 — Veterinary Preceptorship	2
AGR 499C — Senior Seminar in Agriculture	3
CHEM 201 — Survey of Organic Chemistry, or CHEM 112 — Principles of Chemistry II	4

**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.*

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

Agribusiness Option

Students who select this option must complete the required core courses in the area of concentration in agricultural science and 24 semester hours of requirements and electives, with advisor's approval.

General Education Requirements

The following specific General Education Courses must be completed:

AGR 204 — World Food	3
AGR 261 — Information Acquisition and Analysis	3
BIOL 150 — Introduction to Plant Science	3
CHEM 101 — Survey of Chemistry	4
MATH 131 — Mathematical Reasoning and Problem Solving, or MATH 135 — Mathematics for Technical Students (or higher)	3

Core Requirements 33

For the Agribusiness option, the student must complete the Agricultural Sciences core. Where choices exist, the following core courses must be taken:

AGR 180 — Introduction to Field Crops, or AGR 143 — Anatomy and Physiology of Livestock	3
*AGR 402 — Advanced Agricultural Experience, or Approved Cooperative Education	2
CHEM 201 — Survey of Organic Chemistry	4

Agribusiness Required Courses 24

ACCT 281 — Principles of Financial Accounting	3
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An additional 21 hours from the following groups, with courses from at least three groups, must be completed:

Group A	
AGR 302 — Agriculture Finance	3
FIN 252 — Mathematics of Finance	3
FIN 264 — Personal Finance	3
FIN 342 — Money and Banking	3
FIN 420 — Financial Markets and Institutions	3

Group B	
MNGT 301 — Principles of Management	3
MNGT 311 — Human Resource Management	3

Group C	
AGR 305 — Marketing of Farm Products	3
MKT 304 — Marketing	3
MKT 350 — Personal Selling	3
MKT 354 — Consumer Behavior	3
MKT 453 — Marketing Planning and Strategies	3

Group D	
MNGT 261 — The Legal Environment of Business Organizations	3
MNGT 362 — The Legal Environment and Business Practices	3

Group E	
ACCT 282 — Principles of Managerial Accounting	3
ACCT 387 — Income Tax	3
AGR 303 — Land Economics	3

Agriculture Economics Option

Students who select this option must complete the required core courses in the area of concentration in agricultural science and 24 semester hours of requirements and electives in agriculture and economics. Requirements and electives are listed below.

General Education Requirements

The following specific general education courses must be completed:

AGR 204 — World Food	3
AGR 261 — Information Acquisition and Analysis	3
BIOL 150 — Introduction to Plant Science	3
CHEM 101 — Survey of Chemistry	4
MATH 131 — Mathematical Reasoning and Problem Solving, or	
MATH 135 — Mathematics for Technical Students (or higher)	3

Core Requirements **33**

For the Agribusiness option, the student must complete the Agricultural Sciences core. Where choices exist, the following core courses must be taken:

AGR 180 — Introduction to Field Crops, or	
AGR 143 — Anatomy and Physiology of Livestock	3
*AGR 402 — Advanced Agricultural Experience, or	
Approved Cooperative Education	2
CHEM 201 — Survey of Organic Chemistry	4

Agriculture Economics Required Courses **9**

ECON 202 — Principles of Microeconomics	3
ECON 350 — Intermediate Microeconomics	3
ECON 351 — Intermediate Macroeconomics	3

An additional 15 semester hours must be completed from the following courses, with approval of advisor:

AGR 302 — Agriculture Finance	3
AGR 303 — Land Economics	3
AGR 386 — Introduction to Agricultural Policy	3
ECON 410 — History of Economic Thought	3
ECON 447 — International Economics	3
FIN 342 — Money and Banking	3
FIN 373 — Investments	3
MATH 354 — Business Statistics	3

Agriculture Education Option

This area of concentration is designed and approved for students who wish to teach agriculture education in the public schools in Kentucky or are interested in Cooperative Extension.

Students must complete the required core courses in the area of concentration in agricultural science and 44 semester hours of requirements and electives, with advisor's approval.

General Education Requirements

The following specific general education courses must be completed:

AGR 204 — World Food	3
AGR 261 — Information Acquisition and Analysis	3
BIOL 150 — Introduction to Plant Science	3
CHEM 101 — Survey of Chemistry	4
MATH 131 — Math. Reasoning and Problem Solving or	
MATH 135 — Mathematics for Technical Students (or higher)	3

Core Requirements **33**

For the Agricultural Education option, the student must complete the Agricultural Sciences core. Where choices exist, the following core courses must be taken.

AGR 180 — Introduction to Field Crops	3
AGR 215 — Horticultural Science	3
AGR 251 — Introduction to Agricultural Mechanics	3
AGR 300 — Pest Management	3
*AGR 402 — Advanced Agricultural Experience or	
Approved Cooperative Education	2
CHEM 201 — Survey of Organic Chemistry	4

Option Requirements of Agricultural Education

Agriculture Courses:

Approved Agricultural Mechanics Elective	3
Approved Animal Science Elective	3
Approved Soil Science	3
Approved Agricultural Electives	6

Total **15**

Professional Education Courses:

CTE 207 — Foundations of Vocational Education	3
EDF 211 — Human Growth and Development	3

EDSP 230 — Teaching the Exceptional Student	3
CTE 388 — Methods of Curriculum Development	3
CTE 392 — Methods of Instructional Technology	3
CTE 470 — Methods of Instruction	3
AGR 478 — Student Teaching Practicum	12
Total	30

Teacher Certification

Students seeking teacher certification must apply for and be admitted to the TEP. Students must have an overall GPA standing of 2.5 in area of concentration courses before they will be permitted to take agricultural education courses. Students must be approved by the agricultural staff and recommended for certification.

Agronomy Option

Students must complete the required core courses in the area of concentration in agricultural science and 24 semester hours of requirements and electives, with advisor's approval.

General Education Requirements

The following specific general education courses must be completed:

AGR 204 — World Food	3
AGR 261 — Information Acquisition and Analysis	3
BIOL 150 — Introduction to Plant Science	3
CHEM 101 — Survey of Chemistry	4
MATH 131 — Math. Reasoning and Problem Solving or MATH 135 — Mathematics for Technical Students (or higher)	3

Core Requirements **33**

For the agronomy option, the student must complete the Agricultural Science core, where choices exist, the following core courses must be taken:

AGR 180 — Introduction to Field Crops	3
AGR 215 — Horticultural Science	3
AGR 251 — Introduction to Agricultural Mechanics	3
AGR 300 — Pest Management	3
*AGR 402 — Advanced Agricultural Experience, or Approved Cooperative Education	2
CHEM 201 — Survey of Organic Chemistry	4

Agronomy Required Courses **9**

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 205 — Farm Records	3
AGR 303 — Land Economics	3
AGR 312 — Soil Fertility and Fertilizers	3
AGR 314 — Plant Propagation	3
AGR 319 — Herbs	3
AGR 320 — Principles of Vegetable Production	3
AGR 325 — Turf Management	3
AGR 350 — Farm Power and Machinery Management	3

AGR 384 — Forage Crops	3
BIOL 215 — General Botany	4
BIOL 334 — Entomology	3
BIOL 426 — Plant Physiology	3
BIOL 449 — Plant Anatomy	3
CHEM 326 — Organic Chemistry I	3

Animal Science Option

The Animal Science Option is designed to prepare the graduate for a career in the animal agriculture industry and/or admission to a graduate program in Animal Science. As the admission requirements for each graduate program varies, it is essential to work closely with an animal science advisor to assure that the appropriate courses are taken. Completion of this degree option does not guarantee admission to a graduate program.

Summary of degree requirements:

General Education	46
Agricultural Science Core	33
Animal Science Option	24
Supplemental Courses	26
Total Hours	12

General Education **46**

Note: Since AGR 499C is counted in the core hours, it is not included in the general education total hours.

The following general education courses are required by the Animal Science option.

Required General Education hours (Seven hours)

AGR 204 — World Food	3
CHEM 101 — Survey of Chemistry	4

Elective General Education hours **39**

An additional 39 hours of approved courses are needed to complete MSU's General Education program. These should be selected in consultation with an Animal Science Advisor.

Core Requirements **33**

For the Animal Science option, the student must complete the Agricultural Sciences core. Where choices exist, the following core courses must be taken:

AGR 143 — Anatomy and Physiology of Livestock	3
AGR 233 — Animal Diseases and Parasites	3
AGR 243 — Equine Health and Disease	3
AGR 316 — Feeds and Feeding	3
AGR 402 — Advanced Agricultural Experience, or Approved Cooperative Education	2
CHEM 201 — Survey of Organic Chemistry	4

Animal Science Option Requirements **24**

For the Animal Science option, the student must complete 12 hours of option requirements and 12 hours of option electives.

Option Requirements **12**

AGR 180 — Introduction to Field Crops	3
AGR 222 — Livestock Evaluation	3
AGR 330 — Livestock Improvement	3
AGR 384 — Forage Crops	3

Option Electives	12
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 480 — Equine Breeding and Reproduction	3
AGR 415 — Animal Nutrition	3

Animal Science Supplemental Courses 26

For the Animal Science Option, the student must complete 26 hours of supplemental courses in consultation with their Animal Science advisor.

Equine Science Option

The Equine Science Option is designed to prepare the graduate for a career in the equine industry and/or admission to a graduate program in Equine Science. As the admission requirements for each graduate program varies, it is essential to work closely with an Equine Science advisor to assure that the appropriate courses are taken. Completion of this degree option does not guarantee admission to a graduate program.

Summary of degree requirements:

General Education	46
Agricultural Science Core	33
Equine Science Option	24
Supplemental Courses	26
Total Hours	12

General Education 46

Note: Since AGR 499C is counted in the core hours, it is not included in the general education total hours.

The following general education courses are required by the Equine Science option.

Required General Education hours (Seven hours)

AGR 204 — World Food	3
CHEM 101 — Survey of Chemistry	4

Elective General Education hours 39

An additional 39 hours of approved courses are needed to complete MSU's General Education program. These should be selected in consultation with an Equine Science Advisor.

Core Requirements 33

For the Equine Science option, the student must complete the Agricultural Sciences core. Where choices exist, the following core courses must be taken:

AGR 143 — Anatomy and Physiology of Livestock, or VET 108 — Veterinary Clinical Anatomy	3
AGR 233 — Animal Diseases and Parasites	3
AGR 243 — Equine Health and Disease	3
AGR 316 — Feeds and Feeding	3

CHEM 201 — Survey of Organic Chemistry	4
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Equine Science Option Requirements 24

For the Equine Science option, the student must complete six hours of option requirements, and 18 hours of option electives.

Option Requirements 6

AGR 222 — Livestock Evaluation	3
AGR 342 — Horse Production	3

Option Electives 18

AGR 245 — Horseshoeing	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

Equine Science Supplemental Courses 26

For the Equine Science Option, the student must complete 26 hours of supplemental courses in consultation with their Equine Science Advisor.

General Agriculture Option

Students must complete the required core courses in the area of concentration in agricultural science and 24 semester hours of approved electives from the general agriculture option.

General Education Requirements

The following specific general education courses must be completed:

AGR 204 — World Food	3
AGR 261 — Information Acquisition and Analysis	3
BIOL 150 — Introduction to Plant Science	3
CHEM 101 — Survey of Chemistry	4
MATH 131 — Mathematical Reasoning and Problem Solving, or MATH 135 — Mathematics for Technical Students (or higher)	3

Core Requirements 33

For the General Agriculture option, the student must complete the Agricultural Sciences core. Where choices exist, the following core courses must be taken:

AGR 180 — Introduction to Field Crops	3
AGR 215 — Horticultural Science	3
AGR 251 — Introduction to Agricultural Mechanics	3
AGR 300 — Pest Management	3
AGR 402 — Advanced Agricultural Experience, or Approved Cooperative Education	2
CHEM 201 — Survey of Organic Chemistry	4

General Agriculture Requirements. 24

The minimum number of semester hours for each of the following six fields must be completed:

Agriculture Economics	3
AGR 205 — Farm Records	3
AGR 302 — Agriculture Finance	3
AGR 303 — Land Economics	3
AGR 305 — Marketing of Farm Products	3
AGR 386 — Introduction to Agricultural Policy	3

Agricultural Mechanics	3
AGR 350 — Farm Power and Machinery Management	3

Animal Science	6
AGR 222 — Livestock Evaluation	3
AGR 243 — Equine Health and Disease	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 415 — Animal Nutrition	3

Plant Science	6
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	3
AGR 311 — Soil Conservation	3
AGR 312 — Soil Fertility and Fertilizers	3

Approved Agricultural Electives	3
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Golf Course Management Option

Students who select this option must complete the required core courses in the area of concentration in agricultural science and 24 semester hours of requirements, with advisor's approval.

General Education Requirements

The following specific general education courses must be completed:

AGR 204 — World Food	3
AGR 261 — Information Acquisition and Analysis	3

BIOL 150 — Introduction to Plant Science	3
CHEM 101 — Survey of Chemistry	4
MATH 131 — Mathematical Reasoning and Problem Solving or	
MATH 135 — Mathematics for Technical Students (or higher)	3

Core Requirements **33**

For the Golf Course Management option, the student must complete the Agricultural Sciences core. Where choices exist, the following core courses must be taken:

AGR 180 — Introduction to Field Crops	3
AGR 215 — Horticultural Science	3
AGR 251 — Introduction to Agricultural Mechanics	3
AGR 300 — Pest Management	3
AGR 402 — Advanced Agricultural Experience, or Approved Cooperative Education	2
CHEM 201 — Survey of Organic Chemistry	4

Golf Course Management Required Courses

Required Courses

AGR 212 — Landscape Plants	3
AGR 308 — Weed Science	3
AGR 318 — Landscape Maintenance	3
AGR 325 — Turf Management	3
MNGT 301 — Principles of Management	3
MKT 304 — Marketing, or	
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	3

Horticulture Option

Students must complete the required core courses in the area of concentration in agricultural and 24 semester hours of requirements and electives.

General Education Requirements

The following specific general education courses must be completed:

AGR 204 — World Food	3
AGR 261 — Information Acquisition and Analysis	3
BIOL 150 — Introduction to Plant Science	3
CHEM 101 — Survey of Chemistry	4
MATH 131 — Mathematical Reasoning and Problem Solving or	
MATH 135 — Mathematics for Technical Students (or higher)	3

Core Requirements **33**

For the Horticulture option, the student must complete the Agricultural Sciences core. Where choices exist, the following core courses must be taken.

AGR 180 — Introduction to Field Crops	3
AGR 215 — Horticultural Science	3
AGR 251 — Introduction to Agricultural Mechanics	3

AGR 300 — Pest Management	3
AGR 402 — Advanced Agricultural Experience, or Approved Cooperative Education	2
CHEM 201 — Survey of Organic Chemistry	4

Horticulture Required Courses 24

AGR 314 — Plant Propagation	3
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An additional 21 semester hours must be selected from the following courses, with approval of advisor:

AGR 212 — Landscape Plants	3
AGR 213 — Landscape Design	3
AGR 224 — Greenhouse Operations	3
AGR 308 — Weed Science	3
AGR 315 — Fruit Production	3
AGR 317 — Floral Design	3
AGR 318 — Landscape Maintenance	3
AGR 319 — Herbs	3
AGR 320 — Principles of Vegetable Production	3
AGR 323 — Interior Landscaping	3
AGR 324 — Greenhouse Structures	3
AGR 325 — Turf Management	3
AGR 326 — Nursery Management	3
AGR 327 — Advanced Landscape Design	3
AGR 328 — Floral Crop Production	3
BIOL 318 — Local Flora	3

Veterinary Science Option

The Veterinary Science Option is designed to prepare the candidate for admission to a College of Veterinary Medicine (CVM). As the admission requirements for CVMs vary, it is essential to work closely with a pre-veterinary advisor to assure that the appropriate courses are taken. Completion of this degree option does not guarantee admission to a CVM.

There are no special admission requirements for this degree option. It is not restricted to pre-veterinary students, but is open to anyone interested in pursuing an Agricultural Sciences degree option in Veterinary Science. However, a prospective applicant to a CVM must earn excellent grades to be a competitive candidate. It is therefore recommended that pre-veterinary students possess above-average academic skills (ACT composite and math scores of 22, or higher) and a strong aptitude for science courses.

Summary of degree requirements:

General Education	48
Agricultural Science Core	33
Veterinary Science Option	18
Supplemental Courses	31
Total Hours	130
General Education	48

Note: Since AGR 499C is counted in the core hours, it is not included in the general education total hours.

The following general education courses are required by the Veterinary Science option.

Required General Education hours 18

AGR 204 — World Food	3
BIOL 171 — Principles of Biology	4

CHEM 111 — Principles of Chemistry I	4
*MATH 152 — College Algebra (or higher)	3
PHYS 201 — Elementary Physics I	3
PHYS 201A — Elementary Physics I Lab	1

**Applicants to Auburn CVM must take Pre-Calculus Mathematics (MATH 174) unless they have a bachelor's degree prior to matriculation.*

Elective General Education hours 30

An additional 30 hours of approved courses are needed to complete MSU's General Education program. These should be selected in consultation with a pre-veterinary advisor on the basis of the CVM's to which applicant may apply. For example, Auburn University specifically requires fine arts, history and literature; whereas Ohio State University does not require specific social science and humanities courses. It is important to recognize that Auburn University considers history to be social science, not a humanities subject.

Core Requirements (33)

For the Veterinary Science option, the student must complete the Agricultural Sciences core. Where choices exist, the following core courses must be taken:

AGR 143 — Anatomy & Physiology of Livestock, or VET 108 — Veterinary Clinical Anatomy	3
AGR 233 — Animal Diseases and Parasites	3
AGR 243 — Equine Health and Disease	3
AGR 316 — Feeds and Feeding	3
CHEM 112 — Principles of Chemistry II	4

Veterinary Science Option Requirements (18)

For the Veterinary Science option, the student must complete six hours of option requirements, plus 12 hours of option electives.

Option Requirements (six hours)

AGR 415 — Animal Nutrition	3
AGR 480 — Equine Breeding and Reproduction	3

Option Electives (12)

AGR 245 — Horseshoeing	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
VET 355 — Large Animal Clinics II	6
VET 356 — Small Animal Clinics II	6
VET 370 — Veterinary Infectious Diseases	3

Veterinary Science Supplemental Courses (31)

For the Veterinary Science option, the student must complete 16 hours of supplemental requirements, plus 15 hours of supplemental electives.

Required Supplemental hours (16)

BIOL 210 — General Zoology	4
CHEM 326 — Organic Chemistry I	4
CHEM 327 — Organic Chemistry II	4
PHYS 202 — Elementary Physics II	3
PHYS 202A — Elementary Physics II Laboratory	1

Elective Supplemental hours (15)

An additional 15 hours of supplemental electives (300 level or higher science courses) approved by the student's pre-veterinary advisor are required. These should be selected on the basis of the CVM's to which the applicant may apply. Suggested choices include, but are not limited to:

*BIOL 301 — Fundamentals of Biochemistry	4
*BIOL 304 — Genetics	3
*BIOL 317 — Principles of Microbiology	4
BIOL 337 — Comparative Anatomy	3
BIOL 338 — Developmental Biology	3
BIOL 380 — Cell Biology	3
BIOL 424 — Immunology	3
BIOL 425 — Animal Physiology	3
CHEM 360 — Analytical Chemistry	3

**Required by Ohio State University, CVM*

Veterinary Technology Option

The Veterinary Technology option is designed to prepare the candidate for a career as a Veterinary Technologist. Students in this option must be admitted to the Veterinary Technology Program.

Summary of degree requirements:

General Education	46
Agricultural Science Core	33
Veterinary Technology Option	24
Supplemental Courses	29
Total Hours	13

General Education 46

Note: Since AGR 499C is counted in the core hours, it is not included in the General Education total hours.

The following General Education courses are required by the Veterinary Technology option.

Required General Education hours 13

AGR 204 — World Food	3
BIOL 160 — Introduction to Biological Principles or higher	3
CHEM 101 — Survey of Chemistry	4
MATH 131 — Mathematical Reasoning and Problem Solving or	
MATH 135 — Mathematics for Technical Students or higher	3

Elective General Education hours 33

An additional 33 hours of approved courses are needed to complete MSU's General Education program. These should be selected in consultation with the student's Veterinary Technology advisor.

Core Requirements 33

For the Veterinary Technology option, the student must complete the Agricultural Sciences core. Where choices exist, the following core courses must be taken:

AGR 316 — Feeds and Feeding	3
AGR 233 — Animal Diseases and Parasites	3
AGR 243 — Equine Health and Disease	3
CHEM 201 — Survey of Organic Chemistry	4
VET 108 — Veterinary Clinical Anatomy	3
VET 363 — Veterinary Preceptorship (1 hr.), and	
AGR 402 — Advanced Agricultural Experience, or approved cooperative education (1 hr.)	2

Veterinary Technology Option Requirements (24)

For the Veterinary Technology option, the student must complete 24 hours of option requirements.

Option Requirements 24

VET 255 — Large Animal Clinics I	6
VET 256 — Small Animal Clinics I	6
VET 355 — Large Animal Clinics II	6
VET 356 — Small Animal Clinics II	6
Veterinary Technology Supplemental Courses	29

For the Veterinary Technology option, the student must complete 20 hours of supplemental requirements, plus nine hours of supplemental electives.

Required Supplemental Courses (20 hours)

BIOL 213 — Introduction to Veterinary Microbiology	4
VET 110 — Animal Care Techniques I	2
VET 111 — Animal Care Techniques II	2
VET 211 — Animal Care Techniques III	2
VET 212 — Veterinary Surgical Nursing	2
VET 216 — Veterinary Clinical Pathology I	2
VET 217 — Veterinary Clinical Pathology II	2
VET 233 — Veterinary Physiology and Pharmacology I	2
VET 234 — Veterinary Physiology & Pharmacology II	2

Elective Supplemental Courses (nine hours)

An additional nine hours of supplemental electives from the following list.

AGR 221 — Equitation	3
AGR 222 — Livestock Evaluation	3
AGR 245 — Horseshoeing	3
AGR 330 — Livestock Improvement	3
AGR 336 — Dairy 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 480 — Equine Breeding and Reproduction	3
AGR 415 — Animal Nutrition	3
VET 370 — Veterinary Infectious Diseases	3

Agriculture Major

The student must complete the core course requirements listed under the area of concentration in agricultural science, six additional semester hours of approved agriculture electives, and a major or minor selected in another field. General course electives may also be taken in agriculture and related areas by students wishing greater depth in an agriculture field.

Agriculture Minor

The student must complete the following agriculture course plus five semester hours of approved agriculture courses, and a major selected in another field. General course electives may also be taken in agriculture and related areas by students wishing greater depth in agriculture.

Required Courses in Agriculture	21
AGR 101 — Orientation to Agriculture	1
AGR 133 — Introduction to Animal Science	3
AGR 180 — Introduction to Field Crops	3
AGR 204 — World Food	3
AGR 211 — Soils	3
AGR 215 — Horticultural Science	3
Approved AGR courses	5

Agricultural Technology

Faculty

M. Phillips, D. Johnson, E. LeCompt, R. Miculinich, T. Platt, B. Rogers, J. Willard, T. Wistuba

Program Competencies

Students graduating in Agriculture with an Associate degree 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 and literacy of all disciplines of agriculture especially to include the disciplines of animal science, agronomy, soils, horticulture, agricultural mechanics, and pest management.

Additional Competencies for Specific Options

Agribusiness Option

An understanding of the principles of economics and management and how they are used in agribusiness.

Equine Technology Option

An understanding of the current principles of equine production.

Ornamental Horticulture Option

1. An understanding of the basic principles involved in the production of ornamental crops.
2. The ability to utilize ornamental crops for the benefit of society.

Assessment Procedures

Exit examination

Survey of graduating students, alumni, advisory groups, and employers

Associate of Applied Science

(Two-Year Program)

General Education Requirements **21**

See general education requirements for the University.

The following specific general education requirements must be completed:

AGR 204 — World Food	3
AGR 261 — Information Acquisition and Analysis	3
MATH 131 — Mathematical Reasoning and Problem Solving or	
MATH 135 — Mathematics for Technical Students	3

The student must complete a minimum of 51 semester hours in the area of agricultural technology. Thirty-three semester hours are the following core requirements and 18 semester hours are approved electives, selected from within one of the following four options:

Core Requirements

Required Courses

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 205 — Farm Records	3
AGR 211 — Soils	3
AGR 215 — Horticultural Science	3
*AGR 235 — Supervised Work Experience	2
AGR 251 — Introduction to Agricultural Mechanics	3
AGR 300 — Pest Management	3
BIOL 150 — Introduction to Plant Science	3
CHEM 101 — Survey of Chemistry	4

**Students may apply no more than a maximum of 11 hours credit from AGR 235, 402, 476, or cooperative education courses that will count as credit toward a degree.*

Eighteen semester hours must be taken in one of the options listed.

Agribusiness Option

The student must complete the core courses in agricultural technology and required and elective courses.

Required Courses

AGR 301 — Farm Management	3
ECON 101 — Introduction to Economics	3

Twelve hours must be selected from the following courses, with approval of advisor.

ACCT 281 — Principles of Financial Accounting	3
ACCT 282 — Principles of Managerial Accounting	3
AGR 302 — Agricultural Finance	3
AGR 305 — Marketing of Farm Products	3

CIS 211 — Advanced Microcomputers Applications	3
ECON 201 — Principles of Macroeconomics	3
ECON 202 — Principles of Microeconomics	3
MNGT 261 — The Legal Environment of Business Organizations	3
MKT 350 — Personal Selling	3

Agricultural Production Option

(Agronomy and/or Animal Science)

This option is designed for students interested in agronomy or animal science. Both areas are included in the Agricultural Production Option because they are interrelated.

The student must complete the core courses in agricultural technology and select 18 hours from the following courses with at least one course from each group, with approval of advisor:

Group A

AGR 308 — Weed Science	3
AGR 311 — Soil Conservation	3
AGR 312 — Soil Fertility and Fertilizers	3
AGR 314 — Plant Propagation	3
AGR 325 — Turf Management	3
AGR 384 — Forage Crops	3
BIOL 215 — General Botany	4
BIOL 318 — Local Flora	3

Group B

AGR 301 — Farm Management	3
AGR 302 — Agriculture Finance	3
AGR 305 — Marketing of Farm Products	3
ACCT 281 — Principles of Financial Accounting	3

Group C

AGR 222 — Livestock Evaluation	3
AGR 243 — Equine Health and Disease	3
AGR 316 — Feeds and Feeding	3
AGR 330 — Livestock Improvement	3
AGR 336 — Dairy Production	3
AGR 337 — Poultry Production	3
AGR 338 — Livestock Judging	3
AGR 343 — Beef Production	3
AGR 344 — Swine Production	3
AGR 345 — Sheep Production	3

Equine Technology Option

The student must complete the core courses in agricultural technology and the following required and elective courses.

Required Courses

AGR 243 — Equine Health and Disease	3
AGR 342 — Horse Production	3
AGR 380 — Equine Management	3

Nine semester hours must be selected from the following courses, with approval of advisor:

AGR 221 — Equitation	3
AGR 222 — Livestock Evaluation	3

AGR 245 — Horseshoeing	3
AGR 329 — Advanced Stock Seat Horsemanship	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 384 — Forage Crops	3

A maximum of three hours as AGR 329, 332 or 333 may be applied to the option.

Ornamental Horticulture Option

The student must complete core courses in agricultural technology and required and elected courses as follows:

Required Course

AGR 314 — Plant Propagation	3
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Fifteen semester hours must be selected from the following courses, with approval of advisor:

AGR 212 — Landscape Plants	3
AGR 213 — Landscape Design	3
AGR 224 — Greenhouse Operations	3
AGR 308 — Weed Science	3
AGR 315 — Fruit Production	3
AGR 317 — Floral Design	3
AGR 318 — Landscape Maintenance	3
AGR 319 — Herbs	3
AGR 320 — Principles of Vegetable Production	3
AGR 323 — Interior Landscaping	3
AGR 324 — Greenhouse Structures	3
AGR 325 — Turf Management	3
AGR 326 — Nursery Management	3
AGR 327 — Advanced Landscape Design	3
AGR 328 — Floral Crop Production	3

Horsemanship

Faculty

E. LeCompt, J. Willard

Horsemanship Minor

The student must complete a minimum of 21 semester hours of agriculture courses in the following list and a major selected in another field. General course electives may also be taken in horsemanship, agriculture, and related areas by students wishing greater depth in horsemanship.

Course Requirements

AGR 221 — Equitation	3
AGR 243 — Equine Health and Disease	3
AGR 335 — Equitation Teaching	3
AGR 342 — Horse Production	3

Approved Electives **3**

Students must select six hours from the following:

AGR 329 — Advanced Stock Seat Horsemanship	3
AGR 332 — Advanced Saddle Seat Horsemanship	3

AGR 333 — Advanced Hunt Seat Horsemanship 3

Pre-Forestry

Faculty

B. Rogers

Students interested in forestry may take their first two years of course work at MSU and then complete their studies at accredited schools of forestry. If at the end of two years a student does not secure admission to an accredited school of forestry, most of the credits earned may be applied toward a degree at MSU. The program may be modified to meet entrance requirements at any institution offering a forestry program.

Required Course Sequence

First Semester 17

BIOL 150 — Introduction to Plant Science	3
CHEM 101 — Survey of Chemistry	4
ENG 100 — Writing I	3
MATH 175 — Calculus I	4
PHED — activity course	1
General elective	2

Second Semester 16

AGR 180 — Introduction to Field Crops	3
CHEM 201 — Survey of Organic Chemistry	4
ENG 200 — Writing II	3
MATH 353 — Statistics	3
PHED — activity course	1
General elective	2

Third Semester 17

AGR 211 — Soils	3
BIOL 215 — General Botany	4
*ITCM 310 — Principles of Surveying	3
PHYS 201, 201A — Elementary Physics I and Laboratory	4
SOC 170 — Rural Sociology	3

Fourth Semester 15

CMSP 108 — Fundamentals of Speech Communication	3
ECON 201 — Principles of Macroeconomics	3
ENG — Literature elective	3
HIS 202 — American Studies	3
PSY 154 — Introduction to Psychology	3

* Prerequisite required

Total 65

Pre-Veterinary Medicine

Faculty

K. Peterson, P. Prater, J. Willard

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 preveterinary 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 preveterinary 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, non-contract positions may be available. In-state and contract applicants have approximately one in three chance of acceptance; while out-of-state, non-contract 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 preveterinary requirements. All applicants are not accepted and one must have a suitable degree to build an alternate career. Suitable degree programs include veterinary science, veterinary technology, and biology. The Veterinary Science degree program is specifically designed to address the needs of pre-veterinary students. See the Agricultural Sciences, Veterinary Science Option. For further information contact:

Pre-Veterinary Advisor

25 MSU Farm Drive
Morehead, KY 40351
(606) 783-2326

Veterinary Technology

Faculty

L. Larson, B. Lewis, K. Peterson, P. Prater (Coordinator),
S. Rundell, A. Staton

Program Competencies

Students receiving an Associate of Applied Sciences degree in Veterinary Technology should possess competencies in the following areas as defined by the American Veterinary Medical Association:

1. General Competencies:
 - a. Written, oral and interpersonal communication skills.
 - b. Applied mathematical skills applicable to the field of veterinary technology.
 - c. An awareness of the physical and biological concepts applicable to the field of veterinary technology.
 - d. An appreciation of the liberal arts.

2. Specific Competencies:

- a. Anesthesia, including induction, monitoring, and instrumentation.
 - b. Animal husbandry, including restraint, behavior, species and breed identification, reproduction, sex determination, and human-animal bonding.
 - c. Diseases, preventive medicine (including dentistry), and nursing of companion animals, food-production animals, horses, and laboratory animals.
 - d. Economics of veterinary practice.
 - e. Ethics, professionalism, and legal applications in veterinary medicine.
 - f. Humane animal care and management.
 - g. Basic laboratory animal technology.
 - h. Medical terminology.
 - i. Necropsy techniques.
 - j. Nutrition and principles of feeding.
 - k. Orientation to the vocation of veterinary technology.
 - l. Pharmacology for veterinary technicians.
 - m. Principles of imaging, including radiography and ultrasonography.
 - n. Professional organizations and continuing education for graduate technicians.
 - o. Surgical nursing and assisting, including instrumentation.
 - p. Technician utilization and team concepts of health care delivery.
 - q. Veterinary anatomy and physiology.
 - r. Veterinary clinical pathology and parasitology.
 - s. Veterinary microbiology and immunology.
 - t. Veterinary office management.
 - u. Elementary computer skills pertaining to veterinary technology.
 - v. Zoonoses, occupational health hazards, and waste disposal.
3. In addition, students should have the skills necessary to assume responsibility for self-development and lifelong learning in the field of veterinary technology.

Assessment Procedures

- Advisory Board consultation
- Evaluation by accrediting organization (AVMA)
- Exit examination
- Survey of employers
- Survey of graduates
- Graduate performance on state board examinations

Associate of Applied Science

(Five-Semester Program)

The MSU Veterinary Technology Associate Degree Program is approved by the Kentucky Veterinary Medical Association and accredited by the American Veterinary Medical Association. Graduates are eligible to write the National Board Examination for state licensure as a Registered Veterinary Technician or Technologist.

The Veterinary Technology Program has a selective admission policy, which is separate from and in addition to the University's

admission procedures. Admission to the University does not guarantee admission to the Veterinary Technology Program.

In addition to acceptance by the University, applicants must apply for admission to the Veterinary Technology Associate Degree Program and meet the following criteria:

Special Admission Requirements

1. Admission to Morehead State University. Full admission to Morehead State University without conditions. Students who are admitted as provisional or are required to take developmental courses must complete those requirements with acceptable grades prior to admission to the program.
2. Admission to Veterinary Technology Program.
 - a. First-time Freshman:
 1. High school diploma or GED.
 2. Minimum high school GPA of 3.0 on 4.0 scale.
 3. ACT Composite Score of at least 20.
 4. ACT subscores which permit enrollment in courses required by the program.
 - b. College Students:
 1. Minimum cumulative GPA of 2.5 on 4.0 scale in at least 12 hours of approved college-level course work. These 12 hours must include at least six hours of math, biology, or chemistry with a minimum GPA of 2.4 on 4.0 scale.
 2. Approved 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.
 - c. All applicants:
 1. Minimum 40 hours work experience with a veterinarian.
 2. Written recommendation from the above veterinarian.
 3. Health, Physical Capability, and Risk Assessment (HPCR) Requirements.
 - a. Purpose 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.

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.

Required Course Sequence

General Education Requirements: Students must complete the general education requirements for an Associate of Applied Sciences degree. Any course approved by the University for each of the following categories may be taken, unless otherwise specified:

CMSP 108 — Fundamentals of Speech Communication	3
CIS 101 — Computers for Learning, or	
SCI 110 — Introduction to Scientific Computing, or	
AGR 261 — Information Acquisition and Analysis	3
Social/Behavioral Sciences	
ENG 100 — Writing I	3
ENG 200 — Writing II	3
Humanities	3

MATH 135 — Mathematics for Technical Students, (or higher) 3

Total 21

Program Core Requirements

AGR 133 — Introduction to Animal Science	3
BIOL 213 — Introduction to Veterinary Microbiology	4
CHEM 101 — Survey of Chemistry	4
VET 108 — Veterinary Clinical Anatomy	3
VET 110 — Animal Care Techniques I	2
VET 111 — Animal Care Techniques II	2
VET 211 — Animal Care Techniques III	2
VET 212 — Veterinary Surgical Nursing	2
VET 216 — Veterinary Clinical Pathology I	2
VET 217 — Veterinary Clinical Pathology II	2
VET 233 — Veterinary Physiology and Pharmacology I	2
VET 234 — Veterinary Physiology and Pharmacology II	2
VET 255 — Large Animal Clinics I	6
VET 256 — Small Animal Clinics I	6
VET 355 — Large Animal Clinics II	6
VET 356 — Small Animal Clinics II	6
VET 363 — Veterinary Preceptorship (off-campus)	1

Total Program Core 55

Freshmen: First-time freshmen may enter the Vet Tech program and complete the general education requirements concurrently with the Vet Tech sequence. However, it will be necessary to take some summer courses to finish within two years.

Transfer Students: The Vet Tech core sequence takes four semesters and one summer term to complete even if the general education requirements have been previously completed.

Pre-Vet Students: Students completing both Vet Tech and Pre-Vet should make appropriate course substitutions. See advisor for details.

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 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" in, or withdrawing failing from, any required VET course more than once;
2. Earning a grade less than "C" in, or withdrawing failing from, more than one required VET course;
3. Inability to complete the program within four academic years of beginning the program.

Reinstatement to the program

Once dismissed from the program, a student must reapply to the program and be readmitted. Readmitted students must complete all courses in the VET sequence as if starting for the first time.

Reinstatement into the program is NOT automatic. Reapplicants must demonstrate both the aptitude and motivation to succeed in the program. Those seeking reinstatement to the VET course sequence must do the following:

By May 30:

1. Submit transcripts of college courses at the end of the current semester (unofficial copy of transcripts is acceptable).
2. Provide the name and address of the veterinary facility where obtaining additional work experience. Include the dates and hours per week.
3. Submit a letter explaining what will be done differently to succeed in the VT program if reinstated. This should include plans for study, time management, etc.

By July 15:

1. Submit letter describing in detail work experience during the past 12 months and explaining why you wish to become a credentialed veterinary technician.
2. Complete any HPCR requirements that are not current (e.g., rabies vaccinations).

Failure to meet the above deadlines will cancel the reapplication process. Readmission will be granted only if the above criteria are met to the satisfaction of the VT faculty and there are class seats available.

Reapplicants will be notified on Aug. 1 whether their petition for readmission has been granted.

Department of Biology & Chemistry

Douglas Dennis, Chair

103 Lappin Hall
(606) 783-2945
d.dennis@moreheadstate.edu

Faculty

Z. Barnes, M. Blankenbuehler, N. Coker, D. DeMoss, G. DeMoss, D. Dennis (Chair), D. Eisenhour, D. Fulmer, M. Fultz, G. Gearner, J. Hare, H. Hedgecock, A. MacIntosh, S. O'Keefe, D. Peyton, B. Reeder (IRAPP), A. Risk, D. Saxon, D. Smith, C. Tuerk, S. Welter, C. Wymer

Biology & Chemistry

The Department of Biology & Chemistry offers a Bachelor of Science in either Biology or Chemistry. The Biology B.S. degree has three options that meet different career aspirations of students. The Biology B.S. degree options in the area of concentration in Biology are: 1) Biology; 2) Biological Science Teaching; and 3) Environmental Science. Biology students interested in pursuing health-related careers such as pre-chiropractic, pre-dentistry, pre-medical technology, pre-medicine, pre-pharmacy, pre-physician assistant, pre-physical therapy and pre-podiatry, pursue the Biology option. The B.S. degree in Chemistry can either be obtained by completing an area of concentration in professional Chemistry or a major in Chemistry. The professional Chemistry area of concentration is intended for students wanting to pursue a career in Chemistry, whereas the

major in Chemistry is for students intending to pursue Chemistry careers that strongly intersect with other disciplines. There is only a single degree option for the professional Chemistry degree. There are three degree options for the major in Chemistry. These include: 1) General Chemistry; 2) Environmental Chemistry and; 3) Chemistry Teaching. Chemistry students interested in pursuing health-related careers such as pre-pharmacy, pre-medicine, and pre-optometry usually pursue the General Chemistry option of the major in Chemistry.

The Biology & Chemistry programs are designed to provide a strong foundation for the development of professionals in the specific areas outlined. The student must work closely with his/her advisor to assure that proper course sequences are followed. The Department of Biology & Chemistry also offers minors in both Biology and Chemistry.

Biology

Bachelor of Science - Area of Concentration in Biological Sciences

The Biological Sciences concentration is deep and diverse, enabling students to pursue careers in Environmental Science (option 3), teach at the secondary level (option 2), pursue a career in the health professions, or as a professional biologist (option 1). In addition to these career paths, students may find it advantageous to combine their biology study with other disciplines allowing them to pursue careers in law, public policy, and other areas that intersect with the field.

Program Competencies

Students graduating with the Bachelor of Science degree in Biology should possess the following:

1. Written, oral and interpersonal communication skills in the sciences that will allow the graduate to collect, analyze, interpret, utilize and present information that is contemporary in the biological sciences.
2. An awareness of the basic concepts of the physical and biological sciences and how these concepts are applicable in the profession.
3. An awareness of the importance of the arts, humanities, social and behavioral sciences, health sciences as well as the biological and physical sciences to the human community.
4. A basic understanding of literacy of all disciplines of biology, from molecular to cellular to organismal to population levels that unite organismal, continuity, diversity and unity of life.
5. A general competency in basic inorganic and organic chemistry as well as in introductory physics, mathematics and statistics.

Assessment Procedures

- Exit examinations
- Employer feedback
- Graduate feedback
- Performance of graduates on entrance examinations to post-baccalaureate programs

Biology Core

Every student completing a B.S. in Biology must take the following core courses regardless of the chosen option.

BIOL 171 — Principles of Biology	4
BIOL 210 — General Zoology	4
BIOL 215 — General Botany	4
BIOL 317 — Principles of Microbiology	4
BIOL 461 — Ecology	3
BIOL 499C or BIOL 499D	3
MATH 353 — Statistics	3
Total for Biology Core	25

Biology Option 1: Biology

BIOL 304 — Genetics	3
BIOL 380 — Cell Biology	3
BIOL 425 or BIOL 426	3

Advanced Biology Electives 9-12

(Students must complete any three of the following courses)
 BIOL 318, BIOL 334, BIOL 336, BIOL 337, BIOL 338, BIOL 407,
 BIOL 409, BIOL 424, BIOL 425, BIOL 426, BIOL 427, BIOL 428,
 BIOL 429, BIOL 431, BIOL 433, BIOL 437, BIOL 438, BIOL 443,
 BIOL 446, BIOL 447, BIOL 449, BIOL 450, BIOL 456, or BIOL 490

Supplemental Requirements 27-30

CHEM 111 — Principles of Chemistry I	4
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
MATH 152 and MATH 141 or MATH 174 or MATH 175	6 3

Total Option 1 Hours 70-76

Biology Option 2: Biology Teaching

BIOL 234 — Human Anatomy and Physiology I	3
BIOL 235 — Human Anatomy and Physiology II	3
BIOL 304 — Genetics	3
BIOL 380 — Cell Biology	3
BIOL 402 — Integrated Biology, Mathematics, Physical Science, Field Experiences in Teaching	3
BIOL 403 — Integrated Biology, Mathematics, Physical Science, Field Experiences in Teaching	3

Option Requirement Total 18

Advanced Biology Elective 3

(Students must complete one of the following courses)
 BIOL 318, BIOL 334, BIOL 431, BIOL 437, BIOL 450, BIOL 407,
 BIOL 409, BIOL 433, or BIOL 438

Supplemental Requirements Chemistry

(Select one sequence)

Sequence I

CHEM 101 — Survey of Chemistry	4
CHEM 201 — Survey of Organic Chemistry	4
BIOL/CHEM 301 — Fundamentals of Biochemistry	4

Sequence II

CHEM 111 — Principles of Chemistry I	4
CHEM 112 — Principles of Chemistry II	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
MATH 152 and MATH 141 or MATH 174 or MATH 175	6

Supplemental Hours Total 23-26

Teacher Education Program - Secondary Education Requirements

EDF 207 — Foundations of Education	3
EDF 211 — Human Growth and Development	3
EDSP 230 — Education of Exceptional Children	3
EDF 311 — Learning Theories and Assessment in Educ.	3
EDSE 312 — Educational Methods and Technology	3
EDSE 483 — Classroom Organiz and Mgt for Sec Teachers	3
EDSE 416 — Clinical Practice	12
TEP Total	30
Total Option 2 Hours	99-102

Biology Option 3: Environmental Science

BIOL 155 — Introduction to Environmental Science	3
BIOL 356 — Environmental Biology	3
BIOL 357 — Environmental Testing Methods	3
BIOL 409 — Limnology	3

Option Requirement Total 12

Advanced Biology Electives 9

(Student must complete any three of the following courses)
 BIOL 318, BIOL 334, BIOL 431, BIOL 433, BIOL 438, BIOL 437,
 BIOL 450 or MSCI Approved Gulf Coast Laboratory Elective

(Maximum of three hours transferable)

Supplemental Requirements Chemistry

(select one sequence)

Sequence I

CHEM 111 — Principles of Chemistry I	4
CHEM 112 — Principles of Chemistry II	4
CHEM 326 or CHEM 360	4

Sequence II

CHEM 101 — Survey of Chemistry	4
CHEM 201 — Survey of Organic Chemistry	4
BIOL/CHEM 301 — Fundamentals of Biochemistry	4

AGR 211 — Soils	3
ECON 401 or GEO 349, or GEO 351	3
ESS 108 — Physical Geology	4
ESS 376 — Environmental Geology	3

ESS 425 or ITCM 307	3
GOVT 324 — Environmental Law and Policy	3
MATH 152, or MATH 174 or MATH 175	3
PHIL 333 — Environmental Ethics	3
Supplemental Hours Total	37
Total Option Three Hours	83

Emphasis in Environmental Science and Regional Analysis

In addition to the requirements fulfilling the Area of Concentration in Biological Sciences, Environmental Science (Option 3), the following courses are required:

RAPP 201 — Society, Nature, and Development	3
RAPP 202 — Basic Computer Tech in Regional Analysis	3
RAPP 300 — Seminar in Regional Issues I	3
RAPP 350 — Practicing Regional Analysis I	3
RAPP 450 — Practicing Regional Analysis II	3
RAPP 490 — Seminar in Regional Issues II	3
RAPP Requirement Total	18
Total Option Three (RAPP Emphasis) Hours	101

Biology Minor

Core

BIOL 171 - Principles of Biology	4
BIOL 210 - General Zoology	4
BIOL 215 - General Botany	4
BIOL 304 - Genetics	3
Core Total	15

Electives

Three additional courses (minimum of nine hours). These courses must be selected from the list of BIOL courses (Core and Elective) accepted for the biology area of concentration (Option 1)

Total Hours for a Biology Minor **24**

Supplemental Requirements - Minor

The student must take one of the following sequences:

Sequence I

CHEM 101 - Survey of General Chemistry	4
CHEM 201 - Survey of Organic Chemistry	4
or	

Sequence II

CHEM 111 - Principles of Chemistry I	4
CHEM 112 - Principles of Chemistry II	4
Total Supplemental Hours	8

Pre-Chiropractic

Advisor: M. Fultz

Admission requirements for schools and colleges of chiropractic medicine emphasize a strong background in science and the humanities. Pre-chiropractic students are encouraged to fulfill the

requirements and complete their 90 semester hours with additional courses in the biological sciences. An emphasis on courses in the basic sciences, particularly biology, will prepare the student for success in chiropractic medicine.

Requirements

Most schools or colleges of chiropractic medicine require the following pre-professional 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 elected 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 B.S. degree from MSU.

Pre-Dentistry

Advisor: C. Tuerk

Dental schools' selection of applicants is based on science GPA, overall grades, Dental Admission Scores (DAT) and demonstration of superior qualifications in personal maturity, academic competence and demonstrated motivation for pursuing a career in dentistry. The DAT and application process should be completed by the fall one year prior to desired entry into dental school. Preparation for the DAT requires completion of a suggested curriculum emphasizing the biological and physical sciences. Due to increasingly competitive applicant pools, it is strongly recommended that students be very near to completion of a bachelor's degree at the expected time of entry into dental school. Pre-dental students generally follow a curriculum designed for the area of concentration in biology (option 1: nonteaching). However, certain complementary and specific elective and general education courses are recommended. A more detailed suggested curriculum is available from the pre-dental advisor.

Pre-Medical Technology/Clinical Laboratory Science Program

Advisor: C. Wymer

The field of medical technology or clinical laboratory science involves the medical application of the basic sciences. Principles from cellular and molecular biology, organic and biochemistry,

microbiology, immunology, genetics and physiology are applied to laboratory testing.

In the clinical laboratory, samples from the body are tested to determine the presence, absence, extent or cause of disease. The accurate performance of these complex tests requires advanced education in all areas of clinical laboratory sciences, including chemistry, toxicology, immunohematology, hematology, urinalysis, and microbiology. Medical Technology is an exciting career choice for people who like biology and chemistry, enjoy laboratory work, and desire to help others.

The continued growth of the health care industry is accompanied by an increasing demand for clinical laboratory settings. Graduates acquire positions in research laboratories, medical industry and sales, forensic medicine, law enforcement, state health departments, veterinary laboratories, educational programs, physician offices and large clinical laboratories.

After several years experience, medical technologists may choose to move up the career ladder into educational, supervisory, and managerial roles. Others obtain advanced education in management, business, or the computer sciences. Graduates of this program have excelled in all of these areas.

MSU is affiliated with the following accredited hospital schools of medical technology:

St. Elizabeth Medical Center, Covington, Ky.

Owensboro Mercy Health System, Owensboro, Ky.

Bellarmino 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 in order to help defray expenses incurred in providing the students laboratory experience. The hospitals provide the medical technology coordinator with an estimate of expenses, in addition to tuition or fees, the student will likely incur during the clinical training. Grants and/or loans may be available for eligible students.

Affiliated hospital schools do not assume any obligation to accept a maximum or minimum number of students each year from MSU. Selection is based on open competition.

Clinical Year

The following courses, equivalents or subject areas must be satisfactorily completed (at least 2.0 average) during the hospital-based clinical year to receive credit: Immunohematology, 58 hours lecture and 106 hours laboratory; Medical Microbiology, 80 hours lecture and 180 hours laboratory; Medical Mycology, 30 hours lecture and 33 hours laboratory; Serology and Immunology, 40 hours lecture and 32 hours laboratory; Routine Analysis, 40 hours lecture and 150 hours laboratory; Clinical Chemistry, 114

hours lecture and 180 hours laboratory; Medical Parasitology, 25 hours lecture and 45 hours laboratory; Hematology, 99 hours lecture and 180 hours laboratory; Medical Technology Seminar, 16 hours lecture; and Special Topics, 91 hours lecture and 33 hours laboratory.

Certification Examination

Upon successful completion of the clinical year of training, students are eligible to take a certifying examination in medical technology, such as the American Society of Clinical Pathologist (ASCP), Board of Registry.

For the purpose of scheduling course selection and complete preparation for medical technology school, premedical technology students must work closely with their faculty advisors.

For more information on Premedical Technology, important links may be accessed from the Web site given at the beginning of this program description.

Pre-Pharmacy

Advisors: D. Eisenhour, S. O'Keefe

The suggested program of pre-pharmacy study will meet the requirements for the University Of Kentucky College Of Pharmacy and most other pharmacy schools. To assure proper course selections and to meet all admission requirements, students must work closely with their faculty advisor. The 70 hours of required pre-pharmacy coursework of most colleges of pharmacy can be completed in two years, although it usually takes three years due to 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. Due to 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, due to the competitive applicant pool, it is strongly recommended that students obtain a bachelor's degree prior to entering a college of podiatric medicine. All applicants must take the Medical College Admissions Test (MCAT) prior to admission to their podiatry school of choice. To assure proper course selection and to meet all admission requirements to the professional program, students should work closely with their faculty advisor.

A wide range of opportunities exist for the podiatric medical practitioner in today's healthcare system. Many communities are in critical need of the skills, techniques, and knowledge that a podiatrist can contribute to the team approach of providing comprehensive health care.

Pre-Medicine

Advisor: D. Saxon

Admission requirements vary among medical schools, but all recognize the importance of a strong foundation in the natural sciences (biology, general and organic chemistry, mathematics, and physics), highly developed communication and thinking skills, and a good background in the social sciences and humanities. Competencies in these areas should be developed before taking the required Medical College Admission Test (MCAT). Many pre-medical students elect to study an area of concentration in biology, but other options are acceptable and may be completed with the aid of the departmental premedical advisors. Certain complementary and specific general education courses are recommended for the premedical program of study. Students granted early admission to their medical school of choice may, upon completion of their medical degree, transfer selected medical school courses back to MSU for completion of their bachelor's degree in the sciences.

Since specific requirements do vary among medical schools, it is essential that the student investigate the requirements of the medical school(s) of his/her choice during the first year of the preparatory program.

For purposes of scheduling, course selection, and complete preparation for medical school, the pre-medical student must work closely with the assigned faculty advisor.

Gulf Coast Research Laboratory

www.usm.edu/gcr/

MSU maintains a formal affiliation arrangement with the Gulf Coast Research Laboratory (GCRL) in Ocean Springs, Miss. Through this arrangement, our students may take field courses in marine science at GCRL during the summer. Credits for these courses are awarded through the University of Southern Mississippi and will be accepted as transfer credit at Morehead State University. The following is a list of courses taught at GCRL, their level (undergraduate or graduate), and the semester credit hours. Not all courses are offered each year. Most courses have prerequisites of eight to 16 hours of biology.

Marine Science I: Oceanography (U)	5
Marine Science II: Marine Biology (U)	5
Marine Invertebrate Zoology (U/G)	6
Marine Ichthyology (U/G)	6
Marine Ecology (U/G)	5
Marine Aquaculture (U/G)	6
Marine Mammals (U/G)	5
Marine Botany (U/G)	3
Biotechnology in Marine Biology (U/G)	6
Coastal Ecology for Teachers (U/G)	4
Special Topic: Beach Fauna (U/G)	2
Special Topic: Cetacean Behavior and Cognition (U/G)	3
Special Topic: Fauna of Submerged Aquatic Vegetation (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.

There are two possible degree paths in the chemistry program, an area of concentration and a major. Students completing an area of concentration either continue on to graduate school or enter an industrial position directly upon graduation. Graduates with a major in chemistry may pursue careers in industry in chemical information, technical writing, chemical sales and technical

support. The chemistry major may also serve as a basis for further study in biochemistry, medicine, environmental science, pharmaceutical science, physiology or molecular biology. Students may also receive dual degrees through the 3-2 program in chemical engineering. (See the description under Pre-Engineering).

Chemistry

Bachelor of Science - Area of Concentration in Professional Chemistry

A degree in Chemistry opens a wide variety of careers to a graduate. Careers in Chemistry involve such diverse areas as the development of new materials, environmental protection, and drug design. A Chemistry degree is frequently used as a preparation for entrance into law, medical, dental, veterinary, and pharmacy colleges. Students completing an area of concentration either continue on to graduate school or enter an industrial position directly upon graduation.

Area of Concentration 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 327 — Organic Chemistry II	4
CHEM 340 — Chemical Information	2
CHEM 351 — Bioinorganic Chemistry	3
CHEM 360 — Analytical Chemistry	3
CHEM 441 — Physical Chemistry I	3
CHEM 442 — Physical Chemistry II	5
CHEM 451 — Advanced Inorganic Chemistry	3
CHEM 460 — Analytical Chemistry II	5
CHEM 476 — Special Problems or equivalent CHEM 302 or higher lab elective with prior approval of a chemistry advisor	1
PHYS 231 — Engineering Physics I	4
SCI 498 — Senior Thesis I	2
SCI 499C — Senior Thesis II	1
Total	48

Supplemental Requirements

BIOL 171 — Principles of Biology	4
MATH 175 — Calculus I	4
MATH 275 — Calculus II	4
MATH 276 — Calculus III, or MATH 363 — Differential Equations, or MATH 365 — Introduction to Mathematical Statistics	3
PHYS 231A — Engineering Physics I Laboratory	1
PHYS 232 — Engineering Physics II	4
PHYS 232A — Engineering Physics II Laboratory	1
Total	21

For students who plan to enter an industrial position directly on graduation, cooperative study is recommended.

Bachelor of Science - Major in Chemistry

Graduates with a major in Chemistry may pursue careers in industry in chemical information, technical writing, chemical

sales, and technical support. The Chemistry major may also serve as a basis for further study in biochemistry, medicine, environmental science, pharmaceutical science, physiology or molecular biology. Students may also receive dual degrees through the 3-2 Program in Chemical Engineering. (See the description under Pre-Engineering).

The program has three options. Students who wish to work in the chemical industry will follow the general option. This option will be useful for preparation for work in related fields or for professional schools when combined with other courses, minors or majors.

The environmental chemistry option prepares students to work directly in positions in the environmental industry or for graduate study in this field or law.

The chemistry teaching option is solely intended to qualify the student for state certification for secondary school chemistry teaching.

Every student completing a B.S. with a major in Chemistry must take the following core courses and supplemental requirements regardless of the chosen option.

Chemistry Core

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 351 — Bioinorganic Chemistry	3
CHEM 360 — Analytical Chemistry	3
CHEM 441 — Physical Chemistry I	3
Total	21

Chemistry Supplemental Requirements

BIOL 171 — Principles of Biology	4
MATH 175 — Calculus I	4
PHYS 201 — Elementary Physics I and PHYS 201A — Elementary Physics I Laboratory (or equivalent)	4
PHYS 202 — Elementary Physics II and PHYS 202A — Elementary Physics II Laboratory (or equivalent)	4
Total	16

Chemistry Option 1: General Chemistry

CHEM — Electives above 300 or BIOL 490 as approved by chemistry advisor	8
SCI 498 — Senior Thesis I	2
SCI 499C — Senior Thesis II	1
Total	11

Chemistry Option 2: Environmental Chemistry

BIOL 461 — Ecology	3
CHEM 332 — Environmental Chemistry II	3

One elective approved by chemistry advisor from:

BIOL 356 — Environmental Biology	3
BIOL 357 — Environmental Testing Methods	3
BIOL 409 — Limnology	3

CHEM 327 — Organic Chemistry II	4
ESS 376 — Environmental Geology	3
ESS 425 — Hydrogeology	3
Either BIOL 499C — Contemporary Environmental Issues, or SCI 498 — Senior Thesis I and SCI 499C — Senior Thesis II	2 1
Total	12-13

A minor in Environmental Science is strongly recommended with this option because it also includes the prerequisites for the BIOL/ESS courses listed above.

Where students take a double major, upper division chemistry electives may be taken to replace SCI 498/499C with the permission of chemistry advisor.

Chemistry Option 3: Chemistry Teaching

CHEM — Electives above 300 or BIOL 490 as approved by chemistry advisor	8
SCI 402 — Integrated Biology, Mathematics, and Physical Sciences Teaching Methods	3
SCI 403 — Integrated Biology, Mathematics, and Physical Sciences Field Experiences in Teaching	3
SCI 497C — Senior Seminar in Physical Science Education	2
Total	16

In order to achieve state certification for teaching chemistry, the requirements for a secondary education certificate as listed by the College of Education must be satisfied. Currently, the course requirements are EDF 207, EDF 211, EDF 311, EDSE 312, EDSP 230, EDSE 416, and EDSE 483. For other requirements for certification, see the College of Education section elsewhere in the catalog and an advisor in the College of Education.

*Chemistry Minor

CHEM 111 — Principles of Chemistry I	4
CHEM 112 — Principles of Chemistry II or CHEM 131 — Environmental Chemistry I	4
CHEM 326 — Organic Chemistry I	4
CHEM 360 — Analytical Chemistry	3
CHEM — Electives numbered 302 or higher and approved by chemistry advisor	6
Total	21

**At least 50 percent of the required chemistry coursework in the area of concentration or the major in chemistry must be taken in residency. At least 10 hours of chemistry above CHEM 301 must be taken in residency to complete the chemistry minor.*

Pre-Pharmacy

Advisors

Z. Barnes, A. Macintosh

The suggested Pre-Pharmacy Program with a chemistry major meets the requirements of most pharmacy schools; electives are tailored to meet the needs of individual students while providing excellent training in chemistry. A core of biology classes is also taken along with some business, social science, physics and math classes.

Pharmacy schools particularly encourage students holding degrees in chemistry and biology to apply for admission. Students may apply for admission to pharmacy school after three years, but a significant number of applicants spend four years at MSU and complete requirements for a B.S. degree. Specific courses in pharmacy school may be transferred back upon completion of pharmacy school to finish the chemistry degree at MSU. In making admissions decisions, pharmacy schools consider a student's academic record, standardized exam scores, communication skills, integrity, and maturity. Students in the Pre-Pharmacy Program are encouraged to participate in activities to develop and demonstrate all of these characteristics. Pharmacy schools also strongly advise work experience in a pharmacy. Specific courses may be required for admission to particular pharmacy schools, and pre-pharmacy students should carefully plan their course schedules with their chemistry advisors.

The chemistry major for pre-medical students develops and strengthens communication and thinking skills and gives a good background in chemistry. Additional course work in physics and mathematics helps prepare students for medical school. Most premedical 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 — Human Anatomy & Physiology I	3
BIOL 235 — Human Anatomy & 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 & Space Science

Ben Malphrus, Chair

101 Space Science Center
(606) 783-2381

Earth Systems Science

Faculty

M. Chapman, E. Jerde, C. Mason, S. Reid

Science Education Faculty

R. Boram, W. Gonzalez-Espada, J. O'Keefe, E. Roland

Program Competencies

Students 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. Understand the physical processes that shape the earth's surface and interior.
4. Apply knowledge of modern geologic processes to interpret the geologic record.
5. Understand 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. Understand 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.

Assessment Procedures

Performance of graduates on discipline-specific exit exam(s)

Survey of alumni regarding employment, acceptance to graduate school, strengths of MSU's Earth Systems Science program, and weaknesses of the program

Survey of employers or graduate advisors

Bachelor of Science

Area of Concentration

The Area of Concentration is intended for students who desire rigorous, broad-based preparation in most of the subdisciplines within geology. This program is strongly recommended for students who wish to attend graduate school.

Core

ESS 108 — Physical Geology	4
SCI 110 — Intro to Scientific Computing	3
*MATH 141 — Plane Trigonometry	3
*MATH 152 — College Algebra	3
BIOL 155 — Intro to Environmental Sci	3
ESS 201 — Historical Geology	3
PHYS 201 — Elementary Physics I	3
PHYS 201A — Elementary Physics I Lab	1
ESS 325 — Earth Structure and Tectonics	4
ESS 350 — Geomorphology	3
SCI 498 — Senior Thesis I	2
SCI 499C — Senior Thesis II	1

*MATH 174 Pre-Calculus Mathematics may be substituted for MATH 141 and MATH 152.

Option 1: Geology* (24-28 credit hours)

ESS 262 — Mineralogy	3
ESS 263 — Advanced Mineralogy Lab	1
ESS 300 — Petrology	3
ESS 301 — Advanced Petrology Lab	1
ESS 315 — Sedimentation and Stratigraphy	4
GEO 351 — Geographic Information Sys	3

Three electives from the following list:	9-1
ESS 276 — Geologic Methods	3
ESS 303 — Planetary Geology	3
CHEM 332 — Environmental Chemistry	3
ESS 340 — Oceans & Atmosphere	3
ESS 376 — Environmental Geology	3
ESS 379 — Invertebrate Paleontology	4
ESS 425 — Hydrogeology	3
ESS 499D — Geology Field Camp**	6

Supplemental Requirements (15-16 credit hours)

CHEM 111 — Principles of Chemistry I	4
CHEM 112 — Principles of Chemistry II	4
PHYS 202 — Elementary Physics II	3
PHYS 202A — Elementary Physics II Lab	1
MATH — One course from the following:	3-4
MATH 174 — Pre-Calculus Mathematics	
MATH 175 — Analytic Geom & Calc I	
MATH 275 — Analytic Geom & Calc II	

*Students planning to attend graduate school are strongly encouraged to take MATH 175, MATH 275 and Field Camp.

**Geology Field Camp may be used to meet the capstone requirements (SCI 498 & SCI 499C) for the Geology Option, and must be taken off-campus at an accredited university.

Option 2: Environmental Dynamics (21-23 credit hours)

ESS 262 — Mineralogy	3
ESS 300 — Petrology	3
ESS 340 — Oceans & Atmosphere	3
ESS 376 — Environmental Geology	3
ESS 440 — Biogeochemical Cycles	3
Two electives from the following:	6-8
ESS 276 — Geologic Field Methods	3
ESS 315 — Sedimentation and Stratigraphy	4
CHEM 332 — Environmental Chemistry	3
PHYS 350 — Nuclear Science	4
CHEM 360 — Analytical Chemistry	3
GEO 345 — Environmental Geography	3
GEO 351 — Geographic Information Sys	3
GEO 355 — Remote Sensing of the Env.	3
ECON 401 — Environmental Economics	3
ESS 425 — Hydrogeology	3

Supplemental Requirements (12 credit hours)

CHEM 111 — Principles of Chemistry I	4
CHEM 112 — Principles of Chemistry II	4
PHYS 202 — Elementary Physics II	3
PHYS 202A — Elementary Physics II Lab	1

Option 3: Earth & Space Science Education*** (21-23 credit hours)

ESS 340 — Oceans & Atmosphere	3
ESS 303 — Planetary Geology	3
ESS 440 — Biogeochemical Cycles	3
SCI 402 — Integrated Teaching Methods	3
SCI 403 — Integrated Field Experience	3

Two electives from the following:	6-8
ESS 315 — Sedimentation and Stratigraphy	4
ESS 376 — Environmental Geology	3
ESS 379 — Invertebrate Paleontology	4
ESS 410 — Geol. Hist. Plants & Animals	3
ASTR 311 — Astrophysics I: Stars & Stellar Evolution	3
ASTR 312 — Astrophysics II: Galaxies & Cosmology	3

Supplemental Requirements (10-14 credit hours)

ASTR 111 — Concepts I: Planetary	3
ASTR 112 — Concepts II: Cosmology	3
CHEM 111 or CHEM 101 and	4
CHEM 201 — Survey of Organic Chemistry	4

***Acceptance to the Teacher Education Program (described in the College of Education section) is required for students pursuing the Earth & Space Science Teaching Option. Courses required by this program for Certification in Secondary Education are:

EDF 207 — Foundations of Education	3
EDF 211 — Human Growth and Development	3
EDF 311 — Learning Theories & Assessment in Ed	3
EDSE 312 — Educational Methods and Technology	3
EDSE 483 — Class Organ & Mgt for Secondary Teach	3
EDSP 230 — Education of Exceptional Teachers	3
EDSE 416 — Clinical Practice	12

Geology Minor (Non Teaching)

ESS 108 — Physical Geology	4
ESS 201 — Historical Geology	3
ESS — electives approved by advisor	14
Total	21

Integrated Science

Minor (Non Teaching)*

A total of 24 semester hours in Biological and Physical Sciences including:

BIOL electives at 171 and above; and electives with ASTR, CHEM, GEOS, 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.

Geography

Faculty

R. Berglee, V. Craig, J. Holcomb, G. Odell, E. Ratajeski

The Department of Earth and Space Sciences offers a well-balanced undergraduate program in geography, which includes a 33-hour major and a 21-hour minor.

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.

Program Competencies

Students completing the program will:

1. Demonstrate appropriate content knowledge of core geographic concepts.
2. Be able to interpret and use a variety of maps, as well as demonstrate proficiency in storage, management, and manipulation, and display of geographic data in order to answer research questions and solve problems.
3. Be able to conduct original research, and communicate research results effectively in written and oral formats.

Assessment Procedures

- Senior Exit Exam
- Performance in Geospatial Skills Courses
- Senior Capstone Project

Bachelor of Arts

General Education Requirements **48**

See general education requirements for the University.

Major

GEO 100 — Fundamentals of Geography	3
GEO 101 — Physical Geography	3
GEO 201 — Map Interpretation and Analysis	3
GEO 202 — Computer Tech in Reg Analysis	3
GEO 241 — United States and Canada	3

Three technical hours from the following: **3**

GEO 349 — Introduction to GIS/Cartography	
GEO 351 — Geographic Information Systems	
GEO 355 — Remote Sensing	
GEO 499C — Senior Seminar in Geography	3

Four GEO electives **12**

Minimum for a major **33**

Minor

GEO 100 — Fundamentals of Geography	3
GEO 101 — Physical Geography	3
GEO 201 — Map Interpretation and Analysis	3
GEO 241 — United States and Canada	3
Three GEO electives	9

Minimum for a minor **21**

Certificate in Geographic Information Science

The Certificate in Geographic Information Science is an interdisciplinary opportunity designed to provide students and professionals with the theoretical, practical and technical skills that are essential for the analysis of map products and the manipulation of spatial data. Students from a wide range of disciplines can benefit from this certificate program by becoming proficient in the use and application of geographic technologies through an appropriate set of courses. This certification program is open to all MSU students. Students in any discipline can complete this certificate program to better advance their educational standing for employment or graduate education.

To receive the 15 credit hour Certificate in Geographic Information Science, an individual must successfully complete each of the listed required courses with a grade of "C" or better.

GEO 201 — Map Interpretation and Analysis	3
GEO 349 — Introduction to GIS/Cartography	3
GEO 351 — Geographic Information Systems	3
GEO 353 — GIS Applications	3
GEO 355 — Remote Sensing of the Environment	3

Upon completion of the required courses, the Certificate in Geographic Information Science will be issued to the individual by the Department of Earth & Space Sciences.

Geography-Regional Analysis Program

The College of Business and Public Affairs offers a core of courses (18 hours) in regional analysis that can be combined with the following program.

Program Competencies

Students are expected to have:

1. The technical ability to store, manage, manipulate, and display geographic data in order to answer research questions and solve problems.
2. The ability to perform synthetic regional analyses with a focus on economic development, including consideration of factors contributing to growth and its impact on the physical environment.
3. The ability to perform real world location analyses, which are based on traditional geographic theories and concepts.
4. The ability to recognize and value the varied nature of the human condition across individuals and culture groups through the practice of world regional analysis.
5. The ability to express methods of geographic investigation, to conduct original studies, and to present findings of those investigations in written and oral format.
6. The ability to carry out studies in their area of expertise that include a significant analysis of regional resources and issues.
7. The ability to present research and policy reports that are comprehensible to audiences of various public policymakers.
8. The ability to interpret the output of regional resource analysis and their potential use in formulating public policy.

Assessment Procedures

Capstone course

Bachelor of Arts

General Education Requirements 48

See general education requirements for the University.

Major

GEO 100 — Fundamentals of Geography	3
GEO 101 — Physical Geography	3
GEO 201 — Map Interpretation and Analysis	3
GEO 211 — Economic Geography	3
GEO 349 — Introduction to GIS/Cartography	3
GEO 499C — Senior Seminar in Geography	3
Four GEO electives	12

Total 30

Regional Analysis Courses

RAPP 201 — Society, Nature, & Development	3
RAPP 202 — Basic Computer Tech in Reg. Analysis	3
RAPP 300 — Seminar in Regional Issues I	3
RAPP 350 — Practicing Regional Analysis I	3
RAPP 450 — Practicing Regional Analysis II	3
RAPP 490 — Seminar in Regional Issues II	3

Total 18

Supplemental Requirements

ECON 401 — Environmental Economics	3
GOVT 324 — Environmental Law and Policy	3

Space Science and Astrophysics

Faculty

A. Carnevali, M. Combs, J. Kruth, B. Malphrus, T. Pannuti, R. Twiggs, Q. Xu

The program in Space Science is one of distinctively few such programs nationwide offered at the undergraduate level. The presence of the 21 Meter Morehead State University Space Tracking Antenna and Radio Telescope on campus and the availability of this extraordinary facility to our students and faculty for instruction and research provide a solid foundation for the program. Excellent faculty with diverse backgrounds in space related science and technology allow students to tap the full potential of our state-of-the-art facilities. The curriculum has been chosen to be rigorous but not too narrow or specialized. Graduates from the program will have a breadth of knowledge, experience, skills, and adaptability — the marketable tools of new and exciting professional careers in space science and the telecommunications industry.

The main goal of this program is to prepare its graduates for professional opportunities in space science, whether their interest might lie in astrophysical research or in applied technologies such as satellite tracking and telemetry, or 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, planetariums, astronomical observatories, and in other commercial industries.

Program Competencies

The student will:

1. Develop the basic competencies in System Engineering and gain familiarity with the concepts and technologies associated with aerospace systems requirements, particularly spacecraft and related subsystems.
2. Learn how to use basic laboratory instrumentation and acquire skills that permit a rapid start in practical "real world" applications in the workplace.

3. Understand issues common to all radio frequency based communications systems, specify relevant system components, participate in design trade studies, perform field/laboratory work at the engineering technologist level, prepare technical reports including studies and analyses, and have sufficient preparation to be able to quickly assimilate new technical information.
4. Be prepared to enter the workforce as an entry level systems engineer or engineering technologist with the ability to integrate the knowledge gained in coursework with the necessary skills of self-direction and research/project pacing.
5. Have an understanding of semiconductor physics, atomic bonding, and crystal structures and imperfections that ultimately dictate the physical and mechanical properties of the materials. Students will also be familiar with processes leading to materials failure, such as thermal, 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 of Concentration in Space Science

The Bachelor of Science degree in Space Science is an interdisciplinary degree program, and requires students to complete requirements in physics, mathematics, electricity-electronics-telecommunications technology, and astronomy-space science.

Core

*ASTR 112 — Stars, Galaxies, and Cosmology, or ASTR 111 — Planetary Science and the Sky	3
SSE 110 — Introduction to Spaceflight	3
SSE 120 — Introduction to Satellites and Space Systems	3
SSE 324 — Radio Astronomy	3
SSE 380 — Materials Science for Space Applications	3
SSE 431 — Space Plasma Physics	3
SSE 442 — RF/Microwave Systems and Antennas	3
SCI 110 — Introduction to Scientific Computing	3
SCI 498 — Senior Thesis I and	2
SCI 499C — Senior Thesis II (or) IET 499C — Senior Project	3

Core Requirement 27

Mathematics:

MATH 175 — Calculus I	4
MATH 275 — Calculus II	4

MATH 276 — Calculus III	4
Math Requirement	12

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 361 — Fundamentals of Electronics	3
PHYS 381 — Computer Solutions to Engineering and Science Problems	3

Physics Requirement 16

Electricity-Electronics-Telecommunications Technology:

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

ITEC Requirement 18

Technical Electives - Three courses from:

*ASTR 311 — Astrophysics I: Stars and Stellar Evolution	3
*ASTR 312 — Astrophysics II: Galaxies and Cosmology	3
PHYS 332 — Electricity and Magnetism	4
ESS 303 — Planetary Geology	3
SSE 341/ITEC 341 — Solid State Electronic Devices	3
SSE 476 — Directed Research	3
SSE 399 — Selected Topics	3

Technical Elective Requirement 9-10

** These courses will also count toward satisfying the General Education requirements.*

Astrophysics Option

The Department of Math, Computer Science, and Physics offer core and supplemental courses for the B.S. in Physics and Astrophysics Option.

ASTR 311 — Astrophysics I: Stars and Stellar Evolution	3
ASTR 312—Astrophysics II: Galaxies and Cosmology	3
PHYS 324 — Radio Astronomy	3
PHYS 332 — Electricity and Magnetism	4
PHYS 412 — Light and Physical Optics	3
PHYS 391 — Dynamics	3
ESS 303 — Planetary Geology	3
PHYS 493 — Quantum Mechanics	3
Total	25

Astronomy Minor

Physics Sequence 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 Sequence II:

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

Core Physics Requirement **8-10**

ASTR 111 — Concepts in Astronomy I: Planetary Science and the Sky	3
ASTR 112 — Concepts in Astronomy II: Stars, Galaxies, and Cosmology	3
ASTR 311 — Astrophysics I: Stars and Stellar Evolution	3
ASTR 312 — Astrophysics II: Galaxies and Cosmology	3

Astronomy and Astrophysics Requirement **12**

Supplemental Requirement (Minimum of one course)*

GEOS 303 — Planetary Geology	3
ITEC 444 — Satellite Communications	3
PHYS 324 — Radio Astronomy	3
PHYS 350 — Nuclear Science	3
PHYS 399 — Special Topics in Astrophysics	3
PHYS 412 — Light & Physical Optics	3
Supplemental Requirement	3

*Physics majors will take eight additional hours from the supplemental requirement list to substitute for the physics core required.

Total Requirement **23-25**

Department of Industrial & Engineering Technology

Ahmad Zargari, Chair
210 Lloyd Cassity Building
(606) 783-2418

Faculty

S. Adhikari, W. Gris , S. Krijestorac, P. Mason, N. Joshi, R. Stanley, W. Wasel, J. Wogoman, Y. You, A. Zargari

Program Competencies Associate of Applied Science

Students completing the program should be able to:

1. Perform entry level technical occupations in business, industry, and service organizations.
2. Understand and apply theory and concepts of related disciplines to solve technical problems.
3. Apply concepts and skills developed in a variety of disciplines to successfully perform as technicians in the workforce.
4. Develop a field of specialization in one of the following areas: Computer Aided Design and Graphic Technology, Construction Management Technology, Electrical/Electronics Technology, Manufacturing Technology or Telecommunications and Computer Technology.

Assessment Procedures

- Exit Examinations
- Survey of graduating students

Randomly administered alumni survey

Note: Students are required to obtain a grade of "C" in all technical and supplemental courses.

Associate of Applied Science in Industrial Technology

General Education **21**

See general education requirements for the University.

The following specific general education requirements must be completed:

IET 110 — Fundamentals of Computer Technology or equivalent Humanities course	3
MATH 152 — College Algebra (or higher)	3
ENG 100 — Writing I	3
ENG 200 — Writing II or ENG 292 - Technical Composition	3
CMSP 108 — Fundamentals of Speech Communication	3
Humanities	3
Social and Behavior	3

Students must complete a minimum of 42 semester hours in the area of Industrial Technology, of which 21 semester hours are the following core Industrial Technology course requirements. The other 24 semester hours will be selected from one of the following technical options: Computer Aided Design and Graphic Technology, Construction Management Technology, Electrical/Electronics Technology, Manufacturing Technology or Telecommunications and Computer Technology or Industrial and Technical Education.

Core Requirements **21**

IET 110 — Fundamentals of Computer Technology	3
IET 120 — Technology Systems	3
IET 300 — Technology and Society	3
ITCD 103 — Computer Aided Design and Drafting I	3
ITCM 101 — Introduction to Construction Technology	3
ITEC 141 — Direct Current Circuits (DC)	3
ITMT 186 — Manufacturing and Fabrication	3

Option 1: Construction Management Technology

Core Requirements **21**

Option Requirements **24**

ITCM 101 — Introduction to Construction Technology	3
ITCM 202 — Structural Design	3
ITCM 203 — Construction Methods and Equipment I	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

Option 2: Electrical/Electronics Technology

Core Requirements **21**

Option Requirements **24**

ITEC 215 — Basic Control Systems	3
ITEC 240 — Residential Wiring	3

ITEC 241 — Alternating Current Circuits (AC)	3
ITEC 242 — Principles of Communications	3
ITEC 244 — Fiber Optic Theory and Application	3
ITEC 245 — Digital Electronics	3
ITEC 342 — Electronic Devices and Circuits	3
ITEC 346 — Programmable Logic Controllers (PLC)	3

Option 3: Computer Aided Design & Graphic Technology

Core Requirements	21
Option Requirements	24

Select from the following list in consultation with advisor:

ITCD 203 — Computer Aided Design and Drafting II	3
ITCD 215 — Introduction to 3D Design and Modeling	3
ITCD 301 — Tool and Equipment Design	3
ITCD 305 — Residential Architectural Design	3
ITCD 315 — 3-D Design, Modeling and Animation	3
ITCG 102 — Graphic Arts I	3
ITCG 202 — Graphic Arts II	3
ITCG 302 — Offset Lithography	3
ITCG 303 — Computer Imaging and Illustration	3
ITCG 350 — Electronic Composition I	3

In addition to the course listed above, students may take six hours of elective credit from ITCM or ITMT areas.

Option 4: Manufacturing Technology

Core Requirements	21
Option Requirements	24

IET 260 — Hydraulics and Pneumatics	3
ITEC 241 — Alternating Current Circuits (AC)	3
ITMT 106 — Thermoplastics Processing	3
ITMT 170 — Fundamentals of Robotics	3
ITMT 270 — Robotic Systems Engineering	3
ITMT 286 — Machine Tool Processes	3
ITMT 370 — Robotics Interfacing Engineering	3
ITMT 386 — NC-CNC Manufacturing Technology	3

Option 5: Telecommunications and Computer Technology

Core Requirements	21
Option Requirements	24

ITEC 144 — Network Fundamentals	3
ITEC 241 — Alternating Current Circuits (AC)	3
ITEC 242 — Principles of Communications	3
ITEC 244 — Fiber Optic Theory and Applications	3
ITEC 245 — Digital Electronics	3
ITEC 342 — Electronic Devices and Circuits	3
ITEC 344 — Wireless Communications	3
ITEC 345 — Microprocessor Electronics	3

Option 6: Industrial and Technical Education (ITE)

Core Requirements	21
Option Requirements	24

CTE 185 - MOI (Methods of Instruction) in Career and	3
--	---

Technical Education	
CTE 207 - Foundations of Career and Technical Education	3
CTE 388 - Methods of Curriculum Development	3
CTE 393 - Methods of Career and Technical Education	3
CTE 394 - Practicum in Career and Technical Education	4
CTE 396 - Evaluation in Career and Technical Education	3
IET 496 - Organization and Management of the Laboratory	2
Choose one of the following (in consultation with advisor):	3
EDF 211 - Human Growth and Development	
CTE 364 - Guidance in Career and Technical Education	
CTE 372 - Technical Media Development	

Bachelor of Science in Engineering Technology

Program Competencies

Upon successful completion, the Engineering Technology graduates are expected to:

1. Apply scientific concepts to the solution of technological problems.
2. Apply theories, concepts, and principles of related disciplines to develop the communication skills required for engineering technologists.
3. Perform as a technical professional in business, industry, education and government.
4. Apply concepts and skills developed in a variety of technical and professional disciplines including computer applications, materials properties, production processes, quality control, industrial design and safety.
5. Plan, facilitate, and integrate technology and problem solving techniques in the economic enterprise.
6. Engage in applied technical research in order to add to the knowledge of the discipline and to solve problems which surface in the workplace.

Assessment Procedures

With respect to the overall competencies of the program, the IET Department will use senior exit examinations, senior capstone projects, surveys of graduating seniors, surveys of program alumni, and surveys of employers of Engineering Technology graduates. These various measures are meant to assess the degree to which education and training in the program serves the needs of our students, as well as the needs of employers.

Bachelor of Science - Engineering Technology

The program will provide students with the knowledge and understanding of more rigorous and analytical methods for technical problem solving in an industrial setting. The development of such competencies is essential to the preparation of skilled technical professionals who can undertake tasks requiring greater depth and understanding of advanced technology. The Engineering Technology program aims to prepare a group of graduates who will fill advanced engineering technology positions in business and industry. The main objectives of the program are: (1) to develop students with

enhanced technological skills; and, (2) to place these students in business, industry, and government as technical problem-solvers.

Program Requirements

Specific General Education Courses 22

MATH 353 — Statistics	3
PHYS 201/201A — Elementary Physics I/Lab	4
ECON 101 — Introduction to Economics or ECON 201 — Principles of Macroeconomics	3
IET 110 — Fundamentals of Computer Technology	3
IET 120 — Technology Systems	3
IET 300 — Technology and Society	3
IET 499C — Senior Project	3

Mathematics 8

MATH 175* — Calculus I	4
MATH 275 — Calculus II	4

Physical Sciences 8

PHYS 202/202A* — Elementary Physics II/Lab	4
CHEM 101/101L — Survey of Chemistry/Lab	4

Computer Science

CS/MATH 170* — Introduction to Computer Science	4
CIS 205 — C/C++ Programming	3

Business/Economics 6

ECON 202 — Principles of Microeconomics	3
ACCT 281 — Principles of Financial Accounting	3

IET Core 30

IET 307 — Materials Science	3
IET 310 — Engineering Economics Analysis	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 421 — Design of Experiments	3
IET 422 — Industrial Safety Std. and Enforcement	3
IET 430 — Facilities Management	3

Area of Specialization from the following list

(Choose 27 hours)

(15 hours from 300-level or above)

In consultation with the academic advisor, select from:

ITCD 103 — Computer Aided Drafting and Design	3
ITCD 215 — Intro. to 3-D Design and Modeling	3
ITCD 315 — Parametric Modeling and Animation	3
ITCD 403 — Computer Aided Design of Mechanisms	3
ITCD 415 — Advanced CAD	3
ITCM 202 — Structural Design	3
IET 317 — Just in Time & Lean Systems	3
ITCM 101 — Intro to Construction Technology	3
ITCM 307 — Hydrology	3
ITCM 310 — Plane Surveying	3
ITEC 141 — Direct Current Circuits	3
ITEC 245 — Digital Electronics	3

ITEC 355 — Digital and Microcontroller Sys. Design	3
ITEC 345 — Microprocessor Programming	3
ITEC 445 — Microprocessor Interfacing	3
ITEC 344 — Wireless Communications	3
ITEC 480 — Dig. Communications and Networking	3
ITEC 400 — Digital Signal Processing I	3
ITEC 450 — Digital Signal Processing II	3
ITMT 170 — Fundamentals of Robotics	3
ITMT 270 — Robotics Systems Engineering	3
ITMT 370 — Robotics Interfacing	3
ITMT 484 — Manufacturing Information Systems	3
ITMT 488 — Flexible Manufacturing Systems	3

* Courses to be completed by provisionally admitted students.

Assessment Procedures

- Exit examinations
- Capstone project
- Survey of graduating students
- Randomly administered survey of alumni and employers

Note: Students are required to obtain a grade of "C" in all technical and supplemental courses.

Bachelor of Science in Industrial Technology

Program Competencies

Students completing this program should be able to:

1. Perform technical-management occupations in business, industry, education, and government.
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.
5. Develop a field of specialization in one of the following areas: Construction Management Technology, Electronics, Telecommunications & Computer Technology, Computer Aided Design and Graphic Technology, or Manufacturing Technology.

Industrial Technology Area of Concentration

The student must complete the departmental and University general education requirements and a minimum of 72 semester hours in the area of Industrial Technology, of which 36 semester hours are the Industrial Technology core requirements. The other 36 semester hours will be selected from one of the following technical options: Construction Management Technology, Electronics, Telecommunications, & Computer Technology, Computer Aided Design and Graphic Technology, or Manufacturing Technology.

Note: A maximum of 12 academic credits are offered in the B.S.

degree program from Industrial Work Experience through cooperative education study. The courses 239, 339, and 439 within content areas of IET, ITEC, ITC, ITCM and ITMT can be selected following consultation with the student's advisor.

General Education Requirements 48

See general education requirements for the University.

The following specific general education requirements must be completed for all Industrial Technology options:

ECON 101 — Introduction to Economics, or ECON 201 — Principles of Macroeconomics	3
IET 110 — Fundamentals of Computer Technology	3
IET 120 — Technology Systems	3
IET 300 — Technology and Society	3
IET 499C — Senior Project	3
MATH 152 — College Algebra or higher	3
MATH 353 — Statistics	3
PHYS 201 — Elementary Physics I	3
PHYS 201A — Elementary Physics I Laboratory	1

Core Requirements 36

IET 307 — Materials Science	3
IET 317 — Just in Time and Lean Systems	3
IET 319 — Quality Science	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 Standards & 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 Option 1: Construction Management Technology

Option Requirements 36

ITCM 202 — Structural Design	3
ITCM 203 — Construction Methods and Equipment	3
ITCM 204 — Codes, Contracts, and Specifications	3
ITCM 205 — Estimating and Construction Costs	3
ITCM 304 — Interpretation of Technical Drawing	3
ITCM 307 — Hydrology	3
ITCM 310 — Principles of Surveying	3
ITCM 403 — Construction Methods & Equipment II	3
ITCM 410 — Construction Surveying	3
ITCD 405 — Civil Drafting	3

Technical Option 2: Electronics, Telecommunications, & Computer Technology

Option Requirements 36

Students in ITEC are required to take the courses below:

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 400 — Digital Signal Processing I	3
ITEC 444 — Satellite Communications	3
ITEC 445 — Computer Electronics	3
ITEC 480 — Digital Communication and Networking	3

In addition, students in ITEC are to take two courses from the following list, in consultation with their advisor:

ITEC 244 — Fiber Optic Communications	3
ITEC 346 — Programmable Logic Controllers	3
ITEC 355 — Digital and Microcontroller Sys. Design	3
ITEC 450 — Digital Signal Processing II	3

Technical Option 3: Computer Aided Design & Graphic Technology

Option Requirements 36

Select from the following list in consultation with advisor:

ITCD 203 — Computer Aided Design & Drafting II	3
ITCD 215 — Introduction to 3D Design & Modeling	3
ITCD 301 — Tool and Equipment Design	3
ITCD 305 — Residential Architectural Design	3
ITCD 315 — 3D Design, Modeling and Animation	3
ITCD 403 — Computer Aided Design of Mechanisms	3
ITCD 404 — Commercial Architectural Design	3
ITCD 405 — Civil Drafting	3
ITCD 415 — Advanced Computer Aided Design	3
ITCG 102 — Graphic Arts I	3
ITCG 202 — Graphic Arts II	3
ITCG 302 — Offset Lithography	3
ITCG 303 — Computer Imaging and Illustration	3
ITCG 322 — Electronic Imaging and Photography	3
ITCG 350 — Electronic Composition I	3
ITCG 351 — Graphic Duplication	3
ITCG 450 — Electronic Composition II	3
ITCM 202 — Structural Design	3

In addition to the course listed above, students may take six hours of elective credit from ITCM or ITMT areas.

Technical Option 4: Manufacturing Technology

Option Requirements 36

Required Courses

IET 260 — Hydraulics and Pneumatics	3
ITMT 170 — Fundamentals of Robotics	3
ITMT 270 — Robotic Systems Applications	3
ITMT 286 — Machine Tool Processes	3
ITMT 370 — Robotics Interfacing Engineering	3
ITMT 386 — NC-CNC Manufacturing Technology	3
ITMT 470 — Robotics Applications Engineering	3
ITMT 488 — Flexible Manufacturing Eng Tech	3

Select an additional four classes (12 credit hours) from the following list in consultation with advisor. The student must take at least six of the 12 hours in classes 300 level or higher.

ITMT 106 — Thermoplastic Processing	3
ITMT107 — Thermosetting Plastics and Composites	3

ITMT 306 — Mold Design and Construction	3
ITMT 307 or IET 387	3
ITCD 203 — Computer Aided Design and Drafting II	3
ITCD 215 — Introduction to 3D Design and Modeling	3
ITCD 301 — Tool and Equipment Design	3
ITCD 315 — 3D Design, Modeling and Animation	3
ITCD 403 — Computer Aided Design of Mechanisms	3
ITEC 144 — Networking Fundamentals	3
ITEC 215 — Basic Control Systems	3
ITEC 241 — AC Circuits	3
ITEC 346 — Programmable Logic Controllers	3
ITEC 443 — Industrial Electricity	3
ITMT 484 — Manufacturing Information Systems	3

Bachelor of Science in Industrial Education

Upon completion of the program, the new teacher (student) will be able to:

1. Teach technology courses in one of the following areas:
Computer Aided Design and Graphic Technology, Construction Management Technology, Electrical/Electronics Technology, Manufacturing Technology or Telecommunications and Computer Technology.
2. Demonstrate competence in Kentucky's new teacher standards.
3. Apply new teacher standards in 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: Students are required to obtain a grade of "C" in all technical and supplemental courses.

Area of Concentration

The student must complete the departmental and University general education requirements and a minimum of 39 semester hours of Industrial Education core requirements.

Note: Industrial Education majors are required to have documented evidence of 2,000 clock hours of work experience for Career and Technical Education option, and 1,000 clock hours of work experience for Technology Education option. This work experience is to be directly related to their teaching areas. If this requirement has not been met prior to entering this degree program, it can be fulfilled by IET — 398: Supervised Work Experience, for three credit hours.

Technical Option 1: Technology Education

Professional Requirements:

CTE 207 — Foundations of Career & Technical Ed.	3
EDF 311 — Learning Theories and Assessment in Ed.	3
EDEM 330 — Foundations of Reading	3
EDSP 332 — 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

IET 496 — Organization and Management of the Lab	3
IET 499C — Senior Project *	3

Additional Technology Requirements 9

Selected courses from the following technical areas in consultation with advisor:

ITCM, IET, ITMT

Course requires admission into the Teacher Education Program

** Also applies as general education requirement*

Technical Option 2: Career and Technical Education

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
IET 499C — Senior Project *	3

Specialization Component 24

IET 381 — Related Sci, Math, & Tech in Occupations	6
IET 382 — Manipulative Skills in Occupations	6
IET 383 — Knowledge of Related Subjects	6
Specialization Elective	6

** Also applies as General Education Requirement*

IET 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, IET 394 must be taken for eight hours to complete necessary requirements.

Industrial Technology Minor

Minor 24 Core Requirements 9

Six hours from the following:

ITCD 103 — Computer Aided Design and Drafting I	3
ITCM 101 — Introduction to Construction Technology	3
ITEC 141 — Direct Current Circuits (DC)	3
ITMT 186 or ITMT 170	3

Select one course from the following:

IET 120 — Technology Systems	3
IET 300 — Technology and Society	3
IET 319 — Quality Control	3
IET 320 — Industrial Project Management	3
IET 419 — Total Quality Improvement	3

Option Requirements 15

Chosen in consultation with minor advisor.

Choose from the following 9

ITCD, ITCM, ITEC, or ITMT option

Technical electives 6

Bachelor of Science in Technology Management

The 2+2 Technology Management program specifically targets Kentucky Community and Technical College System (KCTCS)

associate-level graduates from technology-related programs and is intended as a "completer" program for the KCTCS 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.

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 in order to add to the knowledge of the discipline and to solve problems which surface in the workplace.

Assessment Procedures

- Senior exit examinations
- Senior capstone projects
- Surveys of graduating seniors
- Surveys of program alumni
- Surveys of employers of Technology Management graduates

General Education Requirements

Mathematics

MATH 152 - College Algebra (or equivalent)	3
MATH 353 - Statistics (or equivalent)	3

Physical Sciences

PHYS 201 - Elementary Physics I (or equivalent)	3
PHYS 201A - Elementary Physics I Lab (or equivalent)	1

Computer Science

IET 110 - Fundamentals of Computer Technology (or equivalent)	3
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Social and Behavioral Science

IET 300 - Technology and Society (or equivalent)	3
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Practical Living

IET 120 - Technology Systems (or equivalent)	3
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Integrative Component

IET 499C - Senior Project	3
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Required General Education Credits 22

**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.*

Technology Management Program Requirements

IET 307 - Materials Science	3
IET 310 - Engineering Economics Analysis	3
IET 317 - Just in Time and Lean Systems	3
IET 319 - Quality Science	3
IET 320 - Industrial Project Management	3
IET 327 - Applied Industrial Management	3
IET 330 - Industrial Design	3
IET 371 - Seminar	1
IET 419 - Total Quality Improvement	3
IET 421 - Design of Experiments	3
IET 422 - Industrial Safety Std. and Enforcement	3
IET 430 - Facilities Management	3
Electives	8
Total Program Requirements	64

Department of Mathematics, Computer Science, & Physics

Dora Ahmadi, Chair

105 Lappin Hall
(606) 783-2930

Faculty

D. Ahmadi, S. Beck, R. Blanton, R. Blankenship, I. Birriel, J. Birriel, D. Chatham, V. Cyrus, M. Dobranski, G. Fricke, P. Holbrook, D. Hood, M. Howard, L. Jaisingh, K. Lewis, R. Maras, R. May, T. Meadows, T. O'Brien, B. Panja, C. Perry, K. Price, S. Rashad, R. Ross, C. Schroeder, K. Schroeder, B. Schworm, D. Skaggs, C. Yess

Program Competencies

The student exiting the programs in the mathematical sciences will:

1. Analyze and solve problems in the areas of algebra, analysis, statistics, and geometry. The student should be able to work individually and as a member of a team. Depending on the program emphasis, the student should possess the concept comprehension skills mentioned above at a sufficient level of expertise to function successfully as a teacher of mathematics, as a contributing member in business or industry, or as a graduate student pursuing an advanced degree in mathematics, statistics, or computer science.
2. Use technology as an aid in the solution of problems. Specifically, the student should be able to write and effectively use programs for computers and graphing calculators.
3. Develop appropriate learning skills to foster the investigation of mathematical ideas and direct his/her own learning.

4. Communicate the mathematical ideas learned in the program to others. This ability should exist in both written and oral forms of communication.

Assessment Procedures

- Senior capstone
- Survey of graduates
- Exit interviews
- Major Field Achievement Test

Bachelor of Science

The Department of Mathematics, Computer Science, & Physics is committed to the education of students who intend (1) to teach mathematics at any level, (2) to apply mathematics or computer science in industry or government, or (3) to use mathematical techniques and concepts in their chosen fields.

Area of Concentration in Mathematics (Non Teaching)

CS/MATH 170 — Introduction to Computer Science	4
MATH 175 — Calculus I	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 312 — Numerical Methods	3
MATH 350 — Introduction to Higher Algebra	3
MATH 363 — Differential Equations	3
MATH 365 — Introduction to Mathematical Statistics	3
MATH 410 — Introduction to Real Analysis	3
MATH 481 — Math for Engineers and Scientists, or MATH 355 — Operations Research	3
MATH 404 — Topology, or MATH 486 — Complex Variables	3
MATH 499C — Senior Capstone	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
Total	56

Area of Concentration in Mathematics (Teaching)

CS/MATH 170 — Introduction to Computer Science	4
MATH 175 — Calculus I	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	3

Science Field Experiences in Teaching	
MATH 410 — Introduction to Real Analysis	3
MATH 499C — Senior Capstone	3
Electives	6
(Mathematics courses at or above the 300-level, except for MATH 330 & 332, as approved by the department chair.)	

Total **58**

Professional Education Core

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

Total **30**

Suggested General Education Courses:

PHYS 201 - Elementary Physics I, or PHYS 231 - Engineering Physics I and PHIL 203 - Social Ethics

Major in Mathematics (Non Teaching)

CS/MATH 170 — Introduction to Computer Science	4
MATH 175 — Calculus I	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
MATH 499C — Senior Capstone	3
Electives from mathematics courses above 300-level except MATH 330, 332, 353, 354, 402, and 403 as approved by the department chair	11

Total **39**

Major in Mathematics (Teaching)

MATH 170 — Introduction to Computer Science	4
MATH 175 — Calculus	4
MATH 275 — Calculus II	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 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 499C — Senior Capstone	3

Total **39**

In addition, the Department strongly recommends that teaching majors complete MATH 276 and both Math 301 and 308. Students must also complete the Professional Education Core as

listed under the Area of Concentration in Mathematics (Teaching).

Mathematics Minor

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, 354, 402, and 403 as approved by the department chair	13
Total	25

Statistics Minor

Option 1: Non-Calculus Option

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	21

Option 2: Calculus Option

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 MATH 456 — Nonparametric Statistics	3
Total	21

Computer Science

Faculty

B. Panja, S. Rashad

Program Competencies

Students will:

1. Have a firm understanding of computing from several points of view, such as hardware, functions, software engineering, network management, database management, operating system platforms, algorithm analysis, and programming languages.
2. Have a firm understanding of at least one high-level programming language, as well as experience with other languages and language structures.
3. Be able to function as a productive member of a software development team or in any other computer related capacity.
4. Be qualified to enter graduate studies in Computer Science.

Assessment Procedures

- Senior capstone
- Survey of graduates

Exit interviews

Major Field Achievement Test

Bachelor of Science

The Department of Mathematics, Computer Science, & Physics is committed to the education of students who intend (1) to apply mathematics and computer science in industry or government, or (2) to use mathematical and computer algorithms in their chosen fields.

Major in Computer Science (Non Teaching)

Required Core

CS/MATH 170 — Introduction to Computer Science	4
CIS 205 — C/C++ Programming I	3
CS 303 — Data Structures	3
CS 310 — Algorithms and Advanced Data Structures	3
CS 360 — Operating Systems	3
CS 380 — Software Engineering	3
CS 499C — Senior Capstone	3

Required mathematics courses

MATH 175 — Calculus I	4
MATH 275 — Calculus II	4
MATH 308 — Discrete Mathematics	3
MATH 353 — Statistics	3
Total	36

Choose three courses from the following:

(at least two of the following 300 or 400 level courses with CS prefix)	9
CS 335 — Theory of Programming Languages	3
CS 450 — Computer Graphics	3
CS 460 — Scientific and Parallel Computing	3
CIS 305 — C/C++ Programming II	3
CIS 314 — Java Programming	3
CIS 405 — Web Dev Strategies and E-Commerce	3
CIS 426 — Database Management Systems	3
CIS 340 — Telecommunications and Networking	3
CIS 442 — Network Administration	3
CIS 443 — Advanced Computer Networking Adm.	3
ITEC 345 — Microprocessor Electronics	3
ITEC 445 — Computer Electronics	3
ITEC 480 — Digital Communications and Networking	3
MATH 301 — Linear Algebra	3
MATH 312 — Numerical Methods	3
Total hours	45

Area of Concentration in Computer Science

Mathematics Courses

MATH 175 — Calculus I	4
MATH 275 — Calculus II	4
MATH 308 — Discrete Mathematics	3
MATH 365 — Intro to Mathematical Statistics	3
Total	14

Computer Science

Computer Science Courses

CIS 205 — Introduction to Programming—C++	3
CIS 340 — Telecommunications and Networking	3
CIS 426 — Database Management Systems	3
CS/MATH 170 — Introduction to Computer Science	4
CS 303 — Data Structures	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
CS 499C — Senior Capstone	3
ITEC 345 — Microprocessor Electronics	3

Nine hours taken from the following. At least two of the three electives must be taken from CS, ITEC, MATH, or PHYS

CIS 305 — Advanced Programming — C++	3
CIS 314 — Advanced Programming — Java	3
CIS 405 — Web Dev Strategies and E-commerce	3
CIS 442 — Network Administration	3
CIS 443 — Advanced Computer Networking Admin	3
CS 450 — Computer Graphics	3
CS 460 — Scientific and Parallel Computing	3
CS 476 — Special Problems	1-3
ITEC 445 — Computer Electronics	3
ITEC 480 — Digital Communication and Networking	3
MATH 260 — FORTRAN Programming	3
MATH 276 — Calculus III	4
MATH 301 — Elementary Linear Algebra	3
MATH 312 — Numerical Methods	3
PHYS 381 — Computer Sol'n. to Eng. & Science Prob	3

Total **43**

Supplemental Courses

PHIL 203 — Social Ethics	3
PHYS 201 & 201A — Elementary Physics I, or PHYS 231 & 231A — Engineering Physics I	4-5
PHYS 202 & 202A — Elementary Physics II, or PHYS 232 & 232A — Engineering Physics II	4-5

Total **11**

Total for Area **68**

Computer Science Minor

Required Courses

CS/MATH 170 — Introduction to Computer Science	4
CIS 205 — Introduction to Programming—C++	3
CS 303 — Data Structures	3
CS 310 — Algorithms and Advanced Data Structures	3

Total **13**

Elective courses **9**

Choose three courses from the following:

At least two 300 or 400-level three-hour courses with CS prefix. At most, one elective chosen from CS Area of Concentration 300-level or above.

Total for Minor **22**

Physics

Faculty

I. Birriel, J. Birriel, K. Price, C. Yess

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, option I. Students interested in a career in secondary science teaching with a major in physics will find the requirements listed in the catalog under option II of the major.

Students desiring careers as professional physicists in industry, or in eventually pursuing graduate work in engineering or related fields, should follow requirements listed under one of the options under Area of Concentration in Applied Physics.

Supplemental Requirements for all options in the Major and Area of Concentration

CHEM 111 — Principles of Chemistry I	4
CHEM 112 — Principles of Chemistry II	4
MATH 175 — Calculus I	4
MATH 275 — Calculus II	4
MATH 276 — Calculus III	4
MATH 363 — Differential Equations	3
SCI 110 — Introduction to Scientific Computing	3

Total **26**

*Major Requirements

Core Courses for both options:

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 332 — Electricity and Magnetism	4
PHYS 340 — Experimental Physics	3
PHYS 353 — Concepts of Modern Physics	4
PHYS 391 — Dynamics	3
Total	24

Option 1: Physics

PHYS 493 — Quantum Mechanics	3
PHYS electives 300-level or above approved by advisor	6
SCI 498 — Senior Thesis I	2
SCI 499C — Senior Thesis II	1
Total	12

Option 2: Physics Teaching

ASTR 111 — Concepts in Astronomy I: Planetary Science and the Sky, or ASTR 112 — Concepts in Astronomy II: Stars, Galaxies, and Cosmology	3
SCI 402 — Integrated Biology, Mathematics, and Physical Sciences Teaching Methods	3
SCI 403 — Integrated Biology, Mathematics, and Physical Sciences Field Experiences in Teaching	3
SCI 497C — Senior Seminar in Physical Science Education	2
Total	11

In order to achieve state certification for teaching physics, 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 332, 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.

*Area of Concentration Requirements

Core courses for all options:

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 353 — Concepts of Modern Physics	4
PHYS 340 — Experimental Physics	3
PHYS 381 — Computer Solutions to Engineering and Science Problems	3
PHYS 481 — Mathematics for Engineers and Scientists	3
SCI 498 — Senior Thesis I	2
SCI 499C — Senior Thesis II	1
Total	26

Area of Concentration Options

Option 1: Computational Physics

CIS 200 — Logic and Design of Computer Programs	3
CIS 205 — Introduction to Programming—C++	3
CIS 305 — Advanced Programming—C/C++	3
MATH 301 — Elementary Linear Algebra, or	

MATH 312 — Numerical Methods	3
MATH 303 — Data Structures	3
PHYS 391 — Dynamics	3
CIS, MATH, or PHYS Electives (Electives should be at 300 level or above or approved by the advisor)	6
Total	24

Option 2: Engineering Physics (Mechanical)

IET 260 — Hydraulics and Pneumatics	3
IET 307 — Materials Science	3
ITMT 186 — Manufacturing and Fabrication	3
PHYS 221 — Statics	3
PHYS 391 — Dynamics	3
PHYS 411 — Thermodynamics	3
Electives 300-level or above approved by the advisor	6
Total	24

Option 3: Engineering Physics (Electrical)

ITEC 141 — Direct Current Circuits (DC)	3
ITEC 241 — Alternating Current Circuits (AC), or PHYS 211 — Circuits	3-4
ITEC 242 — Principles of Communications	3
ITEC 342 — Electronic Devices and Circuits	3
ITEC 344 — Wireless Communications	3
ITEC 345 — Microprocessor Electronics	3
PHYS 332 — Electricity and Magnetism	4
PHYS 361 — Fundamentals of Electronics	3
ITEC, MATH or PHYS Elective 300 or 400 level approved by the advisor	3
Total	28-29

*Physics Minor

PHYS 231 — Engineering Physics I	4
PHYS 231A — Engineering Physics I Laboratory	1
PHYS 232 — Engineering Physics II	4
PHYS 232A — Engineering Physics II Laboratory	1
PHYS 350 — Nuclear Science	4
PHYS — electives, approved by advisor	7
Total	21

**At least 50 percent of the coursework in the major, area, or minor in physics must be taken in residency.*

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.

Requirements

CHEM 111 — Principles of Chemistry I	4
CHEM 112 — Principles of Chemistry II	4
CMSP 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 **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

Psychology Program

Faculty

J. Blackledge, D. Butz, L. Couch (Interim Chair), L. Haller, S. Kidwell, D. Olson, S. Reilley, G. Remillard, I. White, W. White

Program Competencies

Students should:

1. Understand the complexity of human and animal behavior and the influence of psychological, biological, and social factors on behavior.
2. Be competent in psychological research methods including experimental design, data analysis and presentation, report writing, and computer utilization.
3. Understand the methods and knowledge base of six core content areas of psychology.
4. Understand the principle tenets and major theoretical characteristics of major systems in psychology.

Additional competencies for the Area of Concentration in Psychology include one or more of the following:

1. Develop additional knowledge of specialized research areas of psychology.
2. Develop additional knowledge and skills in psychological research design and analysis.
3. Develop practical and theoretical competencies in areas of applied psychology.

Assessment Procedures

- Senior capstone course
- Exit examination

Bachelor of Science in Psychology

The purpose of the psychology major is to provide students, within a liberal arts tradition, with a broad base of skills and knowledge of scientific psychology, and its applications. The purpose of the area of concentration in psychology is to extend the foundation provided by the major by allowing students to seek additional training in specialized areas of psychology, and to gain hands-on experience in basic and applied psychology through practicums, cooperative educational experiences, and directed research with faculty.

Major **36**

Required Core **12**

PSY 154 — Introduction to Psychology	3
PSY 281 — Experimental Design and Analysis I	3
PSY 282 — Experimental Design and Analysis II	3
PSY 499C — Systems and Theories	3

Area Requirements **18**

Abnormal and Clinical Psychology **3**

PSY 450 — Abnormal Psychology, or	
PSY 456 — Introduction to Clinical Psychology, or	
PSY 469 — Counseling Psychology	

Adjustment and Development **3**

PSY 156 — Lifespan Developmental Psychology, or	
PSY 157 — Psychology of Adjustment	

Biopsychology **3**

PSY 421 — Physiological Psychology, or	
--	--

PSY 465 — Drugs and Behavior			
Learning and Motivation	3	Electives (selected from courses not used as required courses or from the following)	24
PSY 486 — Motivation, or		PSY 199 — Workshop	3
PSY 489 — Psychology of Learning		PSY 276 — Independent Study	3
Perception and Cognition	3	PSY 339 — Cooperative Education	3
PSY 380 — Cognitive Psychology, or		PSY 353 — Industrial Psychology	3
PSY 384 — Sensation & Perception		PSY 356 — Cognitive Dev. of the Infant and Child	3
Social and Personality	3	PSY 358 — Psychological Testing	3
PSY 354 — Introduction to Social Psychology, or		PSY 359 — Applied Behavior Analysis	3
PSY 390 — Psychology of Personality		PSY 399 — Workshop	3
Electives (selected from courses not used as required courses or from the following)	6	PSY 422 — Comparative Psychology	3
PSY 353 — Industrial Psychology	3	PSY 452 — Disorders of Childhood	3
PSY 356 — Cognitive Dev. of the Infant and Child	3	PSY 470 — Research Problems	3
PSY 358 — Psychological Testing	3	PSY 471 — Addiction Therapies	3
PSY 359 — Applied Behavior Analysis	3	PSY 472 — Practicum	3
PSY 399 — Workshop	3	PSY 475 — Selected Topics	3
PSY 422 — Comparative Psychology	3	PSY 477 — Seminar in Developmental Research	3
PSY 452 — Disorders of Childhood	3	Minor	24
PSY 471 — Addiction Therapies	3	PSY 154 — Introduction to Psychology	3
PSY 475 — Selected Topics	3	Psychology electives	21
PSY 477 — Seminar in Developmental Research	3		
Area of Concentration	54		
Required Core	12		
PSY 154 — Introduction to Psychology	3		
PSY 281 — Experimental Design and Analysis I	3		
PSY 282 — Experimental Design and Analysis II	3		
PSY 499C — Systems and Theories	3		
Area Requirements	18		
Abnormal and Clinical Psychology	3		
PSY 450 — Abnormal Psychology, or			
PSY 456 — Introduction to Clinical Psychology, or			
PSY 469 — Counseling Psychology			
Adjustment and Development	3		
PSY 156 — Lifespan Developmental Psychology, or			
PSY 157 — Psychology of Adjustment			
Biopsychology	3		
PSY 421 — Physiological Psychology, or			
PSY 465 — Drugs and Behavior			
Learning and Motivation	3		
PSY 486 — Motivation, or			
PSY 489 — Psychology of Learning			
Perception and Cognition	3		
PSY 380 — Cognitive Psychology, or			
PSY 384 — Sensation & Perception			
Social and Personality	3		
PSY 354 — Introduction to Social Psychology, or			

School of Health Sciences

MSU/UK Physician Assistant Program

Physician Assistant Program
430 Reed Hall
(606) 783-2051

For More Information Contact:

Staci Mynhier, Student Services Coordinator
smynh2@uky.edu (606) 783-2636.
www.mc.uky.edu/pa

Department of Imaging Sciences

Barbara L. Dehner, Chair

408 Reed Hall
(606) 783-2639 or (606) 783-2641

Faculty

J. Applegate, M. Cooper (Clinical Coordinator), J. Darling, B. Dehner (Chair), L. Donathan, J. Fannin (Clinical Coordinator), C. Gibbs, W. Goodpaster (Diagnostic Medical Sonography Coordinator)

Morehead State University's Department of Imaging Sciences offers an Associate of Applied Science degree in Radiologic Science (AAS) and a Bachelor of Science Degree in Imaging Sciences (BSIS) with areas of concentration in Computed Tomography/Magnetic Resonance, Diagnostic Medical Sonography and Leadership in Medical Imaging.

Associate of Applied Science in Radiologic Science

The Associate Degree Radiologic Science Program has a selective admission process based on completion of 31-32 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 Outcomes

The Associate Degree Radiologic Science Program will:

1. Prepare graduates who will meet entry-level standards.
2. Meet the needs of both graduates and employers.
3. Develop graduates who recognize the need for professional development and lifelong learning.

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 31-32 credit hours of required pre-radiologic science courses with a minimum grade of "C".

BIOL 234 — Human Anatomy & Physiology I	3
BIOL 235 — Human Anatomy & Physiology II	3
CIS 101 — Computers for Learning	3
CMSP 108 — Fund. of Speech Communication	3
ENG 100 — Writing I	3
MATH 152 — College Algebra	3
*MSU 101 — Discovering University Life	1
IMS/NURS 202 — Medical Terminology	2
PSY 154 — Introduction to Psychology	3
Physical Science Elective (SCI 103, Physics, or Chemistry)	3-4
*RSCI 110 — Intro to Radiologic Sciences	1
**General education area studies or ENG 200	3
Total	31 - 32

**Consideration may be granted for this course to be completed after admission during the first semester.*

***Any area studies course fulfills the requirement for program admission; however, a Humanities Area Studies course also fulfills general education requirements for receipt of an associate degree and is recommended.*

- C. More than two failures of pre-radiologic science courses within two years of application to the program will result in ineligibility for admission. This includes failure of more than two courses or failures of the same course more than twice. Students with course failure(s) prior to the two-year period will be considered for admission if the student has demonstrated satisfactory academic progress ("C" or above in required courses) since the course failure(s).
- D. A grade point average of 2.5 or higher (with no rounding) in the required 30-31 pre-radiologic science courses (MSU 101 is not calculated in the GPA) and a cumulative GPA of 2.0 on all college work.
- E. Meet the established health and physical capability requirements as listed below.
 1. Vision capabilities:
 - a. Normal or corrected refraction within the range of 20/20 to 20/60.
 - b. Able to distinguish color shade changes.
 2. Auditory capabilities:
 - a. Possess normal or corrected hearing ability within 0 to 45-decibel range.
 3. Tactile capabilities:
 - a. Possess in at least one hand the ability to perceive temperature change and pulsation and to differentiate between various textures and structures.
 - b. Recognize an object by touching and handling.
 4. Language capabilities:
 - a. Possess the ability to verbally communicate.
 5. Minimal motor capabilities:
 - a. Grasp securely with two functional upper limbs.
 - b. Push and/or pull moveable objects weighing 100-150 lbs.
 - c. Lift at least 25 lbs. without assistance.
 - d. Stand for long periods of time.
 - e. Walk without assistance of canes, crutches, walkers, and/or humans.
 - f. Reach above shoulders and below waist.
 - g. Twist, bend, stoop/squat, and move quickly.
 6. Mental health:
 - a. Possess the ability to adapt to the environment, function in everyday activities, and cope with stressors.
 7. Freedom from transmittable disease as documented by:
 - a. Negative PPD and/or chest x-ray within immediate past 12 months.
 - b. Rubella and rubeola antibody test (titer values that indicate immunity) documentation of MMR (rubella and rubeola and mumps) vaccine.
 - c. Hepatitis B Vaccine series.
 - d. Varicella zoster live-virus vaccine or reliable history of varicella (chicken pox) or serologic evidence of immunity.
 - e. Immunization as recommended by the Advisory Committee on Immunization Practices of the U.S. Public Health Service and the Committee on Infectious Disease of the American Academy of Pediatrics.
- F. Possess current certification in Basic Life Support for Health Care Providers (CPR) by the American Heart Association.

Application Procedure

Applications will be accepted beginning in January and must be received by the **fourth Friday in May**.

- A. Submit a complete application packet with the following required materials:
1. Imaging Sciences Admission Application.
 2. Official transcripts from MSU and/or other universities/colleges attended.
 3. Copy of course description(s) if transfer credit is sought.
- B. Mail complete application packet to:

Morehead State University

Department of Imaging Sciences
Associate of Applied Science in Radiologic Science
Academic Counseling Coordinators
Reed Hall 219 & 230
Morehead, KY 40351
Phone: (606) 783-2639 or
(606) 783-2641

Requirements for the Completion of an Associate of Applied Sciences Degree in Radiologic Science

1. Complete a minimum of 81 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 hour of MSU 101 — Discovering University Life during the student's first semester if the student begins as a freshman or transfers to MSU with less than 24 credit hours.

Fees and Expenses

Fees and expenses specific to the Department of Imaging Sciences Programs are in addition to those required by MSU. These are subject to change without prior notification. The students are responsible for the purchase of white uniforms, white hose (if applicable), white clinical shoes, white lab coat, malpractice insurance, laboratory fees, dosimeter related fees, film marker fees (if applicable), and all housing and transportation expenses incurred during clinical internship assignments. Students are also responsible for all fees for criminal background checks, drug-testing, certification examinations and all applicable course fees.

Additional Information

- Students may be assigned to clinical practicum areas requiring distant travel or relocation.
- Clinical experience and formal class sessions may be required during various hours of the day, evening, and night.

Associate Degree Radiologic Science Program

Curriculum Sequence

Must have completed the 31-32 credit hours of pre-radiologic science courses and be officially admitted to Program. All RSCI courses must be taken in sequence as listed.

First Year

Fall Semester

ENG 200 — Writing II	3
RSCI 200 — Patient Care	3
RSCI 206 — Radiographic Anat., Positioning and Image Production I	5
RSCI 210 — Radiographic Equipment and Imaging I	3
Total	14

Spring Semester

RSCI 230 — Radiography Clinical Internship I	10
RSCI 330 — Imaging Pathology	2
Total	12

Summer I or Summer II

RSCI 310 — Rad. Anat., Positioning, and Image Production II	4
Total	4

Second Year

Fall Semester

RSCI 300 — Film Critique and Evaluation	2
RSCI 320 — Radiography Clinical Internship II	10
Total	12

Spring Semester

Applications for the Baccalaureate Degree Programs due by first Monday of April.

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
*Elective	
Humanities Area Studies Course	3
Total	12

**Required only if a Humanities Area Studies course was not taken prior to admission into the Program.*

Total for the AAS Degree in Radiologic Science 81-85

The following additional 18 credit hours of general education area studies courses must be taken if a student wishes to complete the Bachelor of Science degree in Imaging Sciences at MSU. The courses can be taken in conjunction with the courses listed in the curriculum sequence above.

Area Studies	Credit Hours
2 Humanities	6
1 Natural and Mathematical Sciences	3
2 Social and Behavioral Sciences	6

1 Practical Living	3
Total	18

Bachelor of Science Degree in Imaging Sciences

The Baccalaureate Degree Imaging Sciences Program is a four-year program of study with areas of concentration in Computed Tomography/Magnetic Resonance (CT/MR) and Diagnostic Medical Sonography (DMS). The programs have a selective admission policy, which is separate and in addition to the University's admission procedure. The number of available clinical positions limits enrollment in the program. Candidates for the programs will be ranked according to grade point average in the general education courses, support courses, and radiography courses.

Students must apply for admission by the first Monday in April. Students are officially admitted into the programs in the following Summer II term. The program consists of 13 months of either Computed Tomography/Magnetic Resonance or Diagnostic Medical Sonography courses.

Upon completion of the CT/MR Program and the American Registry of Radiologic Technologists (ARRT) clinical requirements, the graduate may be eligible to sit for the ARRT National Certification Examination in Computed Tomography and Magnetic Resonance. Upon completion of the Diagnostic Medical Sonography Program, the graduate may be eligible to sit for the American Registry of Diagnostic Medical Sonography (ARDMS) National Certification Examinations.

Admission Criteria

- A. Unconditional acceptance to Morehead State University through the Office of Enrollment Services. The office may be contacted at (606) 783-2000.
- B. Completion of the following courses with a minimum grade of "C" (some courses can be transferred from other institutions):
- | | |
|--|-----------|
| BIOL 234 — Human Anatomy & Physiology I | 3 |
| BIOL 235 — Human Anatomy & Physiology II | 3 |
| CIS 101 — Computers for Learning | 3 |
| CMSP 108 — Fundamentals of Speech Communication | 3 |
| ENG 100 — Writing I | 3 |
| ENG 200 — Writing II | 3 |
| MATH 152 — College Algebra | 3 |
| IMS/NURS 202 — Medical Terminology | 2 |
| PSY 154 — Introduction to Psychology | 3 |
| Humanities Electives | 9 |
| Natural & Mathematical Sciences Elective | 6 |
| Practical Living Elective | 6 |
| Social & Behavioral Sciences Electives | 6 |
| Total General Education & Support Courses | 50 |
- C. More than two failures of required courses within two years of application to the program will result in ineligibility for admission. This includes failure of more than two courses or failures of the same course more than twice. Students with course failure(s) prior to the two-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.

- 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. Considerations for non-JRCERT program graduates will be considered on an individual or program basis. Graduates of an approved program may receive an equivalent credit block to satisfy the radiography component.
- F. Registered and in good standing with the American Registry of Radiologic Technologists in Radiography. Applicants who are not registered must obtain certification prior to the beginning of the fall semester.
- G. Meet the established health and physical capability requirements as listed below.
- Vision capabilities:
 - Normal or corrected refraction within the range of 20/20 to 20/60.
 - Able to distinguish color shade changes.
 - Auditory capabilities: possess normal or corrected hearing ability within 0 to 45-decibel range.
 - 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.
 - Language capabilities: possess the ability to verbally communicate.
 - 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.
 - Mental health: possess the ability to adapt to the environment, function in everyday activities, and cope with stressors.
 - 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.

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, please contact the Academic Counseling Coordinators @ (606) 783-2639 or 783-2641 for further information regarding screening.

This notice has been adopted and modified from Frank G. Sherlock Web site, www.MRISafety.com.

- H. Possess current certification in Basic Life Support for Health Care Providers (CPR) by the American Heart Association.

Application Procedure

Applications will be accepted beginning in January and must be received by the first Monday in April.

- A. Submit a complete application packet with the following required materials:
1. Imaging Sciences Admission Application, Bachelor of Science Degree in Imaging Sciences designating the Computed Tomography Magnetic Resonance Program or Diagnostic Medical Sonography Program. Applicants applying to both programs must rank the programs into a first and second choice. Entrance will not be granted to both programs.
 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 mid-term grades must submit a letter from the radiography program coordinator or individual faculty in general education courses stating the student's letter grade at the current time for each course. All letters must be submitted on official institutional letterhead. Students must complete required courses with a "C" or better and maintain a grade point average of 2.5 or higher.
 3. Copy of course description(s) if transfer credit is sought.
 4. Copy of the current American Registry of Radiologic Technologists registration card for radiography. Applicants who are not registered must obtain certification prior to the beginning of the fall semester.
 5. Copy of the current American Registry of Radiologic Technologists (Computed Tomography and/or Magnetic Resonance) registration card (if applicable).
 6. Copy of the current American Registry of Diagnostic Medical Sonographers (ARDMS) registration card (if applicable).

Note: If applying to both programs, you must rank your choice. Please select which program is your first and second preference. Entrance will not be granted to both programs. Failure to rank your choices (if applying to both programs) will make your application invalid.

- B. Mail complete application packet to:

Morehead State University

Department of Imaging Sciences
Bachelor of Science in Imaging Sciences
Academic Counseling Coordinators
Reed Hall 219 & 230
Morehead, KY 40351
Phone: (606) 783-2639 or
(606) 783-2641

Requirements for Completion of a Bachelor of Science Degree in Imaging Sciences

- A. Complete a minimum of 141-145 credit hours, of which, a minimum of 43 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. Complete at least 32 credit hours at MSU with the last 16 hours preceding graduation earned at MSU. Regional campus sites satisfy this requirement; however, correspondence courses do not.

Fees and Expenses

Fees and expenses specific to the Department of Imaging Sciences Programs are in addition to those required by MSU. These are subject to change without prior notification. The students are responsible for the purchase of white uniforms, white hose (if applicable), white clinical shoes, white lab coat, malpractice insurance, laboratory fees, dosimeter related fees, film marker fees (if applicable), and all housing and transportation expenses incurred during clinical internship assignments. Students are also responsible for all fees for criminal background checks, drug-testing, certification examinations and all applicable course fees.

Additional Information

- Students may be assigned to clinical practicum areas requiring distant travel or relocation.
- Clinical experience and formal class sessions may be required during various hours of the day, evening, and night.

Computed Tomography/Magnetic Resonance Program

Student Outcomes

- A. Students will be clinically competent.
- B. Students will communicate effectively.
- C. Students will use critical thinking and problem solving skills.
- D. Students will evaluate the importance of professional growth and development.
- E. Graduates will possess entry-level skills in computed tomography and magnetic resonance.

Assessment Procedures

Survey of graduates
Survey of employers
Monitoring of certification examinations

Required Computed Tomography/Magnetic Resonance Program Curriculum Sequence

Summer II

CTMR 405 — CT/MR Sectional Anatomy	4
CTMR 413 — Advanced Patient Care	2
Total	6

Fall Semester

CTMR 403 — Computed Tomographic Physics & Instrumentation	3
CTMR 443 — Imaging Procedures in CT	4
CTMR 467 — Computed Tomography Practicum I	5
CTMR 483 — Seminar in CT	2
Total	14

Spring Semester

CTMR 451 — MR Physical Principles of Image Formation	4
CTMR 455 — Imaging Procedures in Magnetic Resonance	3
CTMR 461 — Magnetic Resonance Practicum I	5
CTMR 487 — Seminar in Magnetic Resonance	2
RSCI 499C — Senior Seminar in Radiologic Sciences	3
Total	17

Summer I

CTMR 477 — Advanced Practicum I	4
Total	4

Summer II

CTMR 485 — Advanced Practicum II	4
Total	4

Total Core Requirement 97-101

Total CT/MR Program 45

Total BSIS, CT/MR 14

Upon permission, experienced computed tomography/magnetic resonance practitioners may elect to take "CLEP" tests for credit in subjects they have mastered. Please refer to the University and department "CLEP" policies for additional information.

Diagnostic Medical Sonography Program

Student Outcomes

The student will:

- Synthesize principles from mathematics, natural sciences, social and behavioral sciences, and humanities to serve as a foundation for sonographic practice.
- Integrate scientific knowledge and technical skills with effective communication methods to provide quality care and useful diagnostic information.
- Employ critical thinking by practicing as an entry-level sonographer.
- Demonstrate professional and ethical behavior as a diagnostic medical sonographer.

Assessment Procedures

- Survey of graduates
- Survey of employers
- Monitoring of certification examinations

Required Diagnostic Medical Sonography Program Curriculum Sequence

Summer II

DMS 400 — Introduction to Sonography	1
DMS 402A — Scanning Techniques I	1
DMS 408 — Sonographic Sectional Anatomy	2
Total	4

Fall Semester

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 430 — Sonography Internship I	6
Total	14

Spring Semester

DMS 426A — Scanning Techniques IV	1
DMS 428 — Obstetrical Sonography	2
DMS 438 — Selected Topics in Sonography	2
DMS 441 — Sonographic Physics and Instrumentation II	2
DMS 442A — Scanning Techniques V	1
DMS 450 — Sonography Internship II	6
RSCI 499C — Senior Seminar in Radiologic Sciences	3
Total	17

Summer I

DMS 470 — Sonography Internship III	4
Total	4

Summer II

DMS 480 — Seminar in Sonography	2
DMS 490 — Sonography Internship IV	3
Total	5

Total Core Requirement 97-101

Total Sonography Option 44

Total BSIS, DMS 14

Upon permission, experienced sonographers may elect to take "CLEP" tests for credit in subjects they have mastered. Please refer to the University and department "CLEP" policies for additional information.

Bachelor of Science Degree in Imaging Sciences

Area of concentration: Leadership in Medical Imaging

The Bachelor of Imaging Sciences — Leadership in Medical Imaging degree is an online degree available to registered practitioners in radiography, nuclear medicine, sonography, or radiation therapy.

This program allows the student to complete the required courses part time and is planned for the working practitioner who wants to pursue a leadership role in imaging sciences. Following admission, the student should contact his/her assigned advisor for academic counseling.

Admission Criteria for the Bachelor of Science Degree – Leadership in Medical Imaging

1. Unconditional acceptance to Morehead State University through the Office of Enrollment Services.
2. Graduate of a programmatic accredited program. (Non-programmatic accredited programs will be reviewed on an individual basis.)
3. Registered by respective certification agency, for example American Registry of Radiologic Technologists (ARRT), American Registry of Diagnostic Medical Sonography (ARDMS), or Nuclear Medicine Technology Certification Board (NMTCB).
4. Have a cumulative grade point average of 2.5 on all coursework for admission to the degree program.

Student Outcomes

The student will:

- A. Integrate concepts of communication, leadership, management, teaching/learning, and health care regulations into the professional practice.
- B. Employ critical thinking in the professional practice of imaging sciences.
- C. Assume accountability for continual personal, professional, and education development to enhance one's practice and to meet the changing health care needs of society.

Required Core

IMS 321 - Intro to Multidisciplinary Health Sciences	3
IMS 331 - Issues and Trends in Healthcare Delivery Systems	3
IMS 341 - Sectional Anatomy for the Medical Imaging Professional	3
IMS 351 - Picture Archiving & Comm. Systems	3
IMS 361 - Leadership for the Healthcare Professional	3
IMS 401 - Health Care Law and Policy	3
IMS 421 - Prog. Planning, Evaluation & Assessment	3
IMS 431 - Operations Management in Healthcare	3
IMS 471 - Teach. Methodologies in Imaging Sciences	3
IMS 481 - Fiscal Management in Healthcare	3
IMS 491 - Curriculum Dev. in Imaging Sciences	3
Total	33

Specific general education courses required by the program

ENG 100 - Writing I	3
MATH 131 (or higher) Mathematical Reasoning and Problem Solving	3
CMSP 108 - Fundamentals of Speech Communication	3
CIS 101 - Computers for Learning	3
ENG 200 - Writing II	3
Area of Studies Requirements and Integrated Component Humanities	9
Math and Natural Sciences	9
Practical Living	3
Social & Behavioral Sciences	9
RSCI 499C - Senior Seminar in Radiologic Sciences	3

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

**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 128.*

Students must complete 43 semester hours which must be courses numbered 300 or above. Refer to the Bachelor's Degree Requirements for additional information.

CMSP 390 — Conflict and Communication	3
IMS 300 — Ethical & Legal Issues in Healthcare	3
IMS 302 — Hlth Mainten. Throughout the Life Span	3
IMS 402 — Allied Health Research	3
MATH — 353 Statistics	3
MNGT 301— Principles of Management	3
SOC 354 — The Individual and Society	3

University Requirement

MSU 101 - Introduction to University Life (if applicable)

Total General Education Requirements	48
Imaging Discipline	48
Required Core	33
Program Total	129

Health, Wellness, & Human Performance

Department of Health, Wellness & Human Performance

Lynne Fitzgerald, Chair

201 Laughlin Health Building
(606) 783-2180

The Department of Health, Wellness & Human Performance offers general education courses, majors in health and physical education, areas of concentration in exercise science health promotion, and health and physical education and a minor in health promotion. The general education courses are for all students.

Students selecting a major in health and/or physical education will be required to complete admissions assessments as well as exit examinations covering knowledge and competencies of their programs. Results of these assessments are used for individual guidance and program development. Students should check with their advisors to be certain that they comply with all requirements.

Health

Faculty

Health Promotion

J. Dearden, T. Hardman, J. Hatfield, A. Rathbun

Program Competencies

Students completing the program are:

1. To be familiar with the components of and function of each facet of a comprehensive school health or health promotion program.
2. To communicate effectively, including the ability to write objectives which address the three domains of education (cognitive, affective, and psychomotor).
3. To be able to effectively plan, implement, and evaluate teaching units including various teaching strategies and/or methodologies which address the 75 defined learner outcomes identified in the Kentucky Educational Reform Act.
4. To be cognizant of the various types of learners, and the learning strategies/methodologies which will address the needs to each learner classification.
5. To develop educational units that encourage cross disciplinary integration.
6. To develop critical thinking and problem solving skills.
7. To serve as a facilitator, health advocate, and resource professional for current and future issues in the profession of health for students, teachers, administrators, and the community.
8. To identify and effectively utilize appropriate resources pertaining to health.
9. To be familiar with professional organizations, current trends, and issues relevant to health.

10. To develop classroom skills that will be conducive to the successful accumulation of knowledge and illustrate the applicability to real world situations.
11. To successfully develop measurement and evaluation instruments which will assess the health needs of the student as well as effectiveness of instruction.
12. To effectively disseminate objective, non-biased health information and activities which will provide the student the opportunity to formulate personal values concerning health-related issues.
13. To become familiar with and develop the skills identified within the competencies/responsibilities of an entry-level health educator.

Assessment Procedures

Portfolios
Certification examination
Employment data
External evaluation practicum/field experiences
PRAXIS Content Area Exams
PRAXIS PLT Exam
Dispositions Assessment

Bachelor of Arts

The health major and minor programs prepare individuals for positions in any of the five recognized work settings for health educators — school, community, college/university, worksite, or medical. The programs are broken down into two classifications: Health Promotion and Health Education (P-12). Specific general education requirements for the Health Promotion major are: CIS 101, PSY 154, HLTH 151, HLTH 203, and HLTH 499C.

Major (Health Promotion)

HPE 160 — Foundations of Health and Physical Education	3
HLTH 205 — Psychological Health	3
HLTH 206 — Principles of Nutrition	3
HLTH 230 — Community Health	3
HLTH 310 — Health and Wellness Promotion	3
HLTH 360 — Family Health	3
HLTH 414 — Principles of Epidemiology	3
HLTH 418 — Use and Abuse of Drugs	3
HLTH 425 — Planning, Managing and Evaluating Health/Wellness Programs	3
HLTH 435 — Health Counseling	3

Choose one of the following:

HLTH 408 — General School Safety	3
HLTH 475 — The School Health Program	3
PHED 306 — Functional Anatomy/Biomechanics or BIOL 234 — Human Anatomy & Physiology I	3
HLTH 470 — Practicum in Health Promotions	12
HLTH 499C — Senior Seminar in Health Promotion	3

Approved 300-500 level electives 11
Total 48

Approved 300-500 Level Electives for Health Promotion Major
(Other electives as approved by advisor)
SOC 540 — Gerontology

SOC 545 — Death and Dying	
CMSP 350 — Communication, Culture, and Diversity	
CMSP 383 — Small Group Communication	
HLTH 475 — The School Health Program	
HLTH 480 — Workshop in Health	

Total Program Requirements:

Major Core	48
General Education	48
Minor (minimum)	21
Electives	11
Total Program Hours	12

Health Promotion Major Suggested Course Sequence

Freshman Year

First Semester

CMSP 108 — Fund. of Speech Communication	3
ENG 100 — Writing I	3
CIS 101 — Intro to Computers or EDUC 222 — Computing Tools for Educators	3
HLTH 151 — Wellness: Theory to Action	3
HLTH 203 — Safety and First Aid	3
MSU 101 — Discovering University Life	1

Total 16

Second Semester

General Education Core	6
PSY 154 — Psychology	3
ENG 200 — Writing I	3
HPE 160 — Foundations of Hlth and Physical Ed	3
HLTH 206 — Nutrition or HS 201	3

Total 18

Sophomore Year

First Semester

General Education Core	6
BIOL 234 — Human Anatomy & Physiology I	3
HLTH 230 — Community Health	3
Minor	6

Total 18

Second Semester

General Education Core	6
HLTH 360 — Family Health	3
HLTH 205 — Psychological Health	3
Minor	6

Total 18

Junior Year

First Semester

300-500 electives	6
HLTH 310 — Health and Wellness Promotion	3
General Education Core	6
Minor	3

Total 18

Second Semester

General Education Core	3
HLTH 425 — Planning and Managing HP programs	3
HLTH 430 — Consumer Health	3
HLTH 408 — General School Safety	3
Minor	3

Total 15

Summer Intercession

HLTH 435 — Health Counseling	3
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Credit Hours 3

Senior Year

First Semester

HLTH 499C — Senior Seminar in HP	3
HLTH 418 — Use and Abuse of Drugs	3
HLTH 414 — Principles of Epidemiology	3
Minor	6

Total 15

Second Semester

Professional Semester: HLTH 470 Practicum	15
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Total 15

Area of Concentration in Health Promotion

Major Core

HPE 160 — Foundations of Health and P.E.	3
HLTH 203 — Safety and First Aid	3
HLTH 205 — Psychological Health	3
HLTH 206 — Principles of Nutrition	3
HLTH 230 — Community Health	3
HLTH 310 — Health and Wellness Promotion	3
HLTH 360 — Family Health	3
HLTH 408 — General School Safety	3
HLTH 414 — Principles of Epidemiology	3
HLTH 418 — Use and Abuse of Drugs	3
HLTH 425 — Planning, Managing, and Evaluating Health/Wellness Programs	3
HLTH 430 — Consumer Health	3
HLTH 435 — Health Counseling	3
Approved 300-400 level electives	6
HLTH 471 — Practicum	12
PHED 306 — Functional Anatomy/biomechanics or BIOL 234 — Human Anatomy & Physiology I	3
HLTH 499C — Senior Seminar in Health Promotion	3

Total 60

Electives 6

SOC 441 — Gerontology	3
SOC 445 — Death and Dying	3
CMSP 350 — Comm, Culture, and Diversity	3
CMSP 383 — Small Group Communication	3
HLTH 475 — The School Health Program	3
HLTH 480 — Workshop in Health	3

Major Core	60
General Education	48
Electives	20
Total Program Hours	12

Health Promotion Minor

HPE 160 — Foundations of Hlth & P. E.	3
HLTH 205 — Psychological Health	3
HLTH 230 — Community Health	3
HLTH 310 — Health and Wellness Promotion	3
HLTH 360 — Family Health	3
HLTH 430 — Consumer Health	3
HLTH 435 — Health Counseling	3
HLTH 477 — Field Experience in Health	3
HLTH 418 — Use and Abuse of Drugs	3
Total	27

Bachelor of Arts - Health and Physical Education Teaching

Faculty

L. Fitzgerald, T. Hardman, J. Hatfield, M. Magner, M. Miller, T. Newsome

Program Competencies

Students will demonstrate:

1. An understanding of and working knowledge of discipline specific content.
2. An understanding of general knowledge from other disciplines which can be applied to the discipline.
3. Experiences and opportunities to develop the skills and techniques (including technology) needed to ensure the effective delivery of content to students in developmentally appropriate ways.
4. Knowledge and activities designed to promote sensitivity to and accountability for diverse learner populations.
5. An understanding of and experience using the skills needed for effective classroom management.
6. The skills needed to design, implement, and evaluate student assessments.
7. Knowledge and skills to participate in an interdisciplinary approach to education.
8. Knowledge and skills needed to effectively select and utilize a variety of technical and human resources to augment the learning process.
9. Opportunities to implement Kentucky Education Reform Act initiatives and to be assessed in regard to the effective delivery (KTIP guidelines) of the same in a variety of preservice practice teaching activities.

Assessment Procedures

- Teacher Performance Assessment
- PRAXIS Content Area Exam(s)
- PRAXIS PLT Exam
- Disposition assessment

Area of Concentration in P-12 Health and Physical Education

Specific general education requirements for Health and Physical Education are: BIOL 234, CIS 101 or EDUC 222, EDF 211, PSY 154, SOC 101 or SOC 354, ENG 100, ENG 200, CMSP 108, HLTH 151, HLTH 203, HPE 499C

Major Core courses:

HPE 160 — Foundations to Health and Physical Ed	3
HPE 301 — Classroom Assess.in Hlth. & Phys Ed	3
HLTH 205 — Physiological Health	3
HLTH 206 — Principles of Nutrition or HS 201 — Principles of Nutrition	3
HLTH 230 — Community Health	3
HLTH 360 — Family Health	3
HLTH 418 — Use and Abuse of Drugs	3
HLTH 430 — Consumer Health	3
PHED 205 — Lifetime Fitness	3
PHED 306 — Kinesiology	3
PHED 315 — Motor Development and Learning	3
PHED 430 — Psychosocial Dimensions of Sport	3
PHED 432 — Physiology of Exercise	3
Total	39

Teacher Certification (P-12) Courses

Methods of Teaching

HLTH 475 — School Health Program	3
HPE 300 — Methods of Teaching Elem Physical Ed	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 & Rhythms for Elem Teachers	3
PHED 213 — Methods of Individual Sports	1
PHED 214 — Methods of Racket Sports	1
PHED 215 — Methods of Team Sports	1
PHED 216 — Methods of Lifetime Sports	1
PHED 217 — Methods of Gymnastics & Martial Arts	1
PHED 218 — Methods of Dance	1
PHED 475 — Adapted Physical Education	3
Total.	27

Professional Education Courses

EDF 207 — Foundations of Education	3
EDF 311 — Learning Theories & Assessment in Ed.	3
EDSE 312 — Educational Methods and Technology	3
EDSE 416 — Clinical Practice	12
EDSE 483 — Classroom Organization & Mgt for Secondary Teachers	3

Total	24
Major Core	39
Teacher Certification	27
Professional Education	24
General Education	48
Total Program Hours	13

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).

Freshman Year

First Semester

CMSP 108 — Fund. of Speech Communication	3
ENG 100 — Writing I	3
CIS 101 — Intro to Computers or EDUC 222	3
HLTH 151 — Wellness: Theory to Action	3
HLTH 203 — Safety and First Aid	3
MSU 101 — Discovering University Life	1
PHED 216 — Methods Lifetime Sports	1
Total	17

Second Semester

General Education Core	3
EDF 207 — Foundations of Education	3
HPE 160 — Fd. of Hlth, Physical Ed & Sport Sciences	3
PSY 154 — Psychology	3
ENG 200 — Writing II	3
PHED 217 — Methods gym/martial arts	1
PHED 218 — Methods teaching dance	1
Total	17

Sophomore Year

First Semester

General Education Core	3
SOC 101— Into Soc. or SOC 354 — Ind. & Soc.	3
HLTH 230 — Community Health	3
PHED 212 — Games/Rhythms Elementary	3
EDF 211 — Human Growth & Development	3
Total	15

Second Semester

General Education Core	3
General Education Math and Human Sciences	3
HLTH 205 — Psychological Health	3
HLTH 206 — Prin. of Nutrition or HS 201	3
PHED 205 — Lifetime Fitness	3
PHED 214 — Methods Racket Sports	1
Total	16

Junior Year

First Semester

General Education Core	6
PHED 306 — Kinesiology	3
HLTH 475 — School Health Program	3
HPE 301 — Classroom Assessment in HPE	3
PHED 213 — Methods Individual Sports	1
PHED 215 — Methods Team Sports	1
Total	17

Second Semester

General Education Core	3
HLTH 360 — Family Health	3

PHED 315 — Motor Learning/Development	3
PHED 430 — Psych. Dimensions of Sport & Physical Activity	3
EDF 311 — Learning Theories for Teacher	3
Total	15

Senior Year

First Semester

PHED 475 — Adapted Physical Ed	3
HLTH 418 — Use and Abuse of Drugs	3
HPE 300 — Methods of Teaching Elem Phys Ed	3
HPE 302 — Methods of Teaching Elem Health	3
EDSE 312 — Ed. Methods and Technology	3
Total	15

Second Semester

PHED 432 — Exercise Physiology	3
HLTH 430 — Consumer Health	3
HPE 303 — Methods of Teaching Secondary Phys Ed.	3
HPE 304 — Methods of Teaching Secondary Health	3
EDSE 483 — Classroom Organiz. and Management	3
Total	15

Year Five: Fall

EDSE 416 — Student Teaching	12
HPE 499C — Senior Seminar	3
Total	15

Bachelor of Arts Health Education Teaching P-12

A minor is needed for this program.

Specific general education requirements for Health Education programs are ENG 100, ENG 200, CMSP 108, CIS 101 (or) EDUC 222, EDF 211, HLTH 151, HLTH 203, HPE 499C, PSY 154, SOC 101, SOC 354.

P-12 Health Major

HLTH 205 — Psychological Health	3
HLTH 206 or HS 201 — Principles of Nutrition	3
HLTH 230 — Community Health	3
HLTH 360 — Family Health	3
HLTH 430 — Consumer Health	3
HLTH 418 — Use and Abuse of Drugs	3
HPE 160 — Foundations of Hlth & Physical Education	3
HPE 301 — Classroom Assessment in Hlth & Phys Ed	3
Total	24

Teacher Certification (P-12) Courses

HLTH 475 — School Health Program	3
HPE 302 — Methods of Teaching Elem Health	3
HPE 304 — Methods of Teaching Elem Phys Ed	3
Total	9

Professional Education Courses

EDF 207 — Foundations of Education	3
EDF 311 — Learning Theories and Assessment in Ed	3
EDSE 312 — Educational Methods and Technology	3

EDSP 230 — Teaching the Exceptional Student or PHED 475 — Adapted Physical Ed	3
EDSE 416 — Clinical Practice	12
EDSE 483 — Classroom Organization and Management for Secondary Teachers	3
Subtotal	27
Major Core	24
Teacher Certification	9
Professional Education	27
General Education	48
Minor (21 minimum)	21
Total Program hours	12

Bachelor of Arts Physical Education Teaching P-12

A minor is needed for this program

Specific general education courses required as part of the Physical Education Major include ENG 100, ENG 200, CMSP 108, EDF 211, CIS 101 or EDUC 222, HLTH 151, HLTH 203, HPE 499C, SOC 101 or SOC 354, and PSY 154.

Major Core Courses

HPE 160 — Foundations of Health & P. E.	3
HPE 301 — Classroom Assessment in Health & P. E.	3
PHED 205 — Lifetime Fitness	3
PHED 315 — Motor Development & Motor Learning	3
PHED 306 — Functional Anatomy/Biomechanics	3
PHED 430 — The Psychosocial Dimensions of Sport and Physical Activity	3
PHED 432 — Physiology of Exercise	3
Total	21

Teacher Certification Program Requirements (P-12)

Refer to "Teacher Education Program" and "Professional Experiences" for further course and grade requirements. The Teacher Education Program requires minimum grades of "C" in both HPE 160 and PHED 205.

Complete each of the following:

HPE 300 — Methods of Teaching Elem P. E.	3
HPE 303 — Methods of Teaching Secondary P. E.	3
PHED 212 — Games and Rhythms for Elementary Teachers	3
PHED 213 — Methods of Teaching Individual Sports	1
PHED 214 — Methods of Teaching Racquet Sports	1
PHED 215 — Methods of Teaching Team Sports	1
PHED 216 — Methods of Teaching Lifetime Sports	1
PHED 217 — Methods of Teaching Gymnastics and Martial Arts	1
PHED 218 — Methods of Teaching Dance	1
PHED 475 — Adapted Physical Education	3
Subtotal	18

Professional Education

EDF 207 — Foundations of Education	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 416 — Clinical Practice	12
Total	24
General Education	48
Major Core	21
Minor (Minimum)	21
Teacher Certification	18
Professional Education	24

For suggested sequence of courses for teaching P-12 Physical Education Major refer to HPE suggested sequence.

Exercise Science

Faculty

G. Blunt & M. Probst

Bachelor of Science Program Competencies

Students will demonstrate:

1. Knowledge and understanding of the biological and applied sciences which lay the foundation for this area of study.
2. Knowledge 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

Exercise Science Area of Concentration

Concentration Requirements

BIO 235 — Anatomy and Physiology II	3
HLTH 203 — Safety and First Aid	3
HLTH 206 — Prin. of Nutrition or HS 201	3
HLTH 310 — Health and Wellness Promotion	3
HPE 160 — Foundations of Health and Physical Ed	3
PHED 205 — Lifetime Fitness	3
PHED 220 — Athletic Training	3
PHED 301 — Evaluation in Exercise Science	3
PHED 306 — Functional Anatomy & Biomechanics	3
PHED 315 — Motor Development and Motor Learning	3
PHED 326 — Exercise Program Leadership	3
PHED 332 — Principles of Strength and Conditioning	3
PHED 423 — Exercise Management of Special Populations	3
PHED 424 — Principles of Therapeutic Exercise	3
PHED 432 — Physiology of Exercise	3
PHED 441 — Exercise Testing and Prescription	4

PHED 450 — Planning and Managing Exercise Programs	3
<i>Choose two courses from the following listing:</i>	6
PHED 453A — Corporate Internship	3
PHED 453B — Cardiopulmonary Rehabilitation Internship	3
PHED 453C — Musculoskeletal Rehabilitation Internship	3
Total Hours	58

General Education Requirements

BIO 234 — Anatomy & Physiology I	3
CIS 101 — Computers for Learning	3
CMSP 108 — Fundamentals of Speech Communication	3
ENG 100 — Writing I	3
ENG 200 — Writing II	3
MATH (100 level) 123, 131, 135, 152, 174, or 175	3
CHEM 101 — Survey of Chemistry or CHEM 111 — Principles of Chemistry	4
PHYS 201 — Elem Physics I or SCI 103 — Intro to Physical Science	3
PSY 154 — Intro to Psychology	3
Soc and Behavioral Science Elective	6
Humanities Elective	9
HLTH 151 — Wellness: Theory to Action	3
PHED 499D — Senior Capstone	3
Total Hours	49

Freshman Year

First Semester

ENG 100 — Writing I	
CIS 101 — Computer for Learning	
MATH Reasoning — (100 level)	
HPE 160 — Foundations of Health and P.E.	
CMSP 108 — Fundamentals of Speech	
MSU 101 — Discovering University Life	
Total	16

Second Semester

BIO 234 — Anatomy & Physiology I	
CHEM 101 — Survey of Chemistry or CHEM 111 — Principles of Chemistry I	
HLTH 151 — Wellness: Theory to Action	
PHED 205 — Lifetime Fitness	
SCI 103 — Phys Sciences or PHYS 201 — Elem Physics	
Total	16

Sophomore Year

First Semester

Social and Behavioral Sciences Gen Ed Elective	
Social and Behavioral Sciences Gen Ed Elective	
PHED 220 — Athletic Training	
HLTH 203 — Safety and First Aid	
ENG 200 — Writing II	
Humanities Gen Ed Elective	
Total	18

Second Semester

Humanities Gen Ed Elective	
PSY 154 — General Psychology	
Humanities Gen Ed elective	
BIO 235 — Anatomy & Physiology II	
HLTH 206/HS 201 — Principles of Nutrition	
Total	15

Junior Year

First Semester

HLTH 310 — Health and Wellness Promotion	
Elective	
PHED 315 — Motor Development/Motor Learning	
PHED 332 — Principles of Strength and Conditioning	
PHED 306 — Functional Anatomy/Biomechanics	
Total	15

Second Semester

PHED 326 — Exercise Program Leadership	
PHED 424 — Principles of Therapeutic Exercise	
PHED 432 — Physiology of Exercise	
PHED 301 — Evaluation in Exercise Science	
Elective	
Total	15

Senior Year

First Semester

PHED 423 — Exercise Management of Special Populations	
PHED 441 — Exercise Testing and Prescription	
PHED 453C or PHED 453B — Internship	
Elective	
Elective	
Total	15

Second Semester

PHED 450 — Planning and Managing Exercise Programs	
PHED 453A or PHED 453B — Internship	
Three Elective Courses	
Total	15

Summer I

PHED 499D — Senior Capstone	
Total	3
Total Hours	12

Associate of Applied Sciences in Respiratory Care

Carla Aagaard, Academic Counseling Coordinator

230 Reed Hall
(606) 783-2641

Faculty

M. Vice, J. Callihan

Program Competencies

The graduate will be able to:

1. Communicate effectively.
2. Think critically.
3. Learn independently.
4. Examine relationships in diverse and complex environments,
5. Perform cardiopulmonary diagnostic procedures, patient assessment and respiratory care planning.
6. Administer therapeutic and life support procedures in the management of patients with cardiopulmonary impairment.
7. Evaluate appropriateness of prescribed respiratory care and recommend modifications where indicated.
8. Select, assemble, check, correct malfunctions and assure cleanliness and calibration of respiratory care equipment.
9. Maintain an ethical and effective relationship with the health care team.
10. Perform essential elements of patient education.
11. Demonstrate an awareness of organizational and management principles related to respiratory care.
12. Perform and act on the results of advanced patient assessment techniques.
13. Assist the physician in special procedures of cardiopulmonary care.
14. Demonstrate skills and attitudes needed to maintain professional and technical competence.

Assessment Procedures

National Board for Respiratory Care Applied Measurement Professional Self-Assessment Examination, National Board for Respiratory Care Respiratory Therapy Program Surveys for Graduates and Employers related to educational preparation, graduate performance in the clinical area

Employment

Evaluation by Advisory Committee

Associate of Applied Sciences in Respiratory Care

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 procedure. Enrollment in the program is limited. In the event

there are more qualified applicants than available positions, students with the highest GPA will be accepted.

Application Procedure

1. Be unconditionally admitted to MSU.
2. Declare Respiratory Care as an area of concentration.
3. Enroll in required pre-respiratory care courses as outlined in the respiratory care curriculum sequence.
4. Submit a completed application packet to the Associate of Applied Science in Respiratory Care Program. The application packet includes:
 - a. Application for admission to Respiratory Care Program.
 - b. ACT scores or equivalent.
 - c. Official transcripts of all postsecondary work course.
 - d. Official high school transcript or GED certificate.
 - e. University/undergraduate catalog(s) if transfer credit is sought.
 - f. Course syllabi for all respiratory care courses completed if transfer credit is sought.
 - g. Verification of health and physical capabilities by completing health form provided by departments.
 - h. Prior to admission into the Respiratory Care Program, students are required to complete BIOL 234, CIS 101, ENG 100, MATH 135, and MSU 101.
 - i. Documentation of attendance at a preadmission conference or meeting with the program coordinator.
 - j. Documentation of observation hours.
5. Student selection process occurs in the Fall Semester preceding Spring admission.
6. In order to be considered for official admission to the Respiratory Care Program, all materials except the health form must be submitted to the address listed below before Nov. 15 preceding Spring admission:

Academic Counseling Coordinator, AAS in Respiratory Care

Department of Nursing
Reed Hall 230
Morehead State University
Morehead, KY 40351

Admission Criteria

Applicants to the Respiratory Care Program are selected based upon the following criteria:

1. American College Test (Enhanced ACT) scores or equivalent.
2. GED validation, if applicable. Preference will be given to a standard score of 50 or above.
3. Past performance in college/university: must have a GPA of 2.5 on a scale of 4.0 for all college level courses completed and a grade of "C" or better on BIOL 231 and MATH 135.
4. Health and physical capability requirements are documented by the completion of the required Health Form by a licensed physician(s), a physician assistant or a nurse practitioner upon completion of a thorough physical examination.
5. Respiratory courses will be taken at the Rowan campus on Monday, Wednesday, and Friday.

Admission procedures are reviewed on an annual basis. It is the applicant's responsibility to verify prior to the application deadline that the procedures/criteria have not been revised.

Conditions for Enrollment

1. Students may be assigned to clinical practicum areas other than those in the immediate Rowan County area, requiring traveling some distance from campus. Transportation to and from these settings is the responsibility of the student.
2. Clinical experiences and formal lectures may be required during various hours of the day, evening and night.
3. Students have the responsibility for the cost incurred by enrollment in the Associate of Applied Science degree in Respiratory Care Program. This cost may include clothing, equipment, malpractice insurance and academic materials.
4. Respiratory courses will be taken at the Rowan campus on Monday, Wednesday, and Friday.

Required Course Sequence for AAS Students

A total of 79 credit hours is required for the AAS degree that includes 32 credit hours of general education courses. The student will be required to complete the course sequence approved by the University and in place at the time of admission to the Associate Degree Respiratory Care Program. AAS in Respiratory Care program policies on challenge examination, transfer credit, academic standards and progression and criteria for taking the National Board for Respiratory Care examination can be obtained from the Department of Nursing.

First Semester (Fall)

BIOL 234 — Human Anatomy & Physiology I	3
CIS 101 — Computers for Learning or IET 110 - Intro to Computer Technology	3
ENG 100 — Writing I	3
MATH 135 — Mathematics for Technical Students	3
MSU 101 — Discovering University Life	1
Total	13

Second Semester (Spring)

*BIOL 235 — Human Anatomy & Physiology II	3
RCP 110 — Cardiopulmonary Anatomy & Physiology	3
RCP 120 — Theory and Principles of Respiratory Care	4
RCP 130 — Pharmacology	3
RCP 150 — Clinical Practice I	2
Total	15

Third Semester (Fall)

BIOL 217 — Elementary Medical Microbiology	4
PSY 154, 156, or SOC 101	3
RCP 125 — Cardiopulmonary Evaluation	4
RCP 175 — Clinical Practice II	3
RCP 180 — Ventilatory Support	3
RCP 228 — Preventive and Long-Term Respiratory Care	2
Total	19

Fourth Semester (Spring)

*ENG 200 — Writing II	3
RCP 190 — Advanced Ventilatory Support	2
RCP 200 — Clinical Practice III	3

RCP 204 — Emergency & Special Procedures I	3
RCP 212 — Neonatal/Pediatric Respiratory Care	3
*Humanities elective	3
Total	17

Fifth Semester (Fall)

*CMSP 108 — Fundamentals of Speech Communication	3
RCP 210 — Cardiopulmonary Pathophysiology	3
RCP 214 — Advanced Diagnostic Procedures	3
RCP 225 — Clinical Practice IV	3
RCP 250 — Clinical Practice V	3
Total	15

*Courses may be taken in previous semester(s) or no later than the summer session following the academic year period.

Department of Nursing

Erla G. Mowbray, Chair

234 Reed Hall
(606) 783-2296

Associate Degree Nursing Program

429 Reed Hall
(606) 783-2438
L. Mays, Coordinator-Morehead
M. Walters, Coordinator-Mt. Sterling

Faculty

A. Brown, T. Ferguson, A. Gross, T. Howell, L. Kiper, L. Mays, M. Roark, D. Rose, M. Walters

Program Competencies

The Associate Degree Nursing Program graduate will:

1. Integrate the role of the registered nurse into the nursing practice.
2. Incorporate effective communication skills in therapeutic and collaborative roles.
3. Evaluate the effectiveness of the use of the nursing process and clinical reasoning within a multicultural society.
4. Develop competency in the performance of caring behaviors to meet client care needs.
5. Integrate concepts of effective management of client care through prioritization, collaboration, coordination, delegation, and effective utilization of resources in dynamic health care systems.
6. Analyze legal, ethical and value-based issues embedded in nursing care.
7. Evaluate the influences of nutrition and pharmacology in the care of individuals with diverse backgrounds across the lifespan.
8. Incorporate current technologies and clinical informatics in the provision and management of nursing care.

Assessment Procedures

Course content and program outcomes are assessed by formative and summative standardized testing, and graduate performance

on the National Council Licensure Examination for Registered Nurse (NCLEX-RN). Students complete standardized testing at the completion of each course within the curriculum to evaluate course specific outcomes. Students complete standardized testing during the last week of the program to assess program outcomes. Following graduation each student must complete the NCLEX-RN to gain licensure as a registered nurse.

Associate of Applied Science

The ADN is a program of study leading to an Associate of Applied Science (AAS) degree with an area of concentration in nursing. The program combines general education studies with nursing theory and clinical education. The program is designed to prepare graduates for the role of the registered nurse. Graduates of the program are eligible to take the National Council Licensure Examination for Registered Nurses (NCLEX-RN). The ADN is accredited by the National League for Nursing Accrediting Commission Inc., 61 Broadway, New York, NY 10006. (800) 669-1656.

Admission Requirements and Procedures

The ADN has selective admission. Enrollment in the program is limited. In the event there are more qualified applicants than positions, students with the highest ACT scores will be accepted. The ADN offers programs at the Morehead campus and the Mt. Sterling campus.

Application Procedure

1. Be unconditionally admitted to MSU.
2. Submit a completed application packet to the ADN.
Completed admission packets include:
 - a. Completed ADN application.
 - b. Official American College Test (ACT).
 - 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. Licensed practical nurse applicant: in addition to the above materials, must submit verification of current LPN license and official transcript from LPN program.
 - b. Nursing transfer student: in addition to the above materials, must submit syllabi from nursing course(s) to be evaluated for transfer credit and a written letter of recommendation from the director/coordinator of the nursing program from which the student is transferring.
4. Student selection process occurs following the posting of midterm grades of the semester preceding admission.
5. Applicants reapplying to the ADN must submit new application materials in order to be considered for admission.
6. Students may be officially admitted to the ADN 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,
Reed Hall 234
Department of Nursing
Morehead State University
Morehead, KY 40351

Admission Criteria

The ADN has a limited enrollment on the Morehead and Mt. Sterling campuses. The following criteria will be used to determine conditional acceptance to the ADN for ADN and LPN-ADN applicants:

1. American College Test (Enhanced ACT) Score with a mandatory minimum composite score of 19.
2. Must have a minimum GPA of 2.5 with a minimum grade of "C" in general education and support courses required for the ADN and a minimum cumulative GPA of 2.0 on all work at MSU. Students with less than "C" on two courses required for the ADN in the last two years are not eligible for admission.
3. A minimum GPA of 2.5 with a minimum grade of "C" on the following prerequisite courses: BIOL 234, BIOL 235, ENG 100, MATH 135.

Applicants may be conditionally admitted to the program pending successful completion of prerequisite courses required for admission to the program by the end of the semester prior to admission. Midterm grades must be submitted by the applicant.

Preference will be given to students completing prerequisite courses by the end of the spring or fall semester prior to admission.
4. LPN applicants who meet the admission criteria may elect to begin at the first semester level or seek advanced placement through successful completion of NURA 110: LPN/ADN Transition Course.
5. Final acceptance will be dependent on maintaining course grades and grade point average as well as meeting requirements for CPR and Technical Performance Standards by established dates.

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.

Advanced Placement for Licensed Practical Nurses (LPNs)

LPN applicants may qualify for advanced placement into the third semester of the ADN. LPN applicants seeking advanced placement into NURA 202 (third semester of ADN) must: (1) hold an active license to practice as an LPN; (2) have an ACT score with mandatory minimum composite score of 19; and (3) have completed the first year of required support courses with a minimum grade of "C" in each course and overall GPA in required support courses of at least 2.5 on a 4.0 scale. Prerequisite courses

required to be completed prior to admission include: BIOL 234, BIOL 235, ENG 100, ENG 200, CMSP 108, PSY 156, MATH 135, CIS 101, MSU 101 and PSY 154 with a grade of "C" or better. Application **deadline is last Friday in March** preceding Fall admission and **last Friday in October** preceding spring admission.

LPN applicants who meet admission criteria may seek advance placement into NURA 202 (third semester) through:

Successful completion (grade "C" or better) of the last prerequisite course, NURA 110: LPN/ADN Transition Course and successful completion of an accredited LPN program will result in "K" credit for the first year of NURA courses (NURA 103, NURA 104, and NURA 105). NURA 110 must be completed within two years prior to admission to ADN.

Notes:

All ADN 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. ADN Application forms are available in the Department of Nursing, Reed Hall 234. Application forms are also available on the Web at www.moreheadstate.edu/nursing.

Conditions for Enrollment

1. Clinical education is a mandatory component of the program. Due to accreditation requirements of the clinical education centers, students are likely to 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 the incurred cost. Any student who fails acceptance to the clinical assignment will be unable to complete the program.
2. 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.
3. Clinical experiences and formal lectures may be required during various hours of the day, evening, and night.
4. Students have the responsibility for the cost incurred by enrollment in the ADN. This cost includes clothing, equipment, liability insurance, criminal background check, testing fees, and academic materials.

Required Course Sequence for ADN Students

A total of 69 credit hours is required for the AAS degree which includes 35 credit hours of general education and support courses and 34 credit hours of nursing courses. The student will be required to complete the course sequence approved by the University and in place at the time of admission to the ADN Program. ADN Program policies on challenge examination, transfer credit, academic standards and progression, and criteria for taking the National Council Licensure Examination can be obtained from the Department of Nursing.

Prior to Fall semester:

BIOL 234 — Human Anatomy & Physiology I 3

BIOL 235 — Human Anatomy & Physiology II 3
 ENG 100 — Writing I 3
 MATH 135 — Mathematics for Technical Students (141, 152, 174, 175 or Equivalent) 3
Total 12

First Semester

NURA 103 — Nursing I 6
 Computer Competence 3
 ENG 200 — Writing II 3
 MSU 101 — Introduction to University Life 1
 PSY 154 — Introduction to Psychology 3
Total 16

Second Semester

NURA 104 — Nursing II 4
 NURA 105 — Maternal Newborn Nursing 4
 CMSP 108 — Fundamentals of Speech Comm 3
 PSY 156 — Life Span Psychology 3
Total 14

Completion of BIOL 217 is encouraged prior to Second Level.

Third Semester

NURA 202 — Nursing III 4
 NURA 205 — Psychiatric Nursing 4
 BIOL 217 — Elementary Medical Microbiology 4
 BIOL 217L — Elementary Medical Microbiology Lab 0
 Humanities Elective 3
Total 15

Fourth Semester

NURA 206 — Nursing IV 8
 NURA 207 — Integrated Practicum 4
Total 12
Total Program Credits 69

Required Curriculum Sequence for LPN to ADN Students General education, nursing and support courses required prior to official admission to the ADN

BIOL 234 — Human Anatomy & Physiology I 3
 BIOL 235 — Human Anatomy & Physiology II 3
 CMSP 108 — Fundamentals of Speech Comm 3
 Computer Competence 3
 ENG 100 — Writing I 3
 ENG 200 — Writing II 3
 MATH 135 — Mathematics for Technical Students (141, 152, 174, 175 or Equivalent) 3
 MSU 101 — Introduction to University Life 1
 NURA 110 — LPN to ADN Transition 3
 PSY 154 — Introduction to Psychology 3
 PSY 156 — Life Span Psychology 3
Total 31

Completion of BIOL 217 prior to beginning of the first semester is recommended.

First Semester

NURA 202 — Nursing III	4
NURA 205 — Psychiatric Nursing	4
BIOL 217 — Elementary Medical Microbiology	4
BIOL 217L — Elementary Medical Microbiology Lab	0
Humanities Elective	3
Semester Total	15

Second Semester

NURA 206 — Nursing IV	8
NURA 207 — Integrated Practicum	4
Semester Total	12

Total Program Credits **58**

After official admission to the ADN, LPN to ADN students receive transfer credit for the following nursing courses.

NURA 103 - Nursing I	6
NURA 104 - Nursing II	4
NURA 105 - Maternal Newborn Nursing	4
Total	14

Bachelor of Science in Nursing

Faculty

N. Bush, C. Bledsoe, T. Clark, K. Clevenger, S. Johnson, M. McClave, E. Mowbray, V. Sammons

Program Competencies

Upon completion of the Baccalaureate Nursing Program (BNP), the graduate will be able to demonstrate the role of the professional nurse by:

1. Demonstrating the application of critical thinking skills through the nursing process in the planning and provision of nursing care.
2. Communicating effectively in a variety of spoken, written, and technological formats.
3. Demonstrating competence, initiative, and commitment to the nursing profession.
4. Integrating current scientific knowledge, nursing theory and nursing research to deliver quality health care in accordance with the ANA Standards of Care and Code of Ethics for Nurses.
5. Assuming leadership roles within interdisciplinary health care teams and the profession of nursing.
6. Providing compassionate, sensitive, spiritual and culturally appropriate nursing care for patients at any stage of the life span.
7. Analyzing global issues in the context of cultural diversity.
8. Creating a health care environment that is conducive to wellness and health promotion.

Assessment Procedures

Standardized examinations in specific nursing areas
National Council Licensure Examination for Registered Nurses upon graduation
BNP surveys of graduates and employers

Bachelor of Science in Nursing (BNP)

The BNP offers a program of study which combines general education courses with professional nursing theory and clinical education. The program prepares the graduates for the role of the professional nurse and provides a foundation for graduate study. Graduates of the program are eligible to take the National Council Licensure Examination for registered nurses. The BNP also has a Postlicensure (RN Track) component where graduates of associate degree and diploma nursing programs may pursue the baccalaureate degree. The BNP is accredited by the Commission on Collegiate Nursing Education (CCNE):

One Dupont Circle NW

Suite 530
Washington, DC 20036
(202)-887-6791

BNP 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. University undergraduate catalog(s) if transfer credit is sought.
 - f. Course syllabi for all nursing courses completed if transfer credit is sought.
 - g. 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. In order to be considered for official admission to the prelicensure component of 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
234 Reed Hall
Department of Nursing
Morehead State University
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 limited enrollment. In the event there are more qualified applicants than available positions, students with the highest GPA will be accepted. Applicants to the BNP are selected based upon the following criteria:

1. Completion of the 35 credit hours of the required pre-nursing courses listed in the curriculum sequence for the first year
2. A GPA of 2.75 or above (with no rounding) based on the required 35 credits with no grade being less than a "C."
3. A minimum grade point average of 2.5 or above for BIOL 234 - Anatomy & Physiology I, BIOL 235 - Anatomy & Physiology II, and MATH 135: Math for Technical Students (or the equivalent).
4. 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.
5. Applicants who are currently enrolled but have not yet completed the required 18 semester hours of the second semester are eligible for conditional acceptance based on midterm grades. A copy of current midterm grades must be submitted with the application packet. Final acceptance will be dependent on maintaining course grades and GPA as outlined in the above criteria.
6. Compliance with the Technical Performance Standards.
7. Possess current certification by American Heart Association in Basic Life Support for Health Care Providers (CPR).
8. Documentation of compliance with all health requirements.

BNP-Postlicensure (RN Track) Component Admission Requirements and Procedures

Application Procedure

1. Be unconditionally admitted to MSU.
2. Declare nursing as the area of concentration and meet with assigned nursing faculty advisor.
3. Submit required materials listed below to the Baccalaureate Nursing Program by March 15 for admission into the Fall Semester or Sept. 1 for admission into the Spring Semester:
 - a. Completed BNP application.
 - b. Transcripts from MSU and all universities/colleges attended if courses not listed on MSU transcript.
 - c. Undergraduate catalog(s) if transfer credit is sought.

- d. Validation of current Kentucky nursing licensure.
- e. Validation of current American Heart Association certification in Basic Life Support for Healthcare Providers (CPR).
- f. Verification of professional malpractice insurance.

Regional Academic Counseling Coordinator
BNP Postlicensure Track Component
Department of Nursing, 234 Reed Hall
Morehead State University
Morehead, KY 40351

BNP Postlicensure (RN Track) Component Admission Criteria

Applicants must:

1. Be unconditionally admitted to MSU.
2. Hold an active and unrestricted license to practice as a RN in the state where the practicum will take place.
3. Be a graduate of an Associate Degree Nursing or Diploma program. The diploma graduate must satisfactorily complete national standardized exams for the RN student which generates academic credit for diploma level nursing courses.
4. Have completed 53 credit hours of prescribed general education and support courses required for a bachelor's degree in nursing.
5. Hold a minimum cumulative grade point average of 2.5 on all coursework required for admission to the post licensure component of the Baccalaureate Nursing Program.
6. Hold a minimum grade of "C" in each of the required general education, support and nursing courses.
7. Possess current certification by the American Heart Association (AHA) cardiopulmonary resuscitation (CPR) in Basic Life Support for Healthcare Providers.
8. Possess professional malpractice insurance.
9. Comply with Technical Performance Standards.
10. Provide documentation of required immunization requirements.
11. Provide documentation of a criminal background check.

Required Course Sequence for BNP (Prelicensure)

A total of 128 credit hours is required for the BSN degree which includes 64 credit hours of general education and support courses and 64 credit hours of nursing courses. BNP policies on challenge examination, transfer credit, academic standards and progression, and criteria for taking challenge exams can be obtained from the Department of Nursing.

The student will be required to complete the course sequence approved by the University and in place at the time of admission into the BNP. The generic (prelicensure) sequence follows:

Freshman Year

First Semester

BIOL 234 — Human Anatomy & Physiology I	3
CHEM 101 — Survey of Chemistry & CHEM 101L	4
ENG 100 — Writing I	3
MATH 135 — Math for Technical Students, or (141, 152, 174, 175,)	3

MSU 101 — Discovering University Life	1
PSY 154 — Introduction to Psychology	3
Semester Total	17

Second Semester

BIOL 235 — Human Anatomy & Physiology II	3
CIS 101 — Computers for Learning	3
CMSP 108 — Fundamentals of Speech Comm	3
ENG 200 — Writing II	3
PSY 156 — Lifespan Developmental Psychology	3
SOC 101 — General Sociology	3
Semester Total	18

Sophomore Year

First Semester

BIOL 217 — Elementary Medical Microbiology	4
NURB 260 — Wellness and Health Promotion	4
NURB 262 — Foundational Skills for Prof. Nursing	5
Humanities elective	3
Semester Total	16

Second Semester

BIOL 336 — Pathophysiology	4
NURB 264 — Family Health Nursing	6
NURB 266 — Community-Based Nursing Care	5
Humanities elective	3
Semester Total	18

Junior Year

First Semester

NURB 320 — Care of Older Adults	5
NURB 322 — Mental Health Nursing	4
MATH 353 — Statistics	3
HUM 340 — Hlth & the Hispanic Community: Cultural Perspectives	3
Semester Total	15

Second Semester

NURB 324 — Acute Alterations in Adult Health I	6
NURB 326 — Advanced Nursing Assessment	2
NURB 361 — Nursing Research	3
Practical living elective	3
Social & Behavioral Science elective	3
Semester Total	17

Senior Year

First Semester

NURB 420 — Acute Alterations in Adult Health II	7
NURB 422 — Chronic Alterations in Health	5
NURB 424 — Public Health	3
Semester Total	15

Second Semester

NURB 461 — Nursing Leadership and Management	3
NURS 345 — Global Health	3
NURB 499C — Advanced Nursing Practicum	6

Semester Total 12

Notes:

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.

Required Curriculum Sequence for BNP Postlicensure Students

General education, support, and nursing courses required prior to official admission to the Postlicensure Component:

BIOL 217 — Elementary Medical Microbiology	4
BIOL 234 — Human Anatomy & Physiology I	3
BIOL 232 — Human Anatomy & Physiology II	3
CHEM 101 — Survey of Chemistry & CHEM 101L	4
CIS 101 — Computers for Learning	3
CMSP 108 — Fundamentals of Speech Comm	3
ENG 100 — Writing I	3
ENG 200 — Writing II	3
MATH 135 — Mathematics for Technical Students or (141, 152, 174, 175)	3
PSY 154 — Introduction to Psychology	3
PSY 156 — Lifespan Developmental Psychology	3
SOC 101 — General Sociology	3
Two Free electives	6

Nine credit hours of the following general education requirements:

Humanities electives (three different prefixes)	9
Social and Behavioral Science elective	3
Practical Living elective	3
Total	53

Junior Year

First Semester

NURB 327 — Transition to Prof. Nursing Practice	4
NURB 326 — Advanced Nursing Assessment	2
BIOL 336 — Pathophysiology	4
MATH 353 — Statistics	3
Semester Total	13

Second Semester

HUM 340 — Hlth & the Hispanic Community: Cultural Perspectives	.3
NURB 361 — Nursing Research	3
NURB 424 — Public Health	3
NURS 345 — Global Health	3
Nursing elective (must be >300 level)	3
Semester Total	15

Third Semester

NURB 461 — Nursing Leadership and Management	3
NURB 499C — Advanced Nursing Practicum	6
General education elective (must be >300 level)	3
Free elective greater than 300 level	3
Semester Total	15

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 Postlicensure (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 43 credit hours of courses numbered 300 and above. In order to obtain the required number of hours, the student must take at least one general education elective (Humanities, Social & Behavioral Science or Practical Living) at the 300 or above level. A free elective must also be taken at the 300 or above level and is in addition to the general education elective at 300 or above level.

Progression to any nursing course required in the final semester of the RN-BSN curriculum will be restricted to those admitted students who have met all program requirements for progression into the final semester.

Course Abbreviations

ACCT	Accounting	ITL	Italian
AGR	Agriculture	ITMT	Manufacturing
APS	Appalachian Studies	LAT	Latin
ART	Art	LEAD	Leadership
ASTR	Astronomy	LSIM	Library Science and Instructional Media
BIOL	Biology	MATH	Mathematics
BIS	Business Information Systems	MKT	Marketing
CHEM	Chemistry	MNGT	Management
CHI	Chinese	MS	Military Science
CIS	Computer Information Systems	MSU	University Studies
CMAJ	Communication (Advertising/Public Relations)	MUSC	Music (Conducting)
CMEM	Communication (Electronic Media)	MUSE	Music (Education)
CMJN	Communication (Journalism)	MUSG	Music (Class Applied)
CMSP	Communication (Speech)	MUSH	Music (History and Literature)
COMM	Communication (General)	MUSM	Music (Ensembles)
CRIM	Criminology	MUSP	Music (Private Applied)
CRW	Creative Writing	MUST	Music (Theory and Composition)
CS	Computer Science	MUSW	Music (Research)
CTE	Career and Technical Education	NURA	Nursing (Associate)
CTMR	Computed Tomography/Magnetic Resonance	NURB	Nursing (Bachelor's)
DMS	Diagnostic Medical Sonography	NURS	Nursing
ECON	Economics	PDI	Personal Development Institute
EDAH	Education (Adult and Higher)	PHED	Physical Education
EDEC	Education (Early Childhood)	PHIL	Philosophy
EDEE	Education (Early Elementary — P-5)	PHYS	Physics
EDEL	Education (Elementary)	PLS	Paralegal Studies
EDEM	Education (Early Elementary and Middle Grades)	PSY	Psychology
EDF	Education (Foundations)	RAPP	Regional Analysis and Public Policy
EDGC	Education (Guidance and Counseling)	RCP	Respiratory Care Program
EDMG	Education (Middle Grades — 5-9)	REAL	Real Estate
EDSE	Education (Secondary)	REL	Religion
EDSP	Education (Special)	RSCI	Radiologic Sciences
EDUC	Education (Professional)	RUS	Russian
ENG	English	SCI	Science
ESS	Earth Systems Science	SOC	Sociology
FIN	Finance	SPA	Spanish
FNA	Fine Arts	SPMT	Sport Management
FRN	French	SSE	Space Science and Engineering
GEO	Geography	SWK	Social Work
GER	German	THEA	Theatre
GOVT	Government	VET	Veterinary Technology
HIS	History	WST	Women's Studies
HLTH	Health		
HON	Honors		
HPE	Health & Physical Education		
HS	Human Sciences		
HUM	Humanities		
IECE	Interdisciplinary Early Childhood Education		
IET	Industrial and Engineering Technology		
IMS	Imaging Sciences		
IST	International Studies		
ITCM	Construction Management		
ITCD	Computer Aided Design		
ITCG	Computer Aided Graphics		
ITEC	Electrical, Electronics, Telecommunications and Computer Technology		

Course Descriptions

NOTE: (3-0-3) following a course title means three hours class, no laboratory, three hours credit. Roman numerals I, II, III following the credit hour allowance indicate the term in which the course is normally scheduled: I — Fall, II — Spring, III — Summer. Many required courses are on a rotation. Students should plan their semesters according to when these courses are offered.

Accounting Courses

ACCT 281. Principles of Financial Accounting. (3-0-3); I, II.

An introduction to financial accounting and financial reporting for business. Topics covered include: how decision makers use balance sheets, income statements, and other information found within financial statements; the accounting cycle; accounting and reporting of balance sheet accounts and their articulated income statement accounts.

ACCT 282. Principles of Managerial Accounting. (3-0-3); I, II.

Prerequisite: ACCT 281. An introduction to managerial accounting and decision making. Topics covered include: job order costing, process costing, activity-based costing, cost-volume-profit relationships, the statement of cash flows and financial statement analysis.

ACCT 339. Cooperative Education III. (1 to 8 hrs.); I, II.

Prerequisite: consent of departmental cooperative education coordinator required. Work experience with an in-depth exposure representative of the student's academic level and experience analogous to a junior level status. Maximum of three hours of cooperative education credit (ACCT 339/439) available for option credit.

ACCT 375. Accounting Analysis and Financial Decision Making. (3-0-3); on demand.

Prerequisites: ACCT 282, CIS 101, FIN 360. Interpretation and development of accounting and financial data and statements incorporating spreadsheet analysis and applications. Cross listed with FIN 375.

ACCT 381. Intermediate Accounting I. (3-0-3); on demand.

Prerequisites: ACCT 281 and 282 with a minimum grade of "C." The first of three intermediate-level financial accounting courses. Topics covered will include study of: the environment under which accounting standards are established; the conceptual framework for financial accounting; the accounting cycle; requirements for the presentation of the income statement, balance sheet, and statement of cash flows, time value of money concepts; and accounting for cash, accounts receivable and inventories.

ACCT 382. Intermediate Accounting II. (3-0-3); on demand.

Prerequisite: ACCT 381 with a minimum grade of "C." The second of three intermediate-level financial accounting courses. Topics covered will include accounting for: acquisition and depreciation of fixed assets, intangible assets, current liabilities, contingencies, long-term liabilities, stockholders' equity, retained earnings, dilutive securities, earnings per share, investments, and revenue recognition.

ACCT 383. Intermediate Accounting III. (3-0-3); on demand.

Prerequisite: ACCT 381. The third of the three intermediate-level financial accounting courses. Topics covered will include accounting for: income taxes, pensions, postretirement benefits, leases, changes and errors, and changing prices. Other topics include the cash flow statement, basic financial statement analysis, and methods of full disclosure.

ACCT 387. Income Tax. (3-0-3); I.

Prerequisite: ACCT 282 with a minimum grade of "C." Income tax legislation, federal and state; returns for individuals; gross income; basis for gains and losses; capital gains and losses; dividends; deductions; withholding.

ACCT 388. Practice in Personal Tax Accounting. (3-3-3); II.

Prerequisites: ACCT 387 and consent of instructor. Income tax legislation, federal and state; preparing returns for elderly and low income individuals; gross income; capital gains and losses; dividends; interest; deductions; withholdings. Available for option credit.

ACCT 390. Cost Accounting I. (3-0-3); on demand.

Prerequisite: ACCT 282 with a minimum grade of "C." Control and classification of manufacturing costs, job order and process cost analysis; materials, labor, and overhead analysis; joint and by-product costing.

ACCT 391. Accounting Information Systems. (3-0-3); on demand.

Prerequisite: ACCT 282 with a minimum grade of "C." Examination of accounting information systems within a context of contemporary technology. The course focuses on terms, concepts, and technology found within the accounting information systems environment; accounting cycles and control of accounting information systems; theory and practices relating to systems development; and reporting practices related to accounting information systems.

ACCT 399. Selected Workshop Topics. (1 to 4 hrs.); on demand.

Workshops on various accounting subjects will be presented

periodically. These workshops supplement the basic accounting courses. Credit toward degree programs must be approved by the student's advisor and the department chair.

**ACCT 428. Governmental Accounting.
(3-0-3); on demand.**

Prerequisite: ACCT 282 or equivalent with a minimum grade of "C." Study of fund accounting techniques for government accounting terminology and budgeting processes; operations of general revenue and expense, capital project, debt service, trust, intragovernment, special assessment, and enterprise funds analysis of fixed assets and liabilities, and basics of hospital and public school fund accounting.

**ACCT 439. Cooperative Education IV.
(1 to 8 hrs.); I, II.**

Prerequisite: consent of departmental cooperative education coordinator required. Work experience with an in-depth exposure representative of the student's academic level and experience analogous to a senior-level status. Maximum of three hours of cooperative education credit (ACCT 339/439) available for option credit.

**ACCT 475. Controllership.
(3-0-3); on demand.**

Prerequisite: ACCT 282 or equivalent with a minimum grade of "C." Emphasis on appreciation of the function of the controller in a contemporary business organization. Planning for control, reporting, and interpreting operation results, evaluating new programs, tax administration and other types of required government reporting, economic appraisal of programs, and the protection of assets.

**ACCT 476. Special Problems in Accounting.
(1 to 3 hrs.); on demand.**

Prerequisite: completion of 18 hrs. in accounting, senior standing in accounting and consent of department chair. This course is an independent study of an accounting problem of special interest. Students must present in writing a suggested problem and justification for the study prior to registration. Each request will be considered on its own merit in relation to the special needs of the students.

**ACCT 482. Advanced Accounting.
(3-0-3); on demand.**

Prerequisite: ACCT 382 with a minimum grade of "C." Accounting for requisitions, consolidations, and mergers; purchasing and pooling methods of business combinations, parent and subsidiary accounting for consolidated balance sheets; income statements; statement of changes in financial position; international operations; partnerships; installment sales; consignments; home office and branch accounting.

**ACCT 483. Auditing.
(3-0-3); on demand.**

Prerequisite: ACCT 382 with a minimum grade of "C." Accounting principles applied to internal control systems; audit working papers; detail audit; internal audit; special and fractional audits; audit reports; tests and procedures used in auditing, ethical responsibilities of CPAs.

**ACCT 485. Forensic Accounting.
(3-0-3); on demand.**

Prerequisites: ACCT 381 and ACCT 387 with a minimum grade of "C." An introduction to the fundamental concepts, as well as the more complex and developing issues of modern forensic accounting. Topics include: fraud auditing, litigation support, cybercrime, and business valuations.

**ACCT 486. Accounting Internship.
(1 to 4 hrs.); on demand.**

Prerequisites: completion of 18 hrs. in accounting and consent of department chair. On-the-job professional experience in accounting working under the supervision of a CPA arranged through cooperating public accounting firms and governmental agencies.

**ACCT 487. Advanced Tax Accounting II.
(3-0-3); on demand.**

Prerequisite: ACCT 387 with a minimum grade of "C." Federal income tax report preparation with emphasis on partnership and corporation returns; estate and trust taxation; gift tax; special problems in taxation, tax research.

**ACCT 490. Cost Accounting II.
(3-0-3); on demand.**

Prerequisite: ACCT 390 with a minimum grade of "C." Cost analysis for planning, evaluation, and control. Standard costs, direct costing, budgets, cost and profit analysis, alternative choice decisions, linear programming, capital budgeting.

**Acct 495. Business Valuations.
(3-0-3); on demand.**

Prerequisites: Acct 383, Acct 387, Fin 360. A study of the principles, applications and models for valuing various types of businesses, in various industries, and for various purposes, such as mergers, estates, litigation, etc. Also includes regulations governing business valuation reports.

Agriculture Courses

**AGR 101. Orientation to Agriculture.
(1-0-1); I.**

The importance of agriculture in the community, state, nation, and world, including career opportunities.

**AGR 102. Agricultural Experience.
(1 to 2 hrs.); I, II, III.**

The course is designed to provide students with basic competencies in the agricultural sciences. Enrollment is limited to students in agricultural programs. Students are required to complete two credit hours.

**AGR 108. Elementary Horsemanship (Stock Seat).
(0-2-1); I, II.**

Includes riding basics in relation to stock seat, such as leading a horse, bridling and saddling, grooming, mounting, dismounting, stopping, starting, turning the horse, riding at different gaits, horsemanship safety and ring etiquette, plus general overall knowledge of horses.

**AGR 109. Elementary Horsemanship (Saddle Seat).
(0-2-1); I, II.**

Includes riding basics in relation to saddle seat, such as leading a horse, checking saddle and bridle; mounting and dismounting, stopping, starting, turning, and backing the horse, riding horses at different gaits, horsemanship safety and ring etiquette; plus general overall knowledge of horses. Equates with PHED 109.

**AGR 110. Elementary Horsemanship (Hunt Seat).
(0-2-1); I, II.**

Includes riding basics in relation to hunt seat, such as leading a horse, checking saddle and bridle; mounting and dismounting, stopping, starting, turning, and backing the horse; riding horses at different gaits, horsemanship safety and ring etiquette; and general overall knowledge of horses.

**AGR 118. Intermediate Horsemanship (Stock Seat).
(0-2-1); I, II.**

Includes review of elementary horsemanship (stock seat) techniques; handling horses properly from the ground; grooming and tacking-up; more advanced riding skills such as 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); I, II.**

Includes review of elementary horsemanship (saddle seat) techniques; handling horse properly from ground; grooming, tacking-up; more advanced riding skills such as leg 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); I, II.**

Intermediate review of elementary horsemanship (hunt seat) techniques; handling horse properly from ground; grooming, tacking-up; more advanced riding skills such as leg 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); I, II.**

Fundamental genetics, nutrition, and physiology of beef and dairy cattle, swine, sheep, and horses.

**AGR 143. Anatomy and Physiology of Livestock.
(3-0-3); I.**

An introduction to the comparative anatomy and physiology of common livestock species, including horses, beef and dairy cattle, swine, sheep, and goats. The focus of this course will be on the structure and function of the various organ systems of livestock and how they relate to management practices.

**AGR 180. Introduction to Field Crops.
(2-2-3); II.**

A study of the national and international distribution and importance of major food, feed, oil, fiber, and miscellaneous crops; natural requirements and human inputs for production; current practices in production technology; crop morphology.

**AGR 202. Agricultural Plants and Humanity.
(3-0-3); I.**

The roles agronomic and horticultural plants play in the improved physical and mental health of individuals, in the social and cultural development of countries and communities, and in maintaining an ecologically-sound planet. *This course satisfies area studies-practical living for general education.*

**AGR 204. World Food.
(3-0-3); II.**

Analysis of contemporary problems and issues of public concern relating to food, agriculture, and rural areas using the tools of fundamental economic concepts. Farm income, food prices, world food problems, natural resources, environment, and rural development issues will be studied. *This course satisfies area studies-social and behavioral sciences for general education.* Equates with IST 204.

**AGR 205. Farm Records.
(3-0-3); on demand.**

Development and application of farm records necessary for farm business analysis, including a study of types of inventories, depreciation schedules, cost determining, and record keeping.

**AGR 211. Soils.
(2-2-3); I, III.**

Prerequisite: CHEM 101. Study of origin, formation, composition, and classification of soils; the physical, chemical, and biological properties of the soil; texture, structure, and nutrient holding capacities in relation to plant growth and soil management.

**AGR 212. Landscape Plants.
(2-2-3); on demand.**

A study of ornamental trees, shrubs, and vines commonly used in landscaping. Emphasis is placed on identification, characteristics, adaptability, and maintenance.

**AGR 213. Landscape Design.
(2-2-3); on demand.**

Prerequisite: AGR 212. An introduction to residential landscape design. Emphasis on the design process, design principles, and selection of plants and man-made materials.

**AGR 215. Horticultural Science.
(2-2-3); II.**

A study of the basic principles underlying horticultural practices in fruit growing, vegetable gardening, landscape gardening, and floriculture.

**AGR 221. Equitation.
(1-4-3); I.**

Study and application of basic equitation techniques as it applies to various breeds and styles of riding. Figure work.

**AGR 222. Livestock Evaluation.
(2-2-3); II, odd years.**

Prerequisite: AGR 133. An introduction to growth, development and fattening of meat animals. Evaluation of live animal and carcass characteristics of cattle, sheep and swine.

**AGR 224. Greenhouse Operations.
(2-2-3); on demand.**

Prerequisite: AGR 215. Study of the greenhouse industry, media,

watering, fertilization, insects, diseases, chemical growth regulators, hydroponics, and cost-accounting.

AGR 233. Animal Diseases and Parasites.
(2-2-3); I, odd years.

Prerequisite: AGR 133. Study of the diseases and parasites of food animals. Mechanisms of disease processes, treatments, and preventative measures for the common pathologic conditions in livestock. Environmental and management factors that impact diseases and parasites will also be studied.

AGR 235. Supervised Work Experience.
(1 to 6 hrs.); I, II, III.

Prerequisite: consent of the instructor required. A supervised work experience program for students planning careers in agriculture upon completion of the associate degree program.

AGR 239. Cooperative Education.
(1 to 12 hrs.); I, II, III.

Prerequisite: consent of department chair. Work experience with an in-depth exposure representative of the student's academic level and experience analogous to a sophomore level course.

AGR 243. Equine Health and Disease.
(2-2-3); II.

A general study of the anatomy and physiology of the horse, first aid, diseases and parasites, normal and abnormal behavior and how they relate to herd health management.

AGR 245. Horseshoeing.
(2-2-3); on demand.

The fundamentals of horseshoeing; the basic use of farrier tools; anatomy and physiology of the foot, pastern, and legs. Trimming feet, fitting and nailing shoes, normal and corrective shoeing.

AGR 251. Introduction to Agricultural Mechanics.
(2-2-3); II.

Farm shop organization; shop safety; selection, use, and maintenance of hand and power tools and equipment for construction and maintenance in agriculture; practical exercises and projects to develop essential skills.

AGR 261. Information Acquisition and Analysis.
(2-2-3); I.

The study of the processes used in collecting, organizing, evaluating, and presenting data and information through the use of computerized data collection and analysis systems. Application software commonly used in the various disciplines of Agricultural Sciences. *This course satisfies the computer competency requirement for general education.*

AGR 300. Pest Management.
(2-2-3); II.

Studies in the nature and management of agricultural pests. Discussion will include but not be limited to such topics as pest types; pest damage; cultural, biological, and chemical management strategies; integrated pest management; economic, health, and safety perspectives; and utilization techniques.

AGR 301. Farm Management.
(3-0-3); I.

Farm organization, fitting livestock and cropping programs into a functioning unit, profit maximization and least cost combination

of resources for a specified level of production.

AGR 302. Agriculture Finance.
(3-0-3); on demand.

A study of farm capital structure and needs. The policy and practices of institutions offering credit to farmers are analyzed.

AGR 303. Land Economics.
(3-0-3); on demand.

Farm selection and appraisal of land resources; adaptation of land as the basis for farm organization and agricultural production; study of land tenure systems; rights of ownership; recreational possibilities of nonproductive land.

AGR 305. Marketing of Farm Products.
(3-0-3); on demand.

Development of geographical specializations, demand and supply schedules of agricultural products, price equilibrium, long and short run cyclical price movements, hedging in futures, demand expansion, increasing operational and pricing efficiency, specific commodity marketing.

AGR 308. Weed Science.
(2-2-3); I, even years.

Prerequisite: AGR 180. Identification and classification of weed species, methods of reproduction, and growth characteristics. Effects on livestock, crop yield and quality, and human well-being; management methods and technology.

AGR 311. Soil Conservation.
(2-2-3); I.

Land resources, capabilities, and uses; land use planning; agricultural, construction, mining, and other use effects on soil resources, geologic and accelerated erosion; soil pollution, economics of soil conservation; conservation practices and philosophies.

AGR 312. Soil Fertility and Fertilizers.
(3-0-3); II, odd years.

Prerequisite: AGR 211. A study of plant nutrient needs and uptake; soil nutrient supplying ability; nutrient - soil interactions; chemical forms; fertilizer source materials and manufacture; soil testing and fertility management; economic fertilizer use.

AGR 314. Plant Propagation.
(2-2-3); II, even years.

Prerequisite: AGR 215. A study of the principles and practices of the propagation of horticultural plants. Includes seeding, layering, cutting, division, grafting, and budding.

AGR 315. Fruit Production.
(2-2-3); I, on demand.

Prerequisite: AGR 215. Tree fruits, nuts, and small fruits; varieties, sites, soils, pruning, pest control, planning, and commercial marketing.

AGR 316. Feeds and Feeding.
(2-2-3); I.

Prerequisites: AGR 133 and CHEM 201. Feeds and formulation of rations; fats, carbohydrates, proteins, and their digesting; the role of minerals, vitamins, and feed additives in nutrition.

AGR 317. Floral Design.**(2-2-3); I, II.**

A beginning course for floral design dealing with basics in arranging fresh, dried, and permanent flowers and foliage.

AGR 318. Landscape Maintenance.**(2-2-3); on demand.**

Prerequisites: AGR 212 and 215. Basic maintenance of tree, shrub, ground cover, and annual plants, including fertilizing, mulching, pests, planting, pruning, training, and watering.

AGR 319. Herbs.**(2-2-3); on demand.**

Prerequisite: AGR 215 or BIOL 150. A study of the history, culture, uses, and marketing of culinary, medicinal, and aromatic herbs.

AGR 320. Principles of Vegetable Production.**(2-2-3); on demand.**

Prerequisite: AGR 215. Principles of commercial and home vegetable production and handling. Includes soil; ecological and 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); on demand.**

Prerequisite: AGR 215. Design, selection of plants, installation, and maintenance of interior landscapes in offices, homes, and public buildings.

AGR 324. Greenhouse Structures.**(2-2-3); on demand.**

Prerequisite: AGR 215. Study of factors involved in locating, constructing, and equipping a greenhouse. Studies include coverings, heating, cooling, ventilating, CO₂ injectors, benches, watering and fertilizer application systems, supplemental lighting, environmental control systems, and hothouses.

AGR 325. Turf Management.**(2-2-3); I, odd years.**

Prerequisite: AGR 215. Turf grass varieties, basic principles of production and their practical application to establishment, maintenance, renovation, and pest control on lawns, playgrounds, and sports turf areas.

AGR 326. Nursery Management.**(2-2-3); on demand.**

Prerequisites: AGR 215 and 314. Selection, systems of culture, harvesting and management of ornamental trees, shrubs, and vines.

AGR 327. Advanced Landscape Design.**(2-2-3); on demand.**

Prerequisites: AGR 212 and 213. Selection and location of ornamental plants for large properties such as schools, playgrounds, estates, apartment complexes, and factories. Preparing specifications and bids.

AGR 328. Floral Crop Production.**(2-2-3); on demand.**

Prerequisites: AGR 215 and 224. Production of bedding plants, flowering potted plants, cut flowers, and foliage plants.

AGR 329. Advanced Stock Seat Horsemanship.**(1-4-3); II, odd years.**

Develop skills of performance equitation. Specific skills needed in the training or showing of western horses, halter, pleasure, and reining.

AGR 330. Livestock Improvement.**(2-2-3); II, odd years.**

Prerequisite: AGR 133. Study of the principles, practices, and procedures of animal breeding, selection and mating systems and their application for farm livestock production and improvement.

AGR 332. Advanced Saddle Seat Horsemanship.**(1-4-3); II, even years.**

Develop skills of performance equitation. Specific skills needed in driving, training, and showing of saddle seat style horses.

AGR 333. Advanced Hunt Seat Horsemanship.**(1-4-3); I, even years.**

Develop skills of performance equitation. Specific skills needed in training or showing of hunter horses, jumping and course design.

AGR 335. Equitation Teaching.**(2-2-3); II, odd years.**

Prerequisite: AGR 221. The techniques of horsemanship and methods of equitation instruction.

AGR 336. Dairy Production.**(2-2-3); II, odd years.**

Prerequisite: AGR 133. A general study of the factors involved in the management of a dairy cow herd, including herd operation, records, breeding programs, diseases and principles of nutrition.

AGR 337. Poultry Production.**(2-2-3); I, even years.**

Prerequisite: AGR 133. Principles of poultry production including common breeds of chickens, incubation, breeding, housing, nutrition, diseases, and general management practices.

AGR 338. Livestock Judging.**(1-5-3); II, odd years.**

Study and practice of the principles of livestock judging. The student will be expected to gain an understanding of phenotypic appearance as it relates to important economic traits and genetic improvement of livestock.

AGR 339. Cooperative Education.**(1 to 12 hrs.); I, II, III.**

Prerequisite: consent of department chair. Work experience with an in-depth exposure representative of the student's academic level and experience analogous to a junior level course.

AGR 342. Horse Production.**(2-2-3); I, even years.**

A general study of the history and development of breeds of the horse, the relationship of form to function, horse selection, horse breeding, feeding and genetics.

AGR 343. Beef Production.**(2-2-3); I, odd years.**

Prerequisite: AGR 133. The history, development, and distribution of breeds; sources of cattle and carcass beef; production and distribution practices in steer feeding; commercial and purebred

breeding herds.

AGR 344. Swine Production.

(2-2-3); I, even years.

Prerequisite: AGR 133. History, development, and distribution of types of breeds; management practices, including disease problems in commercial and purebred herds.

AGR 345. Sheep Production.

(2-2-3); II, even years.

Prerequisite: AGR 133. History, development, and distribution of types and breeds; selection, breeding, feeding, and management of sheep; production and handling of wool.

AGR 350. Farm Power and Machinery Management.

(2-2-3); I.

Selection, operation, maintenance, and servicing of agriculture power and machinery units.

AGR 380. Equine Management.

(2-2-3); I, odd years.

Management and practices in various horse operations as they relate to buildings and equipment, sanitation, pasture and feed selection, supervision of laborers, public relations, legalities and liabilities, and record keeping systems.

AGR 384. Forage Crops.

(2-2-3); II, even years.

Prerequisite: AGR 180. The distribution of various forage crops and their adaptations to soil and climate; seeding rates and mixtures; productivity; pest control; and preservation and utilization methods.

AGR 385. Agribusiness Management.

(3-0-3); on demand.

Management of the agribusiness functions, responsibilities, and operational characteristics unique to an agriculturally related business, particularly cooperatives.

AGR 386. Introduction to Agricultural Policy.

(3-0-3); on demand.

A history of agricultural policy and policy making; defining the problems and their settings, government participation in supply and demand for agricultural products.

AGR 388. Methods of Curriculum Development.

(3-0-3); II.

Prerequisite: CTE 207. A comprehensive study of current curriculum content in Vocational Education. Emphasis on modifying and developing new curricula. Equates with CTE 388 and AGR 688.

AGR 392. Methods of Instructional Technology.

(2-2-3); I.

Prerequisite: CTE 207. Holistic approach to curriculum development with an introduction to the use of technology to develop and enhance curriculum and instruction. A portfolio will be maintained and presented at the end of the class. Equates with CTE 392.

AGR 402. Advanced Agricultural Experience.

(1 to 2 hrs.); I, II, III.

Consent required. The course is designed to provide students with

advanced competencies and agricultural management skills in the option they have chosen. Enrollment is limited to students in agricultural programs.

AGR 405. Farm Business Analysis.

(2-2-3); on demand.

A basic course in the applicability of farm records to the efficiency analysis of whole farms and of specific enterprises. Actual university farm enterprises will be used to provide the data source for laboratory work.

AGR 412. Conservation Workshop.

(2-2-3); on demand.

Development of the conservation movement with broad treatment of the basic natural resources, including land, water, air, minerals, forests, and wildlife. May be repeated, but not to exceed total of six hours. Equates with AGR 612.

AGR 415. Animal Nutrition.

(2-2-3); II.

Prerequisite: AGR 316. Chemistry, metabolism, and physiological functions of nutrients; digestibility, nutritional balances, and measures of food energy. Equates with AGR 615.

AGR 439. Cooperative Education.

(1 to 12 hrs.); I, II, III.

Consent required. Work experience with an in-depth exposure representative of the student's academic level and experience analogous to a senior level course.

AGR 470. Methods of Instruction.

(3-0-3); I.

The principles of instructional methods which apply to the teaching of agricultural subject matter which is included under the major program components of secondary vocational agriculture programs. Equates with CTE 470 and AGR 680.

AGR 472. Methods of Instruction.

(3-0-3); I.

Restriction: admission to the TEP. The principles of instructional methods which apply to the teaching of agricultural subject matter which is included under the major program components of secondary vocational agriculture programs. Equates with CTE 470 and AGR 680.

AGR 474. Adult and Young Farmer Education.

(3-0-3); on demand.

The principles and techniques needed in organizing and program planning in post high school vocational agricultural education and conducting young farmer and adult farmer classes. Equates with AGR 680.

AGR 476. Special Problems.

(1 to 3 hrs.); I, II, III.

Consent required. Permits a student to do advanced work as a continuation of an earlier experience or to work in an area of special interest. Topic for investigation must be selected and approved by advisor prior to registration.

AGR 478. Student Teaching Practicum.

(12-0-12); I, II.

Restriction: admission to TEP. Prerequisite: Consent required. Each student is assigned to an approved student teaching center

offering comprehensive teaching experience in Agricultural Education. Cross listed with HS 478 and CTE 478.

AGR 480. Equine Breeding and Reproduction.
(1-4-3); II.

A thorough study of the anatomy and physiology of reproduction in the stallion and the mare with practical emphasis on teasing, breeding, and foaling techniques, semen collection, insemination, and evaluation, along with daily record keeping.

AGR 485. Teaching Agricultural Mechanics.
(3-0-3); on demand.

Objectives with methods, equipment and management of the shop; organization of facilities for high school and vocational technical programs. Equates with AGR 685.

AGR 486. Planning Programs in Vocational Agriculture.
(3-0-3); on demand.

Organization and analysis of the program of vocational agriculture. Departmental program of activities, summer programs, advisory committees, and Future Farmers of America activities. Equates with AGR 686.

AGR 492. Supervision in Agriculture.
(3-0-3); on demand.

The principles and techniques needed in individual group supervision of vocational agricultural programs. Equates with AGR 692.

AGR 499C. Senior Seminar in Agriculture.
(3-0-3); II.

Restriction: senior status in an Agriculture major or area of concentration. Students may conduct research projects or utilize literature surveys leading to written and oral reports in their area of interest in agriculture. Guest lecturers and faculty will present the most current information in agriculture. *This course satisfies the integrative component for general education.*

Appalachian Studies Courses

APS 201. Introduction to Appalachian Studies.
(3-0-3); I.

A multidisciplinary introduction to Appalachian culture and history. Perspectives of literature, music, both popular and documentary film, folk tradition and sociology will also be explored.

Art & Design Courses

ART 101. Two-Dimensional Foundation.
(2-2-3); I, II.

An introduction to fundamental elements and principles of two-dimensional design. This course addresses the arrangement of formal elements within the picture plane. A variety of media are used including paint, ink, pencil and paper.

ART 102. Three-Dimensional Foundation.
(2-2-3); I, II.

An introduction to three-dimensional concepts of form, space, surface and structure. Principles are taught employing a variety of

methods, techniques and materials, such as cardboard, modeling clay, paper and wire.

ART 103. Color Foundation.
(2-2-3); I, II.

An introduction to the fundamentals of artistic and scientific principles of color. This course addresses elements of color and relationships between colors. The primary medium used will be acrylic paint.

ART 109. Introduction to the Computer in the Visual Arts.

(2-2-3); I, II, III.

An introduction to the computer as an academic and professional tool, employing the Macintosh computer platform. Areas covered include the manipulation and generation of images, word processing, spread sheets and basic telecommunications. This course is recommended for, but not limited to art majors. *This course satisfies the computer competency requirement for general education.*

ART 121. School Art I.

(2-2-3); I, II.

Introduction to art and to the teaching of art in the lower (1-3) elementary grades.

ART 204. Drawing I.

(2-2-3); I, II, III.

Prerequisite: ART 101. An introduction to object and subjective drawing. Emphasis is placed on accurate seeing and technical competence at depicting reality. A variety of media is used including charcoal, ink, pastel and pencil.

ART 205. Graphic Design I.

(2-2-3); I, II.

Prerequisites: ART 101 and 103. Introduction to lettering principles and their application. Rough and comprehensive layout in black and white and color, with emphasis on design.

ART 214. Painting Techniques I.

(2-2-3).

Prerequisite: ART 103. Introduction to oil painting, materials and methods, arrangement of the palette; and the use of a variety of different subjects.

ART 221. School Art II.

(2-2-3); II.

Philosophy and methods of teaching art to children in the elementary grades; a study of materials, media, and tools.

ART 245. Ceramics I.

(2-2-3); I, II, III.

Introduction to ceramic forms in hand building, wheel-throwing, glazing, and decorative techniques.

ART 263. Art History I.

(3-0-3); I, II.

An examination of prehistoric, ancient Near Eastern, Pre-Columbian, tribal, and Asian art. It includes a study of materials, techniques, subjects, styles, issues, functions and meanings. *This course satisfies the area studies-humanities for general education.* Cross listed with IST 263.

ART 264. Art History II.**(3-0-3); I, II.**

An examination of ancient Greek and Roman, and Medieval art. It includes a study of materials, techniques, subjects, styles, issues, functions and meanings. *This course satisfies the area studies-humanities for general education.* Cross listed with IST 264.

ART 265. Art History III.**(3-0-3); I, II.**

An examination of art from the Renaissance to the present. It includes a study of materials, techniques, subjects, styles, issues, functions, and meanings. *This course satisfies the area studies-humanities for general education.* Cross listed with IST 265.

ART 294. Sculpture I.**(2-2-3); I, II.**

Prerequisite: ART 102. Creative experiences in the techniques, media, and tools of sculpture, work in stone, wood, metal, clay, and plaster.

ART 300. Elementary Materials and Methods.**(2-2-3); II.**

Requirement: admission to TEP. Background and philosophy of elementary art in education.

ART 301. Field Experience in Art Education.**(1-2-3). I.**

Requirement: admission to TEP. Clinical and field experiences related to planning, implementing, and evaluating art education 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 and 205. An introduction to typography as a foundation for visual communication, with an emphasis on basic concepts of typography-type usage, type anatomy, type classification, basic terminology, tools and materials of the trade, and graphic design. This course is computer based, Macintosh platform.

ART 304. Drawing II.**(2-2-3); I, II.**

Prerequisite: ART 204. A continuation of ART 204.

ART 305. Graphic Design II.**(2-2-3); I, II.**

Prerequisites: ART 109 and 205. A study of three-dimensional design with emphasis on product and package design.

ART 306. Graphic Design for the Web,**(2-2-3); I, II.**

Prerequisites: ART 109 and 305. Application of the principles of graphic design to Web publishing. Emphasis on creative Web site design solutions through image preparation, typography and color design for individual and corporate clinics.

ART 309. Computer Art.**(2-2-3); I, II.**

Use of computers to generate and manipulate images.

ART 310. Puppetmaking.**(2-2-3); I, II, III.**

The historical and contemporary significance of puppetry including the techniques and methods of construction and production.

ART 314. Painting Techniques II.**(2-2-3); I, II, III.**

Painting from still life and landscape with emphasis on creative interpretation and expression.

ART 316. Watercolor I**(2-2-3); on demand.**

Introduction to watercolor media and methods and to the use of various subjects.

ART 320. Survey of Graphic Design.**(3-0-3); on demand.**

An exploration of the origins and evolution of graphics and graphic design from ancient civilization to present. Movements, styles and new developments shaped by technology will be investigated, as well as graphic designs and designers that influenced the ongoing evolution of the discipline.

ART 321. Materials and Methods for Secondary Art.**(2-2-3); I.**

Requirement: admission to TEP. Presentation of the background, philosophy, and techniques for the teaching of art in the secondary school.

ART 345. Ceramics II.**(2-2-3); I, II, III.**

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); I, II.**

Prerequisite: ART 101. Creative experiments in intaglio printmaking on stone. Techniques include line etching, aquatint, soft ground, dry point, and monotype on zinc and copper.

ART 352. Lithographic Printmaking.**(2-2-3); I, II.**

Prerequisite: ART 101. Creative experiments in the techniques of lithographic printmaking on stone. Processes include crayon, rubbing ink, liquid tusche, acid tint, and transfer.

ART 361. Ancient Art.**(3-0-3); on demand.**

The history of Western painting, sculpture, and architecture from prehistoric times until the beginning of the Christian era.

ART 362. Medieval Art.**(3-0-3); on demand.**

The history of European painting, sculpture, and architecture from the beginning of the Christian era until c. 1300.

ART 363. Renaissance Art.**(3-0-3); on demand.**

The history of European painting, sculpture, and architecture from c. 1300 until c. 1525.

ART 364. Mannerist and Baroque Art.**(3-0-3); on demand.**

The history of European painting, sculpture, and architecture

from c. 1525 until c. 1750.

ART 373. Basic Black and White Photography.
(2-2-3); I, II.

Practical introduction to basic camera and darkroom techniques of black and white photography. Areas covered include camera operation, film exposure and development, enlarging and print presentation.

ART 394. Sculpture II.
(2-2-3); I, II.

Prerequisite: ART 294. Studio problems involving the manipulation of various sculpture media.

ART 399. Selected Topics.
(3-0-3); on demand.

Specialized offerings in art for undergraduate students. The purpose of these special courses is to supplement regular course offerings in art.

ART 400. Apprenticeship.
(1 to 16 hrs.); I, II, III.

Requirement: departmental approval upon satisfactory completion of application procedure. Experience in a working situation, allowing the student access to instruction and practical experiences not normally available in the Art Department curriculum.

ART 404. Drawing III.
(2-2-3); I, II.

Prerequisite: ART 304. A serious search into the expressive possibilities of the figure; anatomical investigation of parts, variety of media and techniques leading to individual interpretation.

ART 405. Graphic Design III.
(2-2-3); I, II.

Prerequisite: ART 305. Introduction to the use of graphics as a means of visual communication with emphasis on design concepts. Studio assignments on problems related to the community, society, industry, and commerce.

ART 406. Graphic Design IV.
(2-2-3); I, II.

Prerequisite: ART 405. Advanced work in advertising design with emphasis placed on the commercial application of design principles as they relate to the organization of copy and illustration for use by media.

ART 407. Commercial Illustration I.
(2-2-3); on demand.

Prerequisites: ART 204 and 205. Two- and three-dimensional forms and the various techniques for rendering them for use in commercial design. Emphasis is placed on realistic drawing and presentation of objects.

ART 408. Commercial Illustration II.
(3 to 6 hrs.); I, II.

Prerequisite: ART 407. The continuation of studies in the area of commercial illustration. A more comprehensive study of different media and illustration techniques. May be repeated for credit.

ART 409. Airbrush.
(2-2-3); on demand.

Prerequisites: ART 205 and 214. An introduction to use of the airbrush and its application to design concepts including shape, line, value, texture and composition. A variety of airbrush related materials are used. Techniques, skill and perceptual development are emphasized.

ART 410. Computer Animation.
(2-2-3); on demand.

Prerequisites: ART 109 and 309, or consent of department. The course will give students intensive instruction on the Macintosh computer system in the use and application of 3D modeling and 3D animation programs in the visual art.

ART 411A. Drawing.
(2-2-3); I, II.

Prerequisite: ART 404. Advanced studio in figure drawing. Further exploration of figure drawing concepts and media with emphasis on creative interpretation and expression.

ART 411B. Drawing.
(2-2-3); I, II.

Prerequisite: ART 404. Advanced studio in figure drawing. Further exploration of figure drawing concepts and media with emphasis on creative interpretation and expression.

ART 414. Painting Techniques III.
(2-2-3); I, II.

Further exploration of different mediums and direction toward an individual approach. Painting from a variety of subjects; technical investigation and creative interpretation emphasized.

ART 415. Painting IV.
(2-2-3); I, II.

Experiences leading toward individual achievements in styles and techniques.

ART 445. Ceramics III.
(2-2-3); I, II.

Prerequisite: ART 345. An in-depth study of more advanced forms, surface treatment theory of kiln firing and glaze calculation.

ART 446. Ceramics IV.
(2-2-3); I, II.

Advanced study of contemporary ceramic form and surface resolution. Continued practical experience with kiln operation and glaze calculation.

ART 451. Intaglio Printmaking Studio.
(2-2-3); I, II.

Prerequisite: ART 351. Advanced studio in intaglio printmaking. Techniques include engraving, mezzotint, color intaglio, photo-etching and color monotype. May be repeated for credit.

ART 452. Lithographic Printmaking Studio.
(2-2-3); I, II.

Prerequisite: ART 352. Advanced studio in lithographic printmaking. Techniques include color lithography, reversal, chine colle, and multi-plate registration. May be repeated for credit.

ART 453. Advanced Art Problems.
(1 to 6 hrs.); I, II, III.

Requirement: consent of department chair. A studio course involving

research in an art area of the student's choice.

ART 461. 18th and 19th Century European and U.S. Art.

(3-0-3); on demand.

The history of European and American art painting, sculpture, and architecture from c. 1750 until c. 1900.

ART 462. 20th Century Art.

(3-0-3); on demand.

The painting, sculpture, and architecture of the 20th century.

ART 463. Art of the United States.

(3-0-3); on demand.

A survey of the social, political, and cultural movements which affected the course of American artistic development.

ART 464. Spanish, Portuguese and Latin American Art.

(3-0-3); on demand.

A survey of the painting, sculpture, and architecture of Spain, Portugal, and Latin America.

ART 467. Native American Art.

(3-0-3); on demand.

A survey of the visual arts of the indigenous tribes of North America from the beginning of their recorded history through the present.

ART 468. Appalachian Arts.

(3-0-3); on demand.

This course will provide a survey of the arts of the Appalachian region from pre-colonial times to the present.

ART 473. 35mm Photography.

(2-2-3); I, II.

Prerequisite: ART 373. Advanced small format shooting and darkroom techniques exploring various subjects and styles.

ART 474. Photo Studio.

(2-2-3); I, II.

Prerequisite: ART 473. Small or large format individual projects requiring in-depth treatment of a particular subject, concept, or style.

ART 475. Large Format Photography.

(2-2-3); I, II.

Prerequisite: ART 473. Large format camera operation with various subjects and styles and printing of large format negatives.

ART 476. Individual Art Problems.

(1 to 6 hrs.); I, II, III.

Requirement: consent of department chair. Individual Art Problems will be offered for the student who wishes to explore one medium in-depth.

ART 481. German Art of the 20th Century.

(3-0-3); on demand.

This course will examine the visual expression of German, Austrian, and Swiss artists of the 20th century, including Die Brücke, 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. Cross listed with IST 481.

ART 482. Contemporary World Art.

(3-0-3); on demand.

This course will provide a worldwide survey of contemporary visual arts in historical context and will explore current issues in contemporary art. Cross listed with IST 482.

ART 494. Sculpture III.

(2-2-3); I, II.

Prerequisites: ART 294 and 394. Advanced problems in sculpture involving a combination of materials and their uniqueness as media.

ART 499C. Visual Art Capstone.

(2-2-3); I, II.

Requirement: junior or senior standing and permission of department chair. An integrative course stressing oral and written discourse on the visual arts and preparation of students for professional goals. *This course satisfies the integrative component for general education.*

Astronomy Courses

ASTR 111. Concepts in Astronomy I: Planetary Science and the Sky.

(3-0-3); I, II.

This course represents an introduction to the study of astronomical phenomena: motions of the sky, Newtonian physics, celestial mechanics, matter and energy, structure and scale in the universe, and planetary science including comparative planetology, planetary evolution, interiors, topography, geology, and atmospheres, vagabonds of the solar system (comets, asteroids and Kuiper Belt objects), and the potential for catastrophic collision. We will also investigate extrasolar planetary systems and the possibility of life elsewhere in the universe. *This course satisfies the area studies-natural and mathematical sciences for general education.*

ASTR 112. Concepts in Astronomy II: Stars, Galaxies, and Cosmology.

(3-0-3); I, II.

This course represents an introduction to the study of astronomical phenomena: motions of the sky, Newtonian physics, celestial mechanics; matter and energy, structure and scale in the universe; the sun as a star, solar astrophysics, stars and stellar evolution, stellar endpoints (white dwarfs, neutron stars, and black holes), galaxies (structure, evolution, and interactions) and cosmology (the Big Bang, dark matter, and dark energy). Fundamental cosmological questions will be addressed including how the universe began and its ultimate fate. *This course satisfies the area studies-natural and mathematical sciences for general education.*

ASTR 311. Astrophysics I: Stars and Stellar Evolution.
(3-0-3); I.

Prerequisites: ASTR 112, PHYS 202 or 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. This course is intended for students majoring in space science and the natural sciences. Although calculus is not used in this course, algebra and trigonometry are used extensively.

ASTR 312. Astrophysics II: Galaxies & Cosmology. (3-0-3); II.

Prerequisite: ASTR 311. This course is an in-depth study of the properties, formation, structure, and evolution of galaxies and of principles and modern theories of cosmology. The course emphasizes the application of physical laws and principles in the studies of galaxies, utilizing both algebra and trigonometry. 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).

Equates with SSE 324 or PHYS 324. Prerequisite: PHYS 110 or 201 or equivalent. 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.

Biology Courses

BIOL 105. Introduction to Biological Sciences. (3-0-3); I, II, III.

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 area studies-natural and mathematical sciences for general education.*

BIOL 110. Biological Science for Elementary Teachers. (2-2-3); I, II, III.

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. *This course satisfies the area studies-natural and mathematical sciences for general education.*

BIOL 150. Introduction to Plant Science. (2-2-3); I.

Structure, growth, reproduction and ecology of plants. Emphasis on cultivated plants and applications. Not acceptable for biology majors, minors, and areas. *This course satisfies the area studies-*

natural and mathematical sciences for general education.

BIOL 155. Introduction to Environmental Science. (3-0-3); I, II.

Human ecology with special emphasis on the interactions between humans, required resources (physical, chemical, geological and biological), and their regional and global environments. Information is presented from an analytical and interdisciplinary perspective. *This course satisfies the area studies-natural and mathematical sciences for general education.*

BIOL 160. Introduction to Biological Principles. (3-0-3); I, II.

A course in biology for students to gain competency for BIOL 171. Emphasis is placed on establishing a foundation in molecular, cellular, and biochemical aspects of biology. Not accepted as credit toward the department's majors, minors, or areas of concentration. *This course satisfies the area studies-natural and mathematical sciences for general education.*

BIOL 171. Principles of Biology. (3-2-4); I, II.

Prerequisite: composite ACT of 20 or above, or minimum grade of "C" in BIOL 105 or BIOL 160. General biological principles; emphasis on cell function, energetics, homeostasis, genetics, evolution, and ecology. *This course satisfies the area studies-natural and mathematical sciences for general education.*

BIOL 199. Selected Workshop Topics. (1 to 4 hrs.); on demand.

Prerequisites: eight hours from BIOL. Consent required. Workshops in various biological and environmental subjects presented periodically, based on need. Usually hands-on, experimental, and/or innovative, these workshops supplement various programs in the biological and environmental sciences or other disciplines. Individual credit towards degree programs must be approved by the department chair.

BIOL 210. General Zoology. (2-4-4); I, II.

Prerequisite: BIOL 171. A survey of animals from protozoa to mammalia with emphasis on phylogeny, evolution, comparative morphology, and physiology.

BIOL 213. Introduction to Veterinary Microbiology. (2-4-4); I, II.

Prerequisite: CHEM 101. Study of bacterial and mycotic agents pathogenic to humans and animals. The collection, isolation, cultivation and identification of pathogenic microorganisms from animals is stressed. Virology, anti-microbial susceptibility tests, serological methods and quality control introduced. Not acceptable for biology majors or minors.

BIOL 215. General Botany. (2-4-4); I, II.

Prerequisite: BIOL 171. Structure and physiology of vegetative and reproductive plant organs; introduction to plant genetics and plant kingdom in terms of structure, ecology, and evolution.

BIOL 217. Elementary Medical Microbiology. (3-2-4); I, II, III.

Prerequisite: BIOL 232. An elementary microbiology course for

students interested in understanding the characteristics and activities of microorganisms and their relationship to health and disease. Not acceptable as credit for biology majors or minors.

BIOL 234. Human Anatomy & Physiology I.

(3-0-3); I, II, III.

Prerequisite: composite ACT score of 19 or above, or BIOL 105, BIOL 160, or BIOL 171. This course is a study of human tissues and organs systems (integumentary, nervous, skeletal, and muscular) with focus on the interrelationships of form and function. Homeostatic regulatory mechanisms will be continually emphasized. Not acceptable as credit for Biology Area Non Teaching Option or Environmental Option or minor in Biology. *This course satisfies the area studies-natural and mathematical sciences for general education.*

BIOL 235. Human Anatomy & Physiology II.

(3-0-3); I, II, III.

Prerequisite: BIOL 234. This course is a study of human organ systems (endocrine, reproductive, cardiovascular, lymphatic, digestive, respiratory, and urinary) with focus on the interrelationships of form and function. Not acceptable as credit for Biology Area Non Teaching Option or Environmental Option or minor in biology. Required for the Biology Area Teaching Option.

BIOL 233. Laboratory for Human Physiology.

(0-2-1); on demand.

Consent required. *Prerequisite: BIOL 232 or equivalent (may be taken concurrently).* Fundamental physiological principles with an emphasis on laboratory technique, equipment usage, and clinical applications. Not acceptable as credit for biology majors and minors (non teaching).

BIOL 301. Fundamentals of Biochemistry.

(3-2-4); I, II.

Prerequisite: CHEM 112 or 201. Chemistry of simple and complex biomolecules such as amino acids, proteins, carbohydrates, lipids, and nucleic acids. Biosynthesis and metabolic cycles; gene composition (DNA, RNA, etc.). Not accepted as credit for chemistry minors. Equates with CHEM 301.

BIOL 304. Genetics.

(2-2-3); I, II.

Prerequisite: BIOL 171. Mendelian inheritance, chemical nature of DNA and chromosomes, regulation of gene expression, experimental techniques in genetics, human genetic disorders and population genetics.

BIOL 313. Economic Botany.

(3 hrs).

Wood products, plant fibers, latex products, pectins, gums, resin tannins, dyes, essential oils, medicinals, insecticides, tobacco, oils, fats, waxes, food and beverage plants. Three lecture-discussion-demonstration hours per week.

BIOL 317. Principles of Microbiology.

(2-4-4); I, II.

Prerequisites: BIOL 171 and CHEM 101 or CHEM 111. Fundamental and applied aspects of microbiology. Prokaryotic cell structure and morphology, diversity, metabolism, and genetics emphasized; virology and immunology introduced.

Microbiological techniques, scientific inquiry, bacterial identifications, and recombinant DNA technology stressed in the laboratory.

BIOL 318. Local Flora.

(1-4-3); even years.

Prerequisite: BIOL 215. Identification and classification of plants native to the area. Collection and herbarium techniques.

BIOL 334. Entomology.

(2-2-3); II, odd years

Prerequisite: BIOL 210. A general introduction to insect morphology, physiology, behavior, ecology, evolution, and diversity. The roles of insects as pests, as vectors of disease, and in forensics are also covered. Identification of common orders and families and general morphological structures are covered in lab. Field work is expected.

BIOL 336. Pathophysiology.

(4-0-4); II, III.

Prerequisites: BIOL 232, and CHEM 101 or CHEM 111. Emphasis on physiological mechanisms in regard to disease, pharmacological actions, and providing a bridge between basic science and the clinic. BIOL 217 or BIOL 317 is recommended.

BIOL 337. Comparative Anatomy.

(2-2-3); II.

Prerequisite: BIOL 210. Vertebrate morphology, especially from an evolutionary perspective. Functional aspects and evolutionary trends among the vertebrate classes are emphasized.

BIOL 338. Developmental Biology.

(2-2-3); I.

Prerequisite: BIOL 210. Vertebrate development from gamete formation through the fetal stage; emphasis on comparative structural development.

BIOL 350. Heredity and Society.

(3-0-3); on demand.

Prerequisite: three hours from BIOL. Evolutionary processes and intricacies of genetic transmission. Evolution in human thought, experience, and affairs.

BIOL 351. Plant Natural History.

(3-0-3); I, odd years.

Prerequisite: BIOL 105 or BIOL 110. A survey of major taxonomic groups; emphasis on the natural history of local plants.

BIOL 352. Animal Natural History.

(3-0-3); I, even years.

Prerequisite: BIOL 105 or BIOL 110. A survey of major taxonomic groups; with emphasis on the natural history of local animals.

BIOL 356. Environmental Biology.

(3-0-3); II.

Prerequisites: BIOL 210 and BIOL 215. Basic ecological principles, population and community ecology as they apply to current environmental problems. BIOL 357 is a companion course.

BIOL 357. Environmental Testing Methods.

(1-4-3); I.

Prerequisites: BIOL 210 and BIOL 215. Field and laboratory methods used by environmental professionals. Techniques of

terrestrial and aquatic habitat analysis and aquatic toxicology. BIOL 356 is a companion course.

BIOL 380. Cell Biology.
(2-2-3); I, II.

Prerequisites: BIOL 304, and CHEM 201 or CHEM 326. Integration of biological, chemical, and physical aspects of the cell. Emphasis on molecular processes.

BIOL 399. Selected Workshop Topics.
(1 to 4 hrs.); on demand.

Prerequisites: eight hours from BIOL. Consent required. Workshops in various biological and environmental subjects presented periodically, based on need. Usually hands-on, experimental, and/or innovative, these workshops supplement various programs in the biological and environmental sciences or other disciplines. Individual credit towards degree programs must be approved by the department chair.

BIOL 402. Integrated Biology, Mathematics, Physical Sciences Teaching Methods.
(2-2-3); I.

Restriction: admission to TEP required. *Prerequisites:* 20 hours from BIOL. *Corequisite:* BIOL 403. Methods course for students who desire to become teachers of middle school science and secondary school biology, physical science or mathematics. The course provides integrated and content specific clinical experiences designed to prepare the student for student teaching and their subsequent role as a classroom teacher. Equates with MATH 402 and SCI 402.

BIOL 403. Integrated Biology, Mathematics, and Physical Science Field Experiences in Teaching
(1-4-3); I.

Restriction: admission to TEP required. *Prerequisites:* 20 hours from BIOL. *Corequisite:* BIOL 402. Course provides structured field experiences for students who desire to become teachers of secondary school biology, mathematics, or physical science. This course provides guided field experiences to acclimate the student into the culture of teaching. Equates MATH 403 and SCI 403.

BIOL 407. Invertebrate Zoology.
(1-4-3); on demand.

Prerequisite: BIOL 210. Emphasis is placed on the evolutionary history, comparative morphology, key adaptations, and diversity of the major invertebrate phyla. Field trips optional. Equates with BIOL 607.

BIOL 409. Limnology.
(2-2-3); II.

Prerequisites: 12 hours from BIOL and eight hours from CHEM. Ecology and biota of inland waters. Some all-day field trips required. Equates with BIOL 609.

BIOL 424. Immunology.
(2-2-3); II even years.

Prerequisites: BIOL 317 and BIOL 380. Basic cellular and molecular mechanisms of the immune response and its regulation, including response manifestations. Modern laboratory techniques stressed, including monoclonal antibody production. Equates with BIOL 624.

BIOL 425. Animal Physiology.
(2-2-3); I.

Prerequisites: BIOL 301 or CHEM 310, and BIOL 380. Comparison of fundamental physiological processes in representative vertebrate animals. Emphasis placed on comparative energetics and physiological adaptations of organisms to their environment.

BIOL 426. Plant Physiology.
(2-2-3); II.

Prerequisites: BIOL 215, BIOL 304 and BIOL 380. The fundamentals of physiological functioning of angiosperms from the molecular to the organismal level. Topics include: diffusion, osmosis, cell wall and membrane structure, mineral nutrition, photosynthesis, respiration, photoperiodism, and other aspects of plant growth and development.

BIOL 427. Pathogenic Microbiology.
(2-2-3); I even years.

Prerequisite: BIOL 217 or BIOL 317. Medically important microorganisms; bacteria and fungi emphasized. The isolation, cultivation, and identification of pathogenic microorganisms from clinical specimens are stressed. Antimicrobial susceptibility tests, serological methods, and quality control introduced. Equates with BIOL 627.

BIOL 428. Virology.
(3-0-3); I odd years.

Prerequisite: BIOL 317. Morphology and chemistry of the virus particle; symptoms; identification, and control of more common virus diseases of plants and animals; host-virus relationships; and research methods concerned with viruses. Equates with BIOL 628.

BIOL 429. Histology.
(2-2-3); I.

Prerequisites: BIOL 380, plus eight hours from BIOL. The study of human tissues with emphasis on anatomical, physiological, and biochemical properties/relations. Equates with BIOL 629.

BIOL 431. Herpetology.
(1-4-3); II. odd years.

Prerequisite: BIOL 210. The anatomy, physiology, taxonomy, ecology, distribution, behavior, natural history, and evolution of amphibians and reptiles. Emphasis on collection, identification, and classification of those herptiles found in eastern North America. Field trips required. Equates with BIOL 631.

BIOL 433. Ichthyology.
(1-4-3); I. even years.

Prerequisite: BIOL 210. The anatomy, physiology, systematics, ecology, zoogeography, natural history, evolution and conservation of fishes. Emphasis on collection, identification, and classification of freshwater fishes native to eastern North America and marine fishes of the Atlantic and Gulf coasts. Field trips required. Equates with BIOL 633.

BIOL 437. Ornithology.
(1-4-3); II. even years.

Prerequisite: BIOL 210. Anatomy, physiology, classification and identification of birds, as well as examination of bird behavior, life histories, ecology, and evolution. Field trips required.

BIOL 438. Mammalogy.**(1-4-3); I odd years.**

Prerequisite: BIOL 210. The taxonomy, distribution, behavior, ecology, evolution, and natural history of mammals, with emphasis on those inhabiting eastern North America. Field trips required.

BIOL 439. Cooperative Education.**(1 to 4 hrs.), on demand.**

Consent required. 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. Approval of department chair required.

BIOL 443. General Parasitology.**(2-2-3); II. odd years.**

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. Equates with BIOL 643.

BIOL 444. Clinical Laboratory Procedures.**(2-3-3); on demand.**

Prerequisites: BIOL 232, 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. Equates with BIOL 644.

BIOL 446. Biotechnology.**(2-2-3); II.**

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); on demand.**

Prerequisites: BIOL 232, 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. Equates with BIOL 647.

BIOL 449. Plant Anatomy.**(2-2-3); on demand.**

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. Equates with BIOL 649.

BIOL 450. Aquatic Entomology.**(1-4-3); II. even years.**

Prerequisite: BIOL 210. Survey of aquatic insects, their ecology, their biology, and how they are used as environmental biomonitors. 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); on demand.**

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 Biology or Environmental Science areas of concentration and minors. Especially designed for in-service and pre-service teachers. Equates with BIOL 654.

BIOL 456. Plant Morphology.**(2-2-3); on demand.**

Prerequisite: BIOL 215. Fossil and living nonvascular plants (except bacteria) and vascular plants; emphasis on ecology, morphology, and evolution. Equates with BIOL 656.

BIOL 461. Ecology.**(2-2-3); I, II.**

Prerequisites: 12 hours from BIOL plus eight hours from CHEM.

Interrelations of organisms and environment. Some all day field trips required.

BIOL 476. Special Problems.**(1 to 6 hrs.); I, II, III.**

Consent required. Independent topics and research in the biological and environmental sciences. Topic must be approved prior to registration by the department chair.

BIOL 478. Animal Behavior.**(3-0-3); on demand.**

Prerequisite: 12 hours from BIOL. An introduction to the principles of animal behavior with emphasis in onecological and evolutionary implications. Equates with BIOL 678.

BIOL 480. History of Science.**(3-0-3); on demand.**

Prerequisites: six hours from BIOL, CHEM, or PHYS. Development of scientific traditions, discoveries, and concepts from the time of ancient Egypt to the present. Equates with BIOL 680, SCI 480 and SCI 680.

BIOL 483. Selected Workshop Topics.**(1 to 4 hrs.); on demand.**

Prerequisite: 12 hours of biology. Workshops in various biological and environmental subjects presented periodically, based on need. Usually hands-on, experimental, and/or innovative, these workshops supplement various programs in the biological and environmental sciences or other disciplines. Individual credit towards degree programs must be approved by the department chair.

BIOL 490. Biochemistry.**(4-0-4); II.**

Prerequisite: BIOL 301 or CHEM 301. In-depth survey of the major control points in biochemical pathways with an emphasis on studies from the primary literature. Equates with BIOL 690.

BIOL 493. Laboratory Techniques in Biochemistry.**(0-4-2); on demand.**

Prerequisite: BIOL 301 or CHEM 301. Weekly laboratory sessions

focusing on advanced techniques utilized in the study of biological molecules. Emphasis will be placed on methods in isolation and characterization of biological materials, density gradient ultracentrifugation, spectroscopic methods, electrophoretic techniques, chromatographic separation, radiosotopic labeling, and statistical analysis of experimental data. Equates with BIOL 693.

BIOL 499C. Contemporary Environmental Issues. (3-0-3); II.

Corequisite: BIOL 461. An in-depth examination of current environmental issues and problems with local, regional, national or international import. The historic context, current laws and applicable technology, ecological, social and ethical implications of the issues will be explored. *This course satisfies the integrative component for general education for students with an area of concentration in environmental science.*

BIOL 499D. Principles of Evolution. (3-0-3); I, II.

Prerequisites: BIOL 304 and BIOL 317. Major processes (e.g. natural selection, speciation, molecular evolution, etc.) of evolutionary biology are illustrated by using examples from molecular, cellular, and organismal biology. History of evolutionary theory, history of life on earth, phylogenetics, population genetics, biogeography, and macroevolutionary patterns are also treated. This course satisfies the integrative component for general education for students completing a major in biology.

Business Information Systems Courses

BIS 116. Basic Word Processing. (3-0-3); I, II.

One of the most popular uses of microcomputers is word processing—the creation of documents. This course provides an introduction to the fundamental concepts associated with digital documents creation and formatting, design, and layout of business related documents. The course covers a wide range of word processing features. **Class assumes keyboarding proficiency.**

BIS 216. Contemporary IT Applications. (3-0-3); I, II.

Prerequisites: BIS 116 and CIS 101. This course provides an in-depth coverage of advanced document processing and management software, including desktop publishing and voice recognition. Principles of analysis, design, organization, and presentation of information will be discussed as they relate to developing appropriate business solutions. Emphasis will be placed on evaluating and selecting alternative solutions for a wide range of business, professional, and promotional needs.

BIS 240. Information Resource Management. (3-0-3); I.

Prerequisite: CIS 101. Designed to provide the student with key concepts relating to information resource management and associated emerging technologies for creating, distributing, maintaining, and protecting data in organizational environments. In addition, students will discover and apply fundamental knowledge management principles used to maximize the utility of information resources in organizational

environments.

BIS 290. End User Application Development. (3-0-3); II.

Prerequisite: CIS 211. This course focuses on solving business problems using integrated software solutions and a VBA programming. Case studies and problem activities in core business areas are used to address information systems solutions. The course serves as a required integrative capstone course for the A.A.B. in Business Information Systems.

BIS 321. Business Communications. (3-0-3); I, II, III.

Prerequisite: ENG 200. This course introduces upper-division students to current principles and theories of business communication that stress human relations, ethics, demographic diversity, and global and cross-cultural communications. Attention will be given to planning, composing, evaluating, and analyzing business letters, short documents, memoranda, electronic messages, resumes, and informal reports. Emphasis is on techniques for achieving clarity, brevity, and effectiveness in written business communication.

BIS 350. Computer Systems Support & Security. (3-0-3); I, II.

Prerequisite: CIS 311. This course introduces students to advanced concepts related to PC maintenance, troubleshooting and technical support. Other related topics on help-desk administration, security issues, operating systems, and A+ certification preparation will be discussed.

BIS 421. Business and Technical Presentations. (3-0-3); I, II.

Prerequisite: BIS 321. Provides practical strategies for creating and presenting business and technical presentations supported by emerging desktop presentation software. This course will include researching, creating, and presenting business plans, financial audit and accounting reports, marketing and economic data analysis, as well as research and technical information. Negotiating and selling skills also will be an integral part of the course.

BIS 425. Training and Development for Industry. (3-0-3); I.

Prerequisites: BIS 421 and MNGT 301. Study of the relevant theories, issues, trends, and methods in training and developing adult learners in work organizations; includes program design, needs and task analysis, delivery methods, working with consultants, and program evaluation. Cross listed with MNGT 425.

BIS 425. Training and Development for Industry. (3-0-3); II.

Prerequisites: CIS 211, 311, and junior/senior standing. This course emphasizes the assessment, design, planning, and implementation of end-user information systems. The course consists of an overview of critical analysis of the role and importance of end-user computing in today's organization. Emerging information technologies and associated behavioral issues will be investigated.

BIS 499C. Teaching Methods in Business and Information Technology Education.

(3-0-6); I.

Prerequisite: admission to TEP. Application and integration of field experiences, teaching and learning approaches to create objectives, lesson plans, skill building techniques; use of methods, materials, technology, teaching aides, testing, measurement, and grading for business and marketing education grades 5-12 certification. *This course satisfies the integrative component for General Education only in the Business and Information Technology Education degree programs.*

Career and Technical Education Courses

CTE 185. New Teacher Institute Career and Technical Education.

(3-0-3); I, II, III.

Restriction: restricted to individuals holding a One-Year Certificate for Teaching Vocational Industrial Education preparation level. Emphasis on how to prepare and implement course organization, lesson planning, teaching techniques, and evaluation as it relates to industrial-technical subject matter.

CTE 207. Foundations of Career and Technical Education.

(3-0-3); II.

Orientation for students enrolled in vocational teaching program in agricultural education, industrial education, and family and consumer science education. Course will provide a historical overview of vocational education legislation.

CTE 364. Guidance in Career and Technical Education.

(3-0-3); on demand.

Study of the concept of career education and to explore the new emerging role of the guidance counselor in regard to problems that exist in our present educational system, innovative concept of career education, the counselor and classroom teacher's responsibility within the framework of career education, evaluation of career education, and exploring future implications for developing positive attitudes and values for work for all students, including the disadvantaged and handicapped.

CTE 372. Technical Media Development.

(2-2-3); I.

The use of technology in preparing technical presentations, including issues and delivery methods. A portfolio will be maintained and presented at the end of class.

CTE 388. Methods of Curriculum Development.

(3-0-3); II.

Prerequisite: CTE 207. A comprehensive study of current curriculum content in Vocational Education. Emphasis on modifying and developing new curricula. Cross listed with AGR 388 and HS 388.

CTE 392. Methods of Instructional Technology.

(2-2-3); I, III.

Restriction: admission to TEP. Holistic approach to curriculum development with an introduction to the use of technology to develop and enhance curriculum and instruction. A portfolio will

be maintained and presented at the end of the class. Equates with AGR 392.

CTE 393. Methods in Career and Technical Education.

(3-0-3); I.

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.); on demand.

Prerequisite: CTE 393. Each student is assigned to an approved student teaching center offering comprehensive teaching experiences at the preparation-industrial education level. Directed observations and supervised teaching in approved area vocational school or an extension center in the trade and area in which the certificate is desired. Candidates for the bachelor's degree complete a minimum of 90 hours of supervised student teaching, 120 hours of directed observation, and 40 hours of participation. This experience carries eight hours of credit.

CTE 395. Special Problems in Career and Technical Education.

(1 to 3 hrs.); I, II, III.

Prerequisite: consent of instructor. Individual problems dealing with specific areas in the teaching field of the student. Opportunity of pursuing a technical problem in a laboratory orientation is provided. Conferences with the instructor are scheduled as needed.

CTE 396. Evaluation in CTE.

(3-0-3); II.

Prerequisite: MATH 152 or higher. The study of methods of evaluation, how to prepare evaluation instruments; techniques of assessing technical competency; explanation of test results; and the improvement of instruction.

CTE 400. Preparation for Technology Education.

(4-0-4); on demand.

Restriction: four years of successful teaching experience in career and technical education.

Prerequisite: consent of the instructor required. Seminar designed for individuals who have four years of successful teaching experience and desire dual certification to include industrial education at the orientation and exploration levels.

CTE 401. Preparation for Career and Technical Education.

(4-0-4); on demand.

Restriction: four years of successful teaching experience in industrial education. Seminar designed for individuals who have four years of successful teaching experience at the industrial education orientation and exploration levels and desire dual certification to include industrial education at the preparation level.

CTE 470. Methods of Instruction.

(3-0-3); I.

Restriction: admission to TEP. The principles of instructional methods which apply to the teaching of industrial education subject matter which is included under the major program components of Orientation/Exploration and Preparation Level

education programs. Equates with AGR 470.

CTE 478. Student Teaching Practicum.
(12-0-12); I, II.

Restriction: admission to TEP. Each student is assigned to an approved student teaching center offering comprehensive teaching experience in industrial technology education. Cross listed with AGR 478 and HS 478.

CTE 497. Seminar in Career and Technical Education.
(1-0-1); I.

Current problems, issues, and trends in vocational education.

CTE 661. Foundations of Career and Technical Education.

(3-0-3); on demand.

Prerequisite: upper division standing in industrial education. Study of the philosophical positions underlying the development of industrial education; leaders, their influence and contributions; contemporary theories affecting the current programs of industrial education.

CTE 671. Seminar for Career and Technical Education.

(1-0-1); I, II.

Participants will develop a further understanding of the underlying concepts of industrial career options by participation in one or more programs followed by informal discussion.

Chemistry Courses

CHEM 101. Survey of Chemistry.
(3-2-4); I, II.

Prerequisite: MATH 093 with grade of 'A' or 'B' or MATH 131 with grade of 'C' or higher or ACT Math score of 18 or above. A survey of chemical topics that includes atoms, molecules, mixtures, chemical reactions, subatomic particles, light and matter, stoichiometry, heats of reaction, ions, acids, bases and pH. The topics are covered in combination with case studies such as ozone layer depletion and global warming. This course is intended for students in the applied sciences and is not recommended for natural science majors. *This course satisfies the area studies-natural and mathematical sciences for general education.*

CHEM 104. The Chemistry of Ordinary Things.
(3-0-3); II.

An introduction to some of the fundamental qualitative ideas of chemistry and the application of these ideas to energy sources, pollution, foods, nutritional supplements, cosmetics, plastics and other modern materials. *This course satisfies the area studies-natural and mathematical sciences for general education.*

CHEM 111. Principles of Chemistry I.
(3-2-4); I, II.

Prerequisite: MATH 152 or ACT Math score of 20 or higher. An introduction to stoichiometry and chemical equations, electronic structure of atoms and molecules, periodic properties, gases, phases equilibria, and solutions, with laboratory. Primarily for natural science and preprofessional students. *This course satisfies the area studies-natural and mathematical sciences for general education.*

CHEM 112. Principles of Chemistry II.
(3-2-4); I, II.

Prerequisite: MATH 152 or 174 with grade "C" or better, or ACT math score of 22 or higher, and grade of "C" or better in CHEM 111.

Continuation of CHEM 111. An introduction to chemical equilibria, thermodynamics, and kinetics, electro-chemistry, and coordination compounds, with laboratory. The descriptive chemistry of selected groups of elements is introduced.

CHEM 131. Environmental Chemistry I.
(3-2-4); II.

Prerequisite: grade of "C" or better in CHEM 111. An overview of types of chemical reactions including organic reactions. This will be applied to studying the origin, nature, distribution and fate of a wide variety of chemical species in the environment. The laboratory portion of the course will illustrate the fundamentals of potentiometry, spectrophotometry, atomic absorption, atomic emission, and gas, liquid and ion chromatography methods used for environmental analyses.

CHEM 199. Selected Topics.
(1 to 6 hrs.); on demand.

CHEM 201. Survey of Organic Chemistry.
(3-2-4); I, II.

Prerequisite: grade of "C" or better in CHEM 101. A survey of chemical topics that includes precipitation and redox reactions, radioactivity, solar energy, organic functional groups, drug design and approval, polymers, carbohydrates, proteins and lipids. The topics are covered in combination with case studies such as the pollution of a lake, Chernobyl disaster and the Thalidomide problem. This course is intended for students in the applied sciences and is not recommended for natural science majors.

CHEM 239. Cooperative Education.
(1 to 8 hours); I, II, III.

Prerequisite: Consent of department chair. Participation in supervised work experience in a professional environment.

CHEM 299. Selected Topics.
(1 to 6 hrs.); on demand.

CHEM 301. Fundamentals of Biochemistry.
(3-2-4); I, II.

Prerequisite: CHEM 112 or 201. Chemistry of simple and complex biomolecules such as amino acids, proteins, carbohydrates, lipids, and nucleic acids. Biosynthesis and metabolic cycles; gene composition (DNA, RNA, etc.). Not accepted as credit for chemistry minors. Cross listed with BIOL 301.

CHEM 326. Organic Chemistry I.
(3-2-4); I, II.

Prerequisite: grade of "C" or better in CHEM 112. Structure and nomenclature of organic molecules; introductions to interpretation of spectra reactions and reaction mechanisms of hydrocarbons, alkyl halides, alcohols, and ethers, with laboratory.

CHEM 327. Organic Chemistry II.
(3-2-4); I, II.

Prerequisite: grade of "C" or better in CHEM 326. Interpretation of IR and NMR spectra; reactions and reaction mechanisms of aldehydes, ketones, carboxylic acids and derivatives, phenols,

amines, and organometallics, with laboratory.

CHEM 328. Organic Chemistry III.
(2-4-4); on demand.

Prerequisite: grade of "C" or better in CHEM 327. Advanced topics in organic chemistry; orbital symmetry, heterocyclics and polycyclics, macromolecules, carbanion reactions, and an introduction to physical organic chemistry, with laboratory.

CHEM 332. Environmental Chemistry II.
(3-0-3); I.

Prerequisite: CHEM 327. An intensive study of the fate of environmental contaminants and their dispersion. Containment and remediation strategies will be discussed in detail, particularly their chemical principles.

CHEM 339. Cooperative Education.
(1 to 8 hrs.); I, II, III.

Prerequisite: consent of department chair. Participation in supervised work experience in a professional environment.

CHEM 340. Chemical Information.
(1-2-2); II.

Prerequisite: CHEM 326. Study and use of primary and secondary chemical literature sources, data, and reference sources in chemistry. An introduction to the Chemical Abstracts service, Biological Abstracts, Science Citation Index and the corresponding data bases. Personal data bases, data collection and manipulation, and related current software will also be discussed.

CHEM 351. Bioinorganic Chemistry.
(2-2-3); I.

Prerequisite: grade of "C" or better in CHEM 112. Structure of inorganic compounds. Electron transfer reactions, acid-base theories, kinetic and reaction mechanisms, and relationship of thermodynamics to structure and reactivity of inorganic compounds. Concepts will be taught using biological systems or model compounds for these systems as examples.

CHEM 360. Analytical Chemistry.
(2-3-3); I, II.

Prerequisites: grade of "C" or better in CHEM 112 plus two other science lab courses. Errors and small sample statistics, stoichiometry, equilibrium calculations, electrochemical potentials and compleximetric chemistry. Labs will include volumetric, pH, and various chromatographic and absorption spectrophotometric techniques. Stoichiometry and equilibria concepts will be pursued through lecture and applicators in the instrumental labs.

CHEM 399. Selected Topics.
(1 to 6 hrs.); on demand.

CHEM 429. Pharmaceutical Chemistry.
(3-0-3); on demand.

Prerequisites: C or better in CHEM 327 and C or better in CHEM/BIO 301. Advanced topics in organic, physical, and computational chemistry of drug discovery, design, and kinetics. Drug-receptor interactions, enzyme inhibition/inactivation, drug deactivation/elimination. prodrugs and drug delivery systems will also be discussed.

CHEM 439. Cooperative Education.
(1 to 8 hrs.); I, II, III.

Prerequisite: consent of department chair. Participation in supervised work experience in a professional environment.

CHEM 441. Physical Chemistry I.
(3-0-3); I.

Prerequisites: CHEM 326, MATH 175 and PHYS 201 or 231, with grades of "C" or better. Chemical thermodynamics and chemical kinetics.

CHEM 442. Physical Chemistry II.
(3-4-5); II.

Prerequisites: grade of "C" or better in CHEM 441 and MATH 275. Topics include quantum chemistry, spectroscopy, statistical mechanics, and transport properties.

CHEM 451. Advanced Inorganic Chemistry.
(3-0-3); offered every third semester.

Prerequisite: grade of "C" or better in CHEM 351. CHEM 441 is recommended. Electronic structure and bonding in inorganic compounds. Thermodynamic and kinetic interpretation of selected inorganic and organometallic reactions.

CHEM 460. Analytical Chemistry II.
(2-6-5); offered every third semester.

Prerequisites: grade of "C" or better in CHEM 327 and 360. The theory and practice of infrared, visible, ultraviolet, X-ray and gamma ray, and electron spectroscopies in determinations. The use of chromatography, atomic spectroscopy, and electrochemistry in analytical chemistry. Some quantitative applications of mass and nuclear magnetic resonance spectroscopy are included.

CHEM 476. Special Problems.
(1 to 6 hrs.); I, II, III.

Prerequisite: consent of instructor. Topic to be approved prior to registration. (Maximum of three credit hours applicable toward major, minor, or area of concentration in chemistry.)

CHEM 499. Selected Topics.
(1 to 6 hrs.); on demand.

Chinese Courses

CHI 101. Elementary Chinese I.
(3-0-3); I.

An introduction to listening, speaking, reading, and writing Mandarin Chinese, with some attention to culture. *This course satisfies an area studies requirement in humanities for general education.*

CHI 102. Elementary Chinese II.
(3-0-3); II.

Prerequisite: CHI 101. An introduction to listening, speaking, reading, and writing Mandarin Chinese, with some attention to culture.

CHI 199. Chinese Language and Culture.
(3-0-3); on demand.

An introduction to Chinese phonetics, basic vocabulary, and elementary grammar. Basic reading and conversation skills are emphasized.

CHI 201: Intermediate Chinese I.
(3-0-3); I.

Prerequisites: CHI 101 and 102. Continuing study of listening, speaking, reading, and writing Mandarin Chinese, with some attention to culture.

CHI 202: Intermediate Chinese II.
(3-0-3); II.

Prerequisites: CHI 101, CHI 102 and CHI 201. Continuing study of listening, speaking, reading, and writing Mandarin Chinese, with some attention to culture.

CHI 300-E. Contemporary Chinese Literature and Chinese Society.
(3-0-3); on demand.

An introduction to how contemporary Chinese writers have created works reflecting the new era of Chinese life. An emphasis on how recent Chinese literature both reflects Chinese history and how it confronts the problems of present-day Chinese society.

Communication (Advertising/Public Relations) Courses

CMAF 166. Desktop Publishing and Publication Techniques I.
(2-2-3); I, II, III.

This is an introduction to the use of computers in communication. Areas covered include the manipulation of images, word processing, basic telecommunications, and data management. This course provides students with the basic computer skills necessary for success in mass media courses in the field. *This course satisfies the computer competency requirement for general education.*

CMAF 177. AD/PR Practicum.
(0-4-1); I, II.

This course is designed to provide practical experience and leadership training in areas of advertising and public relations. Each level may be repeated for a total of two credit hours at each level.

CMAF 277. AD/PR Practicum.
(0-4-1); I, II.

This course is designed to provide practical experience and leadership training in areas of advertising and public relations. Each level may be repeated for a total of two credit hours at each level.

CMAF 306. Newspaper Graphics and Production.
(3-0-3); on demand.

Prerequisite: CMAF 166. Theoretical and practical study of the evolution of the graphic design, typography, and production of modern newspapers. Hands-on experience in layout and production.

CMAF 366. Desktop Publishing and Publication Techniques II.
(2-2-3); I, II.

Prerequisite: CMAF 166 or consent of instructor. Study and application of desktop publishing and publication techniques

using the most up-to-date computer software programs.

CMAF 377. AD/PR Practicum.
(0-4-1); I, II.

This course is designed to provide practical experience and leadership training in areas of advertising and public relations. Each level may be repeated for a total of two credit hours at each level.

CMAF 382. Principles of Public Relations.
(3-0-3); I, II.

Purposes, methods, and responsibilities in the profession of public relations.

CMAF 383. Principles of Advertising.
(1 to 4 hrs.); I, II.

Advertising principles and practices.

CMAF 384. Advertising Copy Writing.
(3-0-3); I, II.

Prerequisites: CMAF 383. The main focus of this course will be writing advertising headlines and copy for use in print advertising, and writing/scripting advertising for television and radio mediums.

CMAF 385. Public Relations Research and Techniques.
(3-0-3); II.

Prerequisite: CMAF 382. Theory and practice of producing publicity tools for various media used in campaigns to promote and interpret personal, institutional and organizational objectives and activities. Emphasis is on writing and publicity problem solving.

CMAF 399. Public Relations Workshop.
(1 to 4 hrs.); on demand.

Prerequisite: CMAF 166. A hands-on workshop in preparing print-media public relations materials.

CMAF 464. Magazine Editing and Design.
(3-0-3); on demand.

Prerequisite: CMAF 166. Editing and the graphic design of magazines.

CMAF 477. AD/PR Practicum.
(0-4-1); I, II.

This course is designed to provide practical experience and leadership training in areas of advertising and public relations. Each level may be repeated for a total of two credit hours at each level.

CMAF 482. Public Relations Case Studies.
(3-0-3); II.

Prerequisites: CMAF 382 and CMAF 385. An examination of case studies involving specific practices in carrying out campaigns in public relations.

CMAF 483. Advertising Design.
(3-0-3); I, II.

Prerequisites: CMAF 383 and CMAF 366. Study and application of methods of designing and producing advertisements. Primarily in print media, but includes television story boards.

CMAP 486. Advertising Campaign Strategy and Media Buying.

(3-0-3); on demand.

Prerequisites: CMAP 384 and CMAP 483. This course provides students with knowledge and skills development for planning, designing, implementing, and evaluating advertising campaigns. Students in this class will be expected to develop a complete advertising campaign that will include: development of campaign strategy, media buying/placement, and advertisement creation.

CMAP 491. Technical Writing I.

(3-0-3).

Principles of analysis, process, and definition; program, recommendation, and research reports; proposals and memoranda; visual aids; transitions, mechanics of clear and precise statement.

CMAP 497. Technical Editing.

(3-0-3).

Study of practice and management of editing for technical, scientific, professional, and corporate reports and writings.

CMAP 499C. Senior Seminar.

(3-0-3); II.

Prerequisites: senior standing and CMAP 482. This course is designed for students seeking careers in advertising, public relations, or organizational communication. It will provide them with information and instruction in skills self-assessment, job procurement processes and procedures, career field expectations and requirements, and production of a professional resume and portfolio. *This course satisfies the integrative component of general education.*

Communication (Electronic Media) Courses

CMEM 101. Elements of Production I.

(2-2-3); I, II.

An introduction to the basic production elements for audio and video. Includes message development and differentiation for various mediums.

CMEM 177. Electronic Media Production Practicum.

(0-4-1); I, II.

Practical experience and opportunities in electronic media production.

CMEM 201. Elements of Production II.

(2-2-3), I, II.

Prerequisites: CMAP 166 and CMEM 101. An introduction to the production process as it applies to the areas of audio and video. Practice in application of production elements within the process. Includes program/product conception and application of technology to achieve communication with an audience. An introduction to elements of post-production phase.

CMEM 210. Media Literacy.

(3-0-3); I, II, III.

This course is designed to explore issues of media influence on everyday life and acquaint the general student with the way in which media shapes aspects of modern society. *This course satisfies*

the area studies-humanities for general education.

CMEM 277. Electronic Media Production Practicum.

(0-4-1); I, II.

Practical experience and opportunities in electronic media production.

CMEM 320. Advertising and Sales for Electronic Media.

(3-0-3); II.

Theory and application of the practical and theoretical aspects of advertising for the electronic media. A study of campaigns, ratings, and concepts of the purchase of time on electronic media.

CMEM 338. Radio Operating Practices.

(1-0-1); I, II.

Basic law, technical operating practices, meter reading, and electronic fundamentals necessary in the operation of a broadcast facility.

CMEM 340. Video Production and Direction I.

(2-2-3); I.

Prerequisites: CMEM 101 and 201, or consent of instructor. Basic video production techniques and an introduction to directing skills in a laboratory situation.

CMEM 341. Writing for the Electronic Media.

(3-0-3); I, II.

Prerequisite: CMEM 101. The study and application of theory and technique used in creating advertising, continuity news and public affairs programming as applied to the electronic media.

CMEM 350. Audio Production and Direction.

(2-2-3); I, II.

Prerequisite: CMEM 201. A study of the theory and application of audio production for all electronic media, including radio, television, cable, and film.

CMEM 357. Sportscasting.

(3-0-3); on demand.

The philosophy and techniques utilized in developing style of presentation of sports for the electronic media. Theory practically applied in play-by-play description, interviewing and the presentation of copy.

CMEM 358. Sportswriting.

(3-0-3); on demand.

Prerequisite: CMJN 201. The philosophy and techniques of writing sports news and analysis and commentary for the mass media.

CMEM 377. Electronic Media Production Practicum.

(0-4-1); I, II.

Practical experience and opportunities in electronic media production.

CMEM 379. Field Study Experience.

(1 to 3 hrs.); on demand.

Prerequisite: consent of instructor. Participant will travel to a major broadcasting center and tour commercial, independent, public, cable and satellite broadcast facilities. Will also include related media facilities, news services, public relations and advertising agencies, government facilities and agencies; discussion and informal seminars with practicing professionals and officials in

their field of expertise. May be repeated for credit when topics vary.

CMEM 381. Documentary Production.
(2-2-3); on demand.

Prerequisite: CMEM 201. The study and application of theories and techniques used in documentary video production.

CMEM 383. Animation Production.
(2-2-3); on demand.

The study of traditional animation production techniques. Application of the theories and techniques of traditional animation video production.

CMEM 385. Narrative Video Production.
(2-2-3); on demand.

Prerequisite: CMEM 201. The study and application of production techniques and theories used in narrative video production.

CMEM 390. Electronic Media Web Layout and Design I.
(3-0-3); I, II.

Prerequisite: CMAP 166. An introduction to the basics of Web design from a desktop publishing perspective. Course work will focus on the fundamentals of Web design and layout, writing/editing text for Web use, preparing graphics for the Web, streaming audio and video production for the Web, and basic site management.

CMEM 399. Workshop in Electronic Media.
(1 to 3 hrs); on demand.

Workshops in various electronic media topics will be presented periodically, based on need and interest. Usually hands-on, experimental, and/or innovative, these workshops are designed to supplement various programs in Electronic Media. May be repeated in additional subject areas.

CMEM 420. Feature and Documentary Writing for the Electronic Media.

(3-0-3); I.

Prerequisite: CMEM 101, or consent of department chair. Advanced theory and practices of writing for the electronic medium. Emphasis is placed on writing and production of features and documentaries for radio, television and cable systems.

CMEM 440. Video Production and Direction II.
(2-2-3); II.

Prerequisite: CMEM 340, junior standing, or consent of instructor.

Extension of CMEM 340; with advanced instruction in studio operations. Emphasis upon the opportunity to produce and direct several program types and to serve on crews for such productions.

CMEM 444. Electronic News Gathering.
(3-0-3); II.

Prerequisite: CMEM 341. Practical experience in the gathering, production and distribution of news utilizing audio and video technology. How to combine writing and performance skills with production skills to successfully produce airworthy audio and video news reports, features, and news packages. Primary emphasis will be on utilization of electronic news gathering techniques.

CMEM 450. Electronic Media Management.
(3-0-3); II.

Prerequisite: junior standing or consent of instructor. The examination of administrative decision-making in electronic media. Attention is focused on audience research, sales regulation and personnel concerns. Special attention is given to the purpose and basic idea of programming in relation to audience composition.

CMEM 451. Professional Audio Practices.
(2-2-3); I.

Prerequisite: CMEM 350 or consent of instructor. Experience and advanced study in theory and applications in areas such as music recording and sound, with an emphasis on multi-track recording techniques.

CMEM 452. Issues in Contemporary Broadcasting.
(3-0-3); on demand.

Prerequisite: senior standing. Treatment of current issues within the electronic media industry. Cross listed with WST 452.

CMEM 459. Electronic Media Law and Regulation.
(3-0-3); on demand.

Prerequisite: junior standing. An examination of the basic regulatory law and policy as applied to electronic media as it is today and from an historic and socioeconomic perspective.

CMEM 460. History of Broadcasting.
(3-0-3); on demand.

Prerequisite: senior standing. Historical study of radio and television as a communication service and its development in the United States.

CMEM 477. Electronic Media Production Practicum.
(0-4-1); I, II.

Practical experience and opportunities in electronic media production.

CMEM 499C. Electronic Media Senior Seminar.
(3-0-3); II.

Prerequisite: senior standing. This course is designed for students seeking careers in electronic media. It will provide them with information and instruction in self-assessment skills, job procurement processes and procedures, career field expectations and requirements, and production of a professional resume and portfolio. *This course satisfies the integrative component for general education.*

Communication (General) Courses

COMM 110. History of Communications Media.
(3-0-3); I, II.

This course is designed to provide information about the various media that make up the field of communication and includes the historical development and the interrelationships among the various areas of communication. Also focuses on the ethical and social dilemmas facing today's media and communication practitioners.

COMM 220. Introduction to Communication Theory.
(3-0-3); I, II.

A survey of communication theory.

COMM 320. Introduction to Research Methods in Communication.

(3-0-3); I, II.

Prerequisites: CMSP 108 and COMM 220. Examines a variety of means to gather information about audiences and messages in a systematic, valid, and reliable manner. Subjects include development of research questions and hypotheses, gathering data through quantitative and qualitative methods, and analyzing and reporting data.

COMM 339, 439. Cooperative Education.
(1 to 8 hrs.); I, II, III.

Prerequisite: consent of department chair. The Department of Communication, Media & Leadership Studies offers a series of cooperative study courses allowing students to alternate semesters of on-campus studies with periods of full-time related work experience. See general section of the catalog for a more complete description of Cooperative Education. See restrictions applying to all programs in communication.

COMM 347, 447. Internship.
(1 to 3 hrs.); I, II, III.

Prerequisite: consent of department chair. May be repeated. Competency-based practical experiences aimed at increasing the proficiency of the student in assigned positions. See restrictions applying to all programs in communication.

COMM 411. Advanced Public Speaking.
(3-0-3).

Exposure to traditional preparation and delivery of complex speeches.

COMM 462. Media Criticism.
(3-0-3).

Examination of broadcasting in sociological, aesthetic, historical, psychological, and humanistic terms.

COMM 464. Public Opinion and the News Media.
(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.

COMM 467. Organizational Communication.
(3-0-3); I.

Study of the functions of communication within organizations and professional environments. Students may be assessed a fee for materials distributed in class.

COMM 476. Special Problems.
(1 to 3 hrs.); I, II, III.

Prerequisite: consent of department chair. Research on an original project with appropriate written report within a subject area.

COMM 482. American Popular Cultural and Communications Technology.
(3-0-3); on demand.

Examination of the role and effects of major advances of communications technology on the course of American popular culture and society in the past, present, and future.

COMM 483. Advanced Small Group Communication.
(3-0-3); on demand.

Study of current theory and concepts pertaining to the discussion process.

Communication (Journalism) Courses

CMJN 177. Journalism Practicum.
(0-4-1); I, II.

Practical experience and professional opportunities in newsgathering, writing, reporting and news presentation.

CMJN 201. Newswriting and Reporting I.
(3-0-3); I, II.

Gathering, organizing and writing news for mass media.

CMJN 204. Copyreading and Editing.
(3-0-3); II.

Prerequisite: CMJN 201. Copy correcting, proofreading, headline writing, news selection and page layout.

CMJN 277. Journalism Practicum.
(0-4-1); I, II.

Practical experience and professional opportunities in newsgathering, writing, reporting and news presentation.

CMJN 285. Introduction to Photojournalism.
(2-2-3); I, II.

Lecture and laboratory, introduction to camera use, darkroom procedure, photo layout and practices in reporting news pictorially. Camera rental fee for students without suitable camera.

CMJN 250. Newsgathering.
(3-0-3); I.

Prerequisite: CMJN 201. Study and application of sources, methods, and technologies used in gathering information for news stories. Includes locating, analyzing and using both hard-copy and electronically accessed documents, records and other facts sources, interviewing techniques, and the legal and ethical implications of information gathering and usage.

CMJN 301. Advanced Newswriting and Reporting.
(3-0-3); II.

Instruction in advanced, in-depth writing and reporting for the news media. Includes coverage of events, issues, government and institutional bodies, computer assisted reporting techniques, legal and ethical aspects of news reporting.

CMJN 358. Sportswriting.
(3-0-3); on demand.

Philosophy and techniques in writing sports events stories, sports analysis and commentary for the print media.

CMJN 364. Feature Writing.
(3-0-3); II.

Prerequisite: CMJN 201. Researching, organizing, writing and marketing of nonfiction articles.

CMJN 377. Journalism Practicum.
(0-4-1); I, II.

Practical experience and professional opportunities in

newsgathering, writing, reporting and news presentation.

CMJN 404. School Publications.

(3-0-3); III.

Prerequisite: senior standing. Advancement of students in the production of school newspapers, yearbooks, and magazines; includes a complete review of journalism principles.

CMJN 460. Reviews and Criticism.

(3-0-3); on demand.

Prerequisite: senior standing. Evaluating and writing critical reviews of drama, literature, art, music, and restaurants for the mass media.

CMJN 465. Editorial Writing.

(3-0-3); II.

Study and application of techniques and formats effective in writing opinion for the print media. Includes government, political, civic and social implications; legal and ethical guidelines.

CMJN 476. Special Problems.

(1 to 3 hrs); I, II, III.

Prerequisite: consent of department chair. Research on an original project with appropriate written report, within a subject area.

CMJN 477. Journalism Practicum.

(0-4-1); I, II.

Practical experience and professional opportunities in newsgathering, writing, reporting and news presentation.

CMJN 492. Media Law and Ethics.

(3-0-3); I, II.

Prerequisite: junior standing. This course covers fundamental First Amendment principles and cases and surveys media law, regulations and ethics necessary for journalists working in print or broadcast media or in advertising and public relations.

CMJN 499C. Journalism Senior Seminar.

(3-0-3); II.

Prerequisite: senior standing. This course is designed for students seeking careers in journalism. It will provide them with information and instruction in self-assessment skills, job procurement processes and procedures, career field expectations and requirements, and production of a professional resume and portfolio. *This course satisfies the integrative component for general education.*

Communication (Speech) Courses

CMSP 100. Voice and Articulation.

(3-0-3); II.

Essentials of distinct utterance, phonetic transcription, and uses of the vocal mechanism.

CMSP 108. Fundamentals of Speech Communication.

(3-0-3); I, II, III.

Practice and study of speech communication fundamentals, including: interpersonal skills; critical listening; small group problem solving; information gathering; preparation and delivery of a variety of informal presentations. *This course satisfies the required core-oral communications for general education.*

CMSP 177. Organizational/Interpersonal Communication Practicum.

(0-4-1); I, II.

Practical experience and professional opportunities in organizational settings.

CMSP 200. Oral Interpretation.

(3-0-3); I.

Communicating the meanings of prose, poetry, and dramatic literature through the use of body and voice.

CMSP 210. Listening.

(3-0-3); I, II.

The study and practice of skills in both retentive and empathic listening.

CMSP 230. Interpersonal Communication.

(3-0-3); I, II.

Examines the variables involved in the communication between individuals. Topics include self-concept, perception, cultural diversity, listening, verbal and nonverbal messages, and conflict as they relate to building and maintaining relationships in a variety of settings.

CMSP 277. Organizational/Interpersonal Communication Practicum.

(0-4-1); I, II.

Practical experience and professional opportunities in organizational settings.

CMSP 300. Oral Communication.

(3-0-3); I.

Prerequisite: CMSP 108. Development of appropriate classroom voice through study, exercise, practice in reading, describing, and motivating. Designed for elementary teaching majors.

CMSP 305. Readers' Theatre.

(3-0-3); on demand.

Prerequisite: CMSP 200 or consent of instructor. Applying the theories of oral interpretation to an audience-oriented production.

CMSP 309. Public Speaking.

(3-0-3); II.

Study and practice of speech preparation, composition, research, delivery, analysis, and criticism. Public-setting speeches will be given, including speeches to teach, persuade, and entertain, using various delivery styles including manuscript, impromptu, extemporaneous, and recitation.

CMSP 350. Communication, Culture, and Diversity.

(3-0-3); I, II.

Prerequisite: CMSP 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. *This course satisfies the area studies-humanities for general education.* Cross listed with IST 350.

CMSP 367. Introduction to Organizational Communication.

(3-0-3); I, II.

Prerequisite: CMSP 108. An introduction to basic organizational communication concepts and principles, combined with development of skill in interviewing, group decision making, and presentational speaking in the workplace.

CMSP 371. Professional Communication Practices and Standards.

(3-0-3); I, II.

Prerequisite: CMSP 108. Enhances and refines the presentational and writing styles and standards for the communication professional. Topics include use of new technology in research, writing, and presentations. A variety of presentation formats are examined and performed from a professional perspective.

CMSP 377. Organizational/Interpersonal Communication Practicum.

(0-4-1); I, II.

Practical experience and professional opportunities in organizational settings.

CMSP 382. Argumentation and Debate.

(3-0-3); on demand.

Making rational decisions through the debate process. Analysis, evidence, briefing, and refutation.

CMSP 383. Small Group Communication.

(3-0-3); II.

Study and development of communication skills required for effective participation in small task-oriented groups. Students will learn about and practice participating, leading, managing meetings, dealing with conflict, solving problems, making decisions and assessing performance in the small group context. *This course satisfies the area studies-humanities for general education.*

CMSP 385. Persuasion.

(3-0-3); II.

Nature and methods of persuasion for influencing group opinion and action. Recommended for business majors.

CMSP 388. Speech Activities.

(1-2-2); on demand.

Prerequisite: consent of instructor. Independent guided study in specific areas of speech through participation in the Intercollegiate Individual Events program. May be repeated up to a maximum of six hours credit.

CMSP 390. Conflict and Communication.

(3-0-3); II.

Theory and practice concerning the treatment of interpersonal conflict. Conflict will be defined and examined from practical and philosophical perspectives. Students will study and demonstrate specific strategies for addressing conflicts typical to everyday life at home, at work, and in the communities. *This course satisfies the area studies-humanities for general education.*

CMSP 400. Interviewing.

(3-0-3); on demand.

A detailed study of the various interview types, coupled with role playing experiences. Includes media, employment, and health care interviews.

CMSP 401. Communication and Leadership.
(3-0-3); I, III.

This course involves the study and practice of leadership from a communication perspective. Particular focus will be on the relationship between communicating and leading. Leadership communication concepts and theories in organizational, group, and public contexts will be examined. Students will analyze their communication styles and personal leadership styles and develop leadership communication skills through team projects and classroom exercises.

CMSP 405. Communication Issue Management.
(3-0-3); I, III.

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.

CMSP 421. Classical Rhetorical Theory.
(3-0-3); on demand.

Study of the rhetorical theories of Plato, Aristotle, Cicero, and other writers of the Greek and Roman periods.

CMSP 422. Contemporary Rhetorical Theory.
(3-0-3); on demand.

The study of rhetorical theory from the Renaissance to the present.

CMSP 423. Rhetorical Criticism.
(3-0-3); on demand.

Application of classical and modern rhetorical theory analysis and criticism of selected speeches.

CMSP 427. American Public Address.
(3-0-3); on demand.

Major speeches, speakers, and movements in America from the Colonial Period to the New Deal.

CMSP 430. Contemporary Public Address.
(3-0-3); on demand.

Major speeches, speakers, and movements from the 1930s to the present.

CMSP 477. Organizational/Interpersonal Communication Practicum.
(0-4-1); I, II.

Practical experience and professional opportunities in organizational settings.

CMSP 495. Administering the Communication Program.
(3-0-3); on demand.

Development and management of communication programs and cocurricular activities. Exposure to traditional high school forensics events with experience in each. Introduction to basic theatre techniques.

CMSP 499C. Senior Seminar Applied Communication. (3-0-3); II.

This course is designed for students majoring in applied communication. It will entail individualized and group instruction, assessment and career preparation focused on disciplinary competencies and general life skills with an emphasis on the integration of knowledge and skills acquired in the program. This course satisfies the integrative component for general education.

Computed Tomography/Magnetic Resonance Courses

CTMR 403. Computed Tomographic Physics and Instrumentation. (3-0-3) I.

Prerequisites: CTMR 405 and 413. *Corequisites:* CTMR 443, 467, and 483. *Restriction:* admission to the computed tomography/magnetic resonance program. The study of concepts and theories of computerized tomographic physics and instrumentation with emphasis on areas such as systems operation, imaging processing artifacts, and image quality. Three hours of didactic experience per week.

CTMR 405. Computed Tomography/Magnetic Resonance Sectional Anatomy. (4-0-4); III.

Corequisite: CTMR 413. *Restriction:* admission to the computed tomography/magnetic resonance program. A study of gross anatomy utilizing a systemic approach to identify and analyze anatomic structures as imaged by computed tomography and magnetic resonance. Emphasis will be placed on relationship and functional analysis of systems.

CTMR 413. Advanced Patient Care. (2-0-2); III.

Corequisite: CTMR 405. *Restriction:* admission to the computed tomography/magnetic resonance program. An advanced study of patient care with emphasis on patient care specific to the specialty area and acute medical emergencies. Two hours didactic and two hours of laboratory experience per week.

CTMR 443. Imaging Procedures in Computed Tomography. (3-2-4); I.

Prerequisites: CTMR 405 and 413. *Corequisites:* 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. Preexamination, patient care preparation, and contrast administration procedures will be discussed.

CTMR 451. Magnetic Resonance Physical Principles of Image Formation. (4-0-4); II.

Prerequisites: CTMR 403, 443, 467, and 483. *Corequisites:* CTMR 455, 461, 487, and RSCI 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); II.

Prerequisites: CTMR 403, 443, 467, and 483. *Corequisites:* CTMR 451, 461, 487, and RSCI 499C. *Restriction:* admission to the computed tomography/magnetic resonance program. The study of imaging techniques and pathological correlation for the various regions in the body. Specific clinical application, coils, scan sequences, protocols, and positioning criteria will be covered in this course.

CTMR 461. Magnetic Resonance Practicum I. (0-40-5); II.

Prerequisites: CTMR 403, 443, 467, and 483. *Corequisites:* CTMR 451, 461, 487, and RSCI 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 Technologist (ARRT).

CTMR 467. Computed Tomography Practicum I. (0-40-5); I.

Prerequisites: CTMR 405 and 413. *Co-requisites:* 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 interventional/special procedures. Preexamination, patient care preparation, and contrast administration procedures will be discussed.

CTMR 477. Advanced Practicum I. (0-40-4); III.

Prerequisites: CTMR 451, 455, 461, 487 and RSCI 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 health care 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 a variety of procedures as established by the American Registry of Radiologic Technologists (ARRT).

CTMR 483. Seminar in Computed Tomography. (2-0-2); I.

Prerequisites: CTMR 405 and 413. *Corequisites:* CTMR 403, 443, and 467. *Restriction:* admission to the computed tomography/magnetic resonance program. This is designed to access the student's knowledge and application of computerized tomography. Based on the assessment results, the faculty will provide review and learning experiences to assist the student in meeting identified learning needs. Two hours of didactic experience per week.

CTMR 485. Advanced Imaging Practicum II.
(0-40-4); III.

Prerequisite: CTMR 477. *Restriction:* admission to the computed tomography/magnetic resonance program. A continuation of the clinical application and professional aspects of computed tomography/magnetic resonance in a healthcare setting with an emphasis on the role of the student as an independent entry level practitioner. The student will be required to demonstrate clinical competency in a number and variety of procedures as required by the American Registry of Radiologic Technologist (ARRT).

CTMR 487. Seminar in Magnetic Resonance.
(2-0-2); II.

Prerequisites: CTMR 403, 443, 467, and 483. *Corequisites:* CTMR 451, 461, 487, and RSCI 499C. *Restriction:* admission to the computed tomography/magnetic resonance program. A review of magnetic resonance content with consideration of clinical systems, physical principles and imaging considerations.

Computer Information Systems Courses

CIS 101. Computers for Learning.
(3-0-3); I, II, III.

Students will learn effective strategies for learning and applying microcomputer software including word processing, spreadsheet, presentation and database management. The course introduces concepts, terminology, and tools of the microcomputer software operating and application system environment. Introduction to the effective utilization of networking for communication, research, and information downloading is also incorporated in the course. Emphasis is on preparing the student to use computer technology effectively in the education and work environment. *This course satisfies the computer competency requirement for general education.*

CIS 200. Logic and Design of Computer Programs.
(3-0-3); I, II.

Prerequisites: CIS 101, and either MATH 152 or 174. This course serves as a preparation for computer programming coursework. It introduces the student to the logic, structure, and methodology of computer programming languages. The emphasis is on formal analytical approaches and quantitative problem solving skills.

CIS 202. Introduction to Programming-Visual Basic.
(3-0-3); I, II.

Prerequisite: CIS 200 or MATH 170. This course uses the Visual Basic programming language to introduce basic programming concepts and processes such as data types, variables, operators, control structures, and arrays. A steady progression of hands-on programming exercises is used to teach analytical and quantitative problem solving, methodical programming and design.

CIS 203. PC Productivity Tools.
(3-0-3); on demand.

Prerequisite: CIS 101. This course builds on the computer competencies the student learned in CIS 101. It develops proficiency with personal computer productivity tools such as spreadsheets, relational databases, presentation software, and Internet tools. Students also learn fundamentals of the personal computer operating system environment, file management, and

problem solving. This course may not be used for credit in the CIS or BIS options.

CIS 205. Introduction to Programming C++.
(3-0-3); I, II.

Prerequisite: CIS 200 or CIS 170 or MATH 170. This course uses the C++ programming languages to introduce basic programming concepts and processes such as data types, variables, operators, control structures, and arrays. A steady progression of hands-on programming is used to teach analytical and quantitative problem solving, methodical programming and design.

CIS 211. Spreadsheet & Database Applications.
(3-0-3); I, II.

Prerequisite: CIS 101. This course prepares students to be proficient in both Microsoft Access and Microsoft Excel. In addition, students gain experience with microcomputer hardware, operating systems, and printer and disk file management. This course is intended for students in the CIS or BIS option.

CIS 214. Introduction to Programming-Java.
(3-0-3); I, II.

Prerequisite: CIS 200 or CS 170 or MATH 170. This course uses the Java programming language to introduce basic programming concepts and processes such as data types, variables, operators, control structures, and arrays. A steady progression of hands-on programming exercises teaches analytical and quantitative problem solving, methodical programming and design. Introductory level object-oriented programming, Java input/output process, exception handling, and graphical user interfaces are covered.

CIS 215. Introduction to Programming-COBOL.
(3-0-3); on demand.

Prerequisite: CIS 200. This course uses the COBOL programming language to introduce basic programming concepts and processes such as data types, variables, operators, control structures, and arrays. A steady progression of hands-on programming exercises is used to teach analytical and quantitative problem solving, methodical programming and design.

CIS 302. Advanced Programming-Visual Basic.
(3-0-3); I, II.

Prerequisites: CIS 202 or CS 303 or consent of instructor. This course builds upon the skills and knowledge developed in CIS 202. Emphasis is placed upon development in a visual environment. Major topics include object oriented concepts, database linkages, graphics, and developing applications for the Internet. Students will use state-of-the-art development tools and design methods to implement business applications that run on a stand-alone PC, on a network, and on the Internet.

CIS 303. Data Structures.
(3-0-3); on demand.

Prerequisite: CIS 205. Key concepts of data definitions, such as lists, stacks, and queues. Recursion, graphs and trees, sorting and searching. Structured program design, elementary data structures and the study of algorithms as tools of program design. Cross listed with CS 303 and MATH 303.

CIS 305. Advanced Programming-C++.
(3-0-3); I, II.

Prerequisite: CIS 205 or CS 303 or consent of instructor. A continuation of CIS 205, with an emphasis on object-oriented methodologies, modular program design, reusable and extensible components, cross-platform compatibility, and stream manipulations. Numerous hands-on programming assignments are used to help the student build proficiency as a computer programmer.

**CIS 311. Management Information Systems.
(3-0-3); I, II.**

Prerequisites: CIS 101 and either ACCT 281 or ECON 202. A study of fundamental information systems concepts and terminology. Intended to prepare future managers for the successful implementation and effective use of information technology in globally networked organizations. This course emphasizes the strategic role of information systems in developing business solutions and transforming enterprises for e-business and e-commerce.

**CIS 314. Advanced Programming-Java.
(3-0-3); on demand.**

Prerequisite: CIS 214 or CS 303 or consent of instructor. This course provides a hands-on introduction to the concepts and terminology of object-oriented programming in the Java language. Concepts covered include applets and servlets, packages and server-side processes, and dynamic Internet content generation.

**CIS 315. Advanced Programming-COBOL.
(3-0-3); on demand.**

Prerequisite: CIS 215 or CS 303, or consent of instructor. Advanced structured computer programming using COBOL. Tape and disk file structures and processing emphasized.

**CIS 320. Web Technologies & Design.
(3-0-3); I, II.**

Prerequisite: CIS 101. This course introduces the student to the Internet technologies, Web design concepts and information architecture using Web editor software. The course also provides an introduction to the hypertext markup language (HTML). Emphasis will be placed upon the planning, design, implementation, and evaluation of informational Web sites for organizations.

**CIS 322. Systems Security & Information Assurance.
(3-0-3); on demand.**

Prerequisite: CIS 101. An overview of information systems security, with applications. The course emphasizes methods for the management of information security through the development of policies, procedures, audits, and logs. It also addresses threats, risks, and vulnerabilities, emerging technologies in areas like smart cards, digital signatures, and biometrics, and methods for the analysis of legal, ethical, and privacy issues in information systems.

**CIS 330. Collaborative Technologies.
(3-0-3); I.**

Prerequisite: CIS 101. This course is designed to provide students with an introduction to group support systems, electronic meeting management and other collaborative and groupware applications. The course addresses a wide range of topics including system implementation and design, electronic

facilitation, business process reengineering, knowledge management and collaborative learning. Special emphasis will be placed on using groupware technologies and systems to create a store, and distribute explicit and tacit knowledge within contemporary organizations.

**CIS 339. Cooperative Education III.
(1 to 8 hrs.); on demand.**

Prerequisites: CIS 311 and consent of instructor. This course provides 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.

**CIS 340. Telecommunications and Networking.
(3-0-3); I, II.**

Prerequisite: choose one; CIS 202, 205, 211, 214, or 215. Fundamental concepts of digital networks and telecommunications technologies in a global environment. The course covers analysis, applications, and administration of computer networks and a broad range of current hardware and software.

**CIS 360. Business Enterprise Systems.
(3-0-3); on demand.**

Prerequisites: CIS 101 & ACCT 281. Enterprise Systems are becoming a significant investment in today's organization. This course presents a conceptual framework and overview on business enterprise systems and business processes. Emphasis will focus on the essential elements of business process integration. Current trends and issues related to business process transformation and improvement will be investigated.

**CIS 365. Healthcare Informatics.
(3-0-3); I, II.**

This course covers fundamental concepts of healthcare information systems; current and developing health and business information systems of interest to managers in health services organizations; healthcare information system architecture; security and privacy issues; uses of healthcare information clinical and strategic analysis and decision support; techniques required to develop and evaluate an information system request for proposal; and thoughts on the future of healthcare information systems including community health systems and web-based access to health information. The course will also cover current information and issues regarding the latest technology applications.

**CIS 398. Practicum in Information Systems.
(3 hrs.); I, II.**

Provides work experience (non-compensated) in an occupational area. Student works under supervision in an approved position. Course credit commensurate with time worked, type of work, variety of work experience.

**CIS 399. Selected Workshop Topics.
(1 to 4 hrs.); on demand.**

Prerequisites: junior standing and consent of instructor. Workshops on selected information systems subjects are presented periodically to supplement the basic course offerings in the department. Credit toward CIS or BIS options must be approved in writing by the student's advisor.

CIS 405. Web Development Strategies and E-commerce.

(3-0-3); II.

Prerequisites: CIS 311 or CS 380, and at least one from the following: CIS 302, 305, 314, 315. A practical introduction to concepts and development methods fundamental to the creation and deployment of global Internet based computer information systems. Topics include Web site 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 Web site.

CIS 414. Designing and Implementing Collaborative Solutions.

(3-0-3); on demand.

Prerequisite: CIS 311. This course provides a foundation in designing and implementing business solutions to support collaboration in global environments. The focus is on creating collaborative environments in which members of an organization can exchange ideas, share information, and work together on common projects and assignments regardless of their physical location. The course combines lecture, case studies, and hands-on experience.

CIS 413. IS Design and Implementation.

(3-0-3); I, II.

Prerequisite: CIS 211, & CIS 311 or CS 380. This course introduces the System Development Life Cycle (SDLC), information systems (IS) project management, systems analysis, structured systems design, information systems strategic planning, and best practices for the design, planning, implementation, and support of information systems. Students will learn how to do systems analysis and design for and how to plan an IS project and implement the project using project management principals. This class makes use of case studies to promote critical thinking and further understanding of topics covered in the class.

CIS 426. Database Management Systems.

(3-0-3); II.

Prerequisite: CIS 325 or CS 380. This course introduces fundamentals of designing databases and database applications in contemporary organizations. Emphasis is on database concepts, design, and understanding of formal data models. Students design and implement a relational database application.

CIS 430. Advanced Topics in Information Systems.

(3-0-3); on demand.

Prerequisite: choose one: CIS 202, 205, 211, 214 or 215. This course is intended to introduce students to the idea of Decision Support Systems (DSS), Expert Systems (ES), Executive Information Systems (EIS), Artificial Intelligence (AI), Modeling and other leading edge concepts in Information Systems.

CIS 439. Cooperative Education IV.

(1 to 8 hrs.); on demand.

Prerequisites: CIS 311 and consent of instructor. This course provides on-site instruction and practical work experience in information systems in a paid position approved through an application process. A maximum of three credit hours is allowed as a CIS option elective.

CIS 442. Network Administration.

(3-0-3); I, II.

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); II.

Prerequisite: CIS 442 or consent of instructor. This course provides advanced skill level with the concepts and terminology of computer intercommunications and networking. The course relies on a hands-on approach as the primary teaching method to focus on organizational enterprise networking and studying specific network protocols. Hands-on tutorials for managing and operating various multi-vendor networks are used in the course.

CIS 476. Special Topics in Computer Information Systems.

(1 to 3 hrs.); on demand.

Prerequisites: consent of instructor and one of the following CIS 200 or CIS 170. This course is for independent study of CIS topics of special interest. Student must prepare a written project proposal and justification for the independent study prior to registration. Proposals are approved based on their academic merit and the special needs of the student.

CIS 480. Cases in Information Technology.

(3-0-3); on demand.

Prerequisites: CIS 311 and senior standing. This is a senior-level course that integrates 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); I, II.

Prerequisites: senior standing in CIS, CIS 325 or CIS 413 or BIS 440. Students will learn skills in information technology project management and will complete a capstone project in a real-world working environment. Working in teams, students analyze the project in a paced approach, identify and document metrics and milestones, and deliver an information systems solution under deadline that meets the agreed-upon project objectives. Final deliverables include a term portfolio and a formal class presentation.

Computer Science Courses

CS 170. Introduction to Computer Science.

(3-2-4); I, II.

Prerequisite: MATH 152 or minimum ACT Math subscore of 22. An overview of modern computer science; mathematical treatment

of algorithms; implementation of fundamental programming principles in a modern programming language; techniques of problem solving related to computing. Designed for students who have basic familiarity with Microsoft Office applications. Cross listed with MATH 170. This course satisfies the area studies-Computer Competence for general education.

CS 172. Computer Games Concepts.
(3-0-3), II.

Prerequisite: CS/MATH 170 or CIS 101 or IET 110 or SCI 110. An introductory course to the general principles of computer games and to primary 3D computer animation. Topics include interface structure, strategies and tactics for making computer games, and animation specific topics including modeling, materials, lighting, and output.

CS 239. Cooperative Education I.
(1 to 3 hrs); I, II.

Prerequisite: department chair approval. An opportunity for students to participate in co-op or intern positions. This course may not be counted toward elective credits for the Area of Concentration, Major, or Minor in Computer Science.

CS 303. Data Structures.
(3-0-3); I, II.

Prerequisite: CIS 205. Key concepts of data definitions, such as lists, stacks, and queues. Recursion, graphs and trees, sorting and searching. Structured program design, elementary data structures and the study of algorithms as a tool of program design. Equates with CIS 303.

CS 310. Algorithms and Advanced Data Structures.
(3-0-3); I, II.

Prerequisite: CS 303. An in-depth study of advanced nonlinear data structures, such as trees and graphs, as well as their implementations and applications. A continuation of advanced programming techniques, including inheritance and polymorphism. A thorough study of algorithms and algorithm efficiency.

CS 312. Game Prototype Design and Implementation.
(3-0-3); II.

Prerequisite: CS 303. Introduction to the industry standard software for game prototype design and implementation. Use of techniques and critical thinking skills for modeling and animation. Customization options and strategies for 3D production.

CS 335. Theory of Programming Languages.
(3-0-3); I.

Prerequisite: CS 310. This course is an introduction to the fundamental principles underlying the design of programming languages. This course investigates the programming features of several common languages from the point of view of implementation. The student is exposed to the language characteristics along with the details and difficulties in their implementation.

CS 339. Cooperative Education II.
(1 to 6 hrs); I, II.

Prerequisite: department chair approval. An opportunity for students to participate in co-op or intern positions. This course may not be

counted toward elective credits for the Area of Concentration, Major, or Minor in Computer Science.

CS 360. Operating Systems.
(3-0-3); II.

Prerequisite: CS 310. Topics to be covered include operating system philosophy, tasking and processes, process coordination and synchronization, scheduling and dispatch, physical and virtual memory organizations, device management, file systems and naming, security and protection, communications and networking, and distributed systems.

CS 380. Software Engineering.
(3-0-3); I.

Prerequisite: CS 310. This course is an introduction to the discipline of software engineering. Students will explore the major phases of the software life cycle, including analysis, specification, design, implementation, testing, and maintenance of software systems. Techniques for creating documentation and using software development tools will be presented. Students will gain experience in these areas by working in teams on software development projects.

CS 439. Cooperative Education III.
(1 to 12 hrs); I, II.

Prerequisite: department chair approval. An opportunity for students to participate in co-op or intern positions. This course may not be counted toward elective credits for the Area of Concentration, Major, or Minor in Computer Science.

CS 450. Computer Graphics.
(3-0-3); on demand.

Prerequisites: CS 310 and MATH 275. An in-depth study of the techniques, methods, and mathematics behind computer graphics. This course will examine the spectrum of today's graphics systems, discuss fundamental graphics techniques and the associated mathematics, transformations, rendering, geometric modeling, and animation.

CS 460. Scientific and Parallel Computing.
(3-0-3); on demand.

Prerequisites: CS 310 and MATH 312. An introduction to scientific and parallel computing. This course explores computers with vector and parallel architectures, development of algorithms for parallel architectures, and programming on parallel and vector computers.

CS 476. Special Problems.
(1 to 3 hrs.); I, II, III.

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.

CS 499C. Senior Capstone.
(3-0-3); I, II.

Prerequisite: junior or senior standing. Designed to give the student an introduction to research and literature in computer science. This course satisfies integrative component for general education. Cross listed with MATH 499C.

Creative Writing Courses

CRW 499C. Senior Thesis.

(3-0-3); I, or II.

Prerequisites: senior standing in the B.F.A. Program and completion of at least 24 hours in English courses and 300-level B.F.A. in Creative Writing courses. Senior B.F.A. majors write a thesis arranged with a member of the creative writing faculty and submit it to a B.F.A. faculty committee for appraisal.

Criminology Courses

CRIM 210. The Sociology of Deviance.

(3-0-3); I, II.

This course is designed to introduce students to the sociological and criminological study of deviant and criminal behavior. Students are also introduced to theories of crime and deviance. Equates with SOC 210.

CRIM 250. Introduction to the Criminal Justice System.

(3-0-3); I, II.

This course introduces students to the current structure and functioning of the criminal justice system in the U.S. from arrest, district attorney's discretionary authority in charging, indictments, conviction, sentencing, and the appeals process. Students are provided with a brief history of the American criminal justice system including policing, the courts, and the correctional system.

CRIM 300. The Criminogenic Family.

(3-0-3); I, II.

The course focuses on family risk factors for later delinquency and criminal behavior as well as preventative intervention and treatment. This course examines a variety of family issues including child maltreatment, domestic violence, family alcoholism, drug addiction, family chaos, inadequate or neglectful parenting, corporal punishment, which are known risk factors for later criminal behavior. Students gain a general understanding of the macro-level processes that have detrimental effects on family functioning and family structure. Equates with WST 302 and SWK 300.

CRIM 306. Juvenile Delinquency.

(3-0-3); I.

Prerequisites: CRIM 210 and three additional hours of criminology or consent of instructor. This course examines the extent, ecological distribution, and theories of delinquency in contemporary American society, including a critical examination of trends and methods of treatment of delinquency. Criminology majors must take this course or CRIM 401. Equates with SOC 306 and SWK 306.

CRIM 315. White Collar Crime.

(3-0-3); I.

This course provides students with a variety of theoretical explanations and examples of corporate and organizational crime as well as crime committed by individuals in the workplace. Equates with SOC 315.

CRIM 316. Global Crime and Terrorism.

(3-0-3); I.

Students are introduced to international crime and terrorism in the 19th, 20th and 21st centuries through study of government-organized Armenian Genocide, the Holocaust and the Nuremberg Tribunal and the initiation of human rights laws following the end of World War II. Students are also introduced to the study and structure of international terrorism that has emanated from the Neo-Salafi and Wahhabi ideology of Radical Muslims beginning in the 20th century after the state of Israel was formed. Other types of organized crime that is discussed will include the following: corruption, drug trafficking, weapons trafficking, and human trafficking. The new International Criminal Court is introduced to students as well as international civil cases involving human rights violations. Equates with SOC 316.

CRIM 317. Police Culture.

(3-0-3); I.

This course provides detailed information about the paramilitary structure of the law enforcement agencies. Students learn about the history of policing, the code of silence, police brutality, corruption, and the history of police commissions. Students gain an understanding of the bureaucratic, organizational and political pressures that exist within and outside these organizations. Students develop a better understanding of the Bill of Rights and how that affects police work as well as Supreme Court cases and decisions that have impacted law enforcement practices. Equates with SOC 317.

CRIM 333. Sociology of Gender Violence: Prospectives on Women and Intimate Partner Violence.

(3-0-3); II.

Prerequisites: SOC 101, SOC 203 or WST 273 and/or consent of instructor. This course offers social science and experiential exposure to the controversies, theories, patterns, policies, and treatment unique to women's experiences with date, acquaintance, and spousal violence. Focus also is given to marginalized groups, including women of low income, women of color, and women in same-sex relationships. Equates with WST 333 and SOC 333.

CRIM 345. Correctional Institutions.

(0-3-0); III.

Prerequisite: 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.

CRIM 363. Cross-Cultural Perspectives on the Sex Industry.

(3-0-3); II.

Prerequisite: SOC 350 or WST 273. This course explores current theoretical debates and empirical studies on the global sex industry. Broad topics in this course include the feminist sex wars, stripping, pornography, prostitution and sexual trafficking. Equates with WST/SOC 363.

CRIM 380. Race, Class, Gender and Crime.

(3-0-3); I, II.

This course focuses on the intersection of race, class and gender 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 388. Sociology of Punishment.
(3-0-3); II.

Prerequisite: CRIM/SOC 210. This course provides the student with background knowledge of the development of ideas and actions taken against those people who have been the objects of society's punishment. Equates with SOC 388.

CRIM 395. Sociology of Serial Murder.
(3-0-3); on demand.

Prerequisites: CRIM 306 or CRIM 401, six additional hours of criminology, sociology, or psychology, and junior or senior standing. This course is designed to provide students with an in-depth examination of the serial killers among us. It focuses on the myths and stereotypes that have evolved from mass media and public efforts to find explanations for the relatively rare phenomenon of serial murder. Case studies are used to introduce several serial killers that have plagued the streets of America and abroad.

CRIM 399. Selected Topics.
(1 to 3 hrs.); II.

Unique topics and learning experiences that supplement regular course offerings. May be repeated in additional subject areas.

CRIM 401. Criminology.
(3-0-3); II.

Prerequisite: CRIM 210 and three additional hours of CRIM. This course provides a thorough examination of criminological theories. Students are also provided with explanations of the causes of crime, as well as the methods of effective treatment and prevention of crime. Criminology majors must take this course or CRIM 306. Equates with SOC 401.

CRIM 416. Working with Offenders.
(3-0-3); II.

In this course, students learn the basic structure of the counseling process with offenders, including techniques and practice skills. Equates with SWK 416.

CRIM 461. Sociology of the Law.
(3-0-3); on demand.

This course provides a clear understanding of the manner in which laws are formed to protect certain groups and marginalize others who are often perceived as threatening. Students deconstruct specific laws by analyzing the formation of criminal law from its incipient stages of development in American society.

CRIM 465. Environmental Sociology.
(3-0-3); II.

This course introduces students to this subfield of sociology examining current environmental issues and conflicts and various theoretical perspectives used to understand them and formulate solutions. The role of grassroots organizations is also

reviewed. Equates with SOC 465.

CRIM 476. Special Problems.
(1 to 3 hrs.); I, II, III.

Prerequisites: three hours sociology general education and nine additional hours of CRIM/SOC. Arranged with the department to study some particular aspect of the field of criminology.

CRIM 490. Practicum in Criminology.
(0-0-5); I, II, III.

Prerequisite: nine hours of criminology. *Corequisite:* CRIM 491. The course is designed to meet with practicum students as a group for a class that meets every week. Students discuss their practicum and are assigned written papers associated with the practicum experience. The course consists of practical experience in a jail, juvenile or adult correctional institutions, juvenile or adult probation and parole agency, or other related agency. A minimum of 240 hours will be spent at the assigned agency.

CRIM 491. Practicum Seminar.
(1-0-1); I, II, III.

Corequisite: CRIM 490. This course is required for all criminology majors.

CRIM 499C. Senior Criminology Capstone.
(0-3-0); I, II.

Prerequisites: CRIM 306 or 401, CRIM/SOC 450, SOC 451, six additional hours of criminology, and senior standing. This course is designed to integrate and synthesize the students' knowledge of criminology prior to graduation. This includes a review of substantive theories, research methods, and information about criminal behavior and the criminal justice system. *This course satisfies the integrative component for general education.*

Diagnostic Medical Sonography Courses

DMS 400. Introduction to Sonography.
(1-0-1); III.

Corequisites: DMS 402A and 408. *Restriction:* admission into the diagnostic medical sonography program. An introduction to the diagnostic medical sonography with emphasis on the history of sonography, the professional role of the sonographer, and the correlation of clinical laboratory tests to sonographic procedures. Four hours of didactic instruction per week for four weeks.

DMS 402A. Scanning Techniques I.
(0-2-1); III.

Corequisites: DMS 400 and 408. *Restriction:* admission into the diagnostic medical sonography program. An introduction to the performance of sonographic procedures. Emphasis is on equipment operation, image production, and basic scanning techniques. Eight hours of laboratory experience per week for four weeks.

DMS 408. Sonographic Sectional Anatomy.
(2-0-2); III.

Corequisites: DMS 400 and 402A. *Restriction:* admission into the diagnostic medical sonography program. A study of sectional anatomy as visualized by sonographic imaging. Anatomic areas include abdominal viscera and vasculature, superficial structures, male and female pelvis, and fetal anatomy. Eight hours of didactic

instruction per week for four weeks.

DMS 410. Abdominal Sonography.

(2-0-2); I.

Prerequisites: DMS 400, 402A and 408. Corequisites: DMS 412A, 416A, 418, 420, and 430. Restriction: admission into the diagnostic medical sonography program. A study of abdominal organs and superficial structures with emphasis on examination protocols, image production and evaluation, normal and pathologic interpretation and relation of laboratory values to pathologic conditions. Four hours of didactic instruction per week for the first eight weeks of the semester.

DMS 412A. Scanning Techniques II.

(0-2-1); I.

Prerequisites: DMS 400, 402A and 408. Corequisites: DMS 410, 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); I.

Prerequisites: DMS 400, 402A and 408. Corequisites: DMS 410, 412A, 418, 420, and 430. Restriction: admission into the diagnostic medical sonography program. Applied principles of genitourinary sonography and introductory physics in a dedicated laboratory setting. Emphasis is on examination protocols, instrument controls, and clinical applications. Four hours of laboratory experience per week for the first eight weeks of the semester.

DMS 418. Genitourinary Sonography.

(2-0-2); I.

Prerequisites: DMS 400, 402A and 408. Corequisites: DMS 410, 412A, 416A, 420 and 430. Restriction: admission into the diagnostic medical sonography program. A study of genitourinary sonography with emphasis on examination protocols, image production and evaluation, normal and pathological interpretation and relation of laboratory values to pathologic conditions. Four hours of didactic instruction per week for the first eight weeks of the semester.

DMS 420. Sonographic Physics and Instrumentation

I.

(2-0-2); I.

Prerequisites: DMS 400, 402A and 408. Corequisites: DMS 410, 412A, 416A, 418, and 430. Restriction: admission into the diagnostic medical sonography program. The introductory study of sonographic physics and instrumentation with emphasis on sound wave concepts, beam patterns, transducers, pulsed echo instrumentation and image storage and display. Didactic content will be applied in corequisite scanning sessions. Four hours of didactic instruction per week for the first eight weeks of the semester.

DMS 426A. Scanning Techniques IV.

(0-2-1); II.

Prerequisites: DMS 410, 412A, 416A, 418, 420 and 430. Corequisites: DMS 428, 438, 441, 442A, 450 and RSCI 499C. Restriction:

admission into the diagnostic medical sonography program. Applied principles of sonographic procedures of the reproductive organs in the gravid state. Emphasis is on examination protocols, equipment operation, and scanning techniques. Four hours of laboratory experience per week for the first eight weeks of the semester.

DMS 428. Obstetrical Sonography.

(2-0-2); II.

Prerequisites: DMS 410, 412A, 416A, 418, 420 and 430. Corequisites: DMS 426A, 438, 441, 442A, 450 and RSCI 499C. 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); I.

Prerequisites: DMS 400, 402A and 408. Corequisites: DMS 410, 412A, 416A, 418, and 420. Restriction: admission into the diagnostic medical sonography program. Clinical application of technical and professional aspects of diagnostic sonography in a healthcare setting with emphasis on performance of areas such as gynecology, abdomen, and superficial anatomy. Eight hours of clinical experience per week for the first eight weeks. Forty hours of clinical experience per week for the second eight weeks of the semester.

DMS 438. Selected Topics in Sonography.

(2-0-2); II.

Prerequisites: DMS 410, 412A, 416A, 418, 420, 430. Corequisites: DMS 426A, 428, 441, 442A, 450 and RSCI 499C. 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); II.

Prerequisites: 410, 412A, 416A, 418, 420 and 430. Corequisites: DMS 426A, 428, 438, 442A, 450, and RSCI 499C. Restriction: admission into the diagnostic medical sonography program. The advanced study of sonographic physics and instrumentation with emphasis on Doppler instrumentation, spectral analysis, color flow imaging, image characteristics and artifacts, quality assurance, bioeffects and safety considerations. Didactic content will be applied in corequisite scanning sessions. Four hours of didactic instruction per week for the first eight weeks of the semester.

DMS 442A. Scanning Techniques V.

(0-2-1); II.

Prerequisites: DMS 410, 412A, 416A, 418, 420, and 430. Corequisites: DMS 426A, 428, 438, 441, 450, and RSCI 499C. 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); II.**

Prerequisites: DMS 410, 412A, 416A, 418, 420, and 430. *Corequisites:* DMS 426A, 428, 438, 441, 442A, and RSCI 499C. *Restriction:* admission into the diagnostic medical sonography program. Clinical application of technical and professional aspects of diagnostic sonography in a health care 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); III.**

Prerequisites: DMS 426A, 428, 438, 441, 442A, 450 and RSCI 499C. *Restriction:* admission into the diagnostic medical sonography program. A continuation of technical and professional aspects of diagnostic sonography in a health care 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 480. Seminar in Sonography.
(2-0-2); III.**

Prerequisite: DMS 470. *Corequisite:* DMS 490. *Restriction:* admission into the diagnostic medical sonography program. A review of diagnostic sonography content with consideration of clinical systems, sonographic patterns, and technical aspects. Eight hours of didactic experience per week for four weeks.

**DMS 490. Sonography Internship IV.
(0-32-3); III.**

Prerequisite: DMS 470. *Corequisite:* DMS 480. *Restriction:* admission into the diagnostic medical sonography program. A continuation of technical and professional aspects of diagnostic sonography in a health care 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.

Early Childhood Education Courses

**IECE 301. At-Risk Infants and Toddlers I.
(3-0-3); I.**

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.

**IECE 345. Preschool Programs for Special Needs Children.
(3-1-3); II.**

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.

**IECE 360. Families in Early Childhood Education.
(3-0-3); I.**

Prerequisites: EDF 207, and HS 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.

**IECE 361. Positive Child Guidance.
(3-1-3); II.**

Prerequisites: EDF 207, and HS 253. This course provides positive strategies for guiding the behavior of young children. Candidates will learn both preventive and corrective discipline measures.

**IECE 410. The Role of the Teacher: Designing Language and Cognitive Activities for Diverse Groups.
(3-0-3); I.**

Prerequisite: admission to TEP. One of a block of three courses that will focus on knowledge, skills, and methodology necessary to develop the role of the early childhood teacher. The focus of this course is the development of cognitive and language activities.

**IECE 411. The Role of the Teacher: Creating a Learning Environment for Diverse Groups.
(3-2-2); I.**

Prerequisite: admission to TEP. How the learning environment is established to provide optimal learning experiences and to guide children in developing responsible behavior.

**IECE 412. The Role of the Teacher: Designing the Implementation of Creative Play Activities for Young Children.
(3-1-3); I.**

Prerequisite: admission to TEP. The role of the early childhood teacher in implementing creative play activities for young children from birth to age five.

**IECE 425. Clinical Practice: Infants & Toddlers and Preschool for 3-5 year olds.
(12 hrs.) I, II.**

Prerequisite: admission to Teacher Education Program. Placement in approved infant/toddler and in approved preschool settings for children ages 3-5 years for clinical semester to include observation, participation, and family support in accordance with Kentucky Interdisciplinary Early Childhood Education Standards. Special conferences with supervising teacher, attendance, and participation in faculty and out-of school activities required.

**IECE 457. Professional Assessment.
(3-0-3); I, II.**

Prerequisites: IECE 301, 345, 410, 411, and 412. This course has two components: assessment and certification portfolio preparation. Final course for students in the IECE certification preparation program, prior to the professional semester. Students will complete assessment for certification and finalize and professionalize their certification portfolio. Assessments required for teacher certification will be administered in this course.

Earth Systems Science Courses

ESS 106. Introduction to Geology. **(3-0-3); I, II, III.**

General introduction to the materials, structures, and physical processes of earth. Emphasis on socioeconomic implications of geologic hazards, earth resource management, and waste disposal/treatment. *This course satisfies the area studies-natural and mathematical sciences for general education.*

ESS 108. Physical Geology. **(3-2-4); I, II.**

Earth materials, structures, and processes for geology majors and others who wish to take upper division ESS classes. Lab provides hands-on experience in rock and mineral identification and the use and interpretation of topographic and geologic maps. *This course satisfies area studies-natural and mathematical sciences for general education.*

ESS 199. Selected Topics. **(1 to 6 hrs.); on demand.**

***ESS 200. Coal Mining Geology.** **(3-0-3); on demand.**

Prerequisite: ESS 108. Study of coal and coal-bearing rocks with applications to surface and underground mining.

ESS 201. Historical Geology. **(2-2-3); II.**

Prerequisite: ESS 108. Introduction to the geologic (rock) record of major physical and biological events in Earth's evolution.

ESS 239. Cooperative Education. **(1 to 8 hrs.); I, II, III.**

Prerequisite: consent of department chair. Participation in supervised work experience in a professional environment.

ESS 262. Mineralogy. **(2-2-3); I, odd years.**

Prerequisite: ESS 108. Physical and chemical properties of minerals; chemical, optical, and x-ray methods of identification, systematic survey of common mineral groups.

ESS 263. Advanced Mineralogy Lab. **(0-2-1); I, odd years.**

Corequisite: ESS 262. Advanced methods in mineralogy.

***ESS 276. Geologic Methods.** **(2-2-3); I, alternate years.**

Prerequisite: ESS 201 or consent of instructor. Basic field office and laboratory techniques and instruments used in geologic studies.

ESS 299. Selected Topics. **(1 to 6 hrs.); on demand.**

ESS 300. Petrology. **(2-2-3); II, even years.**

Prerequisite: ESS 262. Origin, evolution and interpretation of igneous and metamorphic rocks; chemical, optical, and x-ray methods of analysis.

ESS 301. Advanced Petrology Lab. **(0-2-1); II, even years.**

Corequisite: ESS 300.

ESS 303. Planetary Geology. **(3-0-3); I, odd years.**

Prerequisites: ESS 108 and MATH 093 or higher, or an ACT math subscore of 18 or greater. A study of the processes affecting planetary origins and evolution, with an emphasis on processes uncommon on earth (impacts, geology of icy bodies, planetary rings, etc.), particularly in the outer regions of the solar system. The processes of planetary exploration and the various methods of data gathering from interplanetary probes will be examined.

***ESS 315. Sedimentation and Stratigraphy.** **(2-4-4); I, alternate years.**

Prerequisite: ESS 201. Origins and characteristics of sediments, sedimentary structures, depositional environments, facies, systems tracts, sequences and sedimentary basins. Lab provides hands-on experience in sediment analysis and techniques used in reconstructing stratal geometries.

ESS 325. Earth Structure and Tectonics. **(2-4-4); II, odd years.**

Prerequisites: ESS 108 and MATH 141 or MATH 174. Details of Plate Tectonic theory and the forces generated, which deform the Earth's Crust. Geologic structures and geometrical techniques used in descriptive analysis.

ESS 339. Cooperative Education. **(1 to 8 hrs.); I, II, III.**

Prerequisites: ESS 239 and consent of department chair. Participation in supervised work experience in a professional environment.

ESS 340. Oceans & Atmospheres. **(2-2-3); II, even years.**

Prerequisite: ESS 108, or CHEM 101, or CHEM 111, or PHYS 201. An introduction to Oceanography and Atmospheric Science, with an emphasis on interrelationships such as energy transfer, circulation patterns, and seasons. Human influences and cultural effects on international environmental strategies will be explored.

***ESS 350. Geomorphology.** **(2-2-3); I, alternate years.**

Prerequisite: ESS 108. Landforms and geologic processes that shape the Earth's surface. Lab emphasizes use of topographic maps, aerial photographs and remotely sensed images in landform recognition and interpretation.

***ESS 376. Environmental Geology.** **(2-2-3); II.**

Prerequisites: ESS 108 and MATH 135 or higher. Interaction of humans with surface and near-surface geological environments. Applies geological principles and techniques to problems associated with natural and anthropogenic geologic hazards, disposal/treatment of human and industrial wastes, and earth resource management.

***ESS 379. Invertebrate Paleontology.** **(2-4-4); I, odd years.**

Prerequisite: ESS 201 or ESS 410. Invertebrate animals, their morphology, classification, paleoecology, phylogeny, and stratigraphic succession; faunal assemblages and research techniques.

ESS 389. Honors Seminar in Earth Systems Science.
(3-0-3); on demand.

Prerequisites: HON 101 and HON 102. Study and discussion of current topics, issues, and problems in various areas of the overall discipline of Earth Systems. Topics will vary from semester to semester.

ESS 399. Selected Topics
(1 to 6 hrs.); on demand.

***ESS 410. Geological History of Plants and Animals.**
(2-2-3); on demand.

Prerequisite: ESS 201. Evolutionary history of plants and animals throughout geological time.

***ESS 413. Micropaleontology.**
(2-2-3); on demand.

Prerequisites: ESS 201 and ESS 379 or ESS 410. Collection, preparation, microscopic investigation, classification, paleocology, and stratigraphic succession of microfossils.

ESS 415. History of Geology.
(2-0-2); on demand.

Development of geological thought; important persons and their contributions to our understanding of Earth.

ESS 425. Hydrogeology.
(2-2-3); I. alternate years.

Prerequisites: ESS 108, ESS 200 or higher, and MATH 152; *Corequisite:* CHEM 112 or consent of instructor. Algebra-based course in applied ground water concerning the origin and movement of ground water, aquifers, behavior of pumped wells, general water chemistry and water quality, and ground water contamination.

ESS 430. Low-Temperature Geochemistry.
(2-2-3); II. alternate years.

Prerequisites: CHEM 112, ESS 108 and 300 or consent of instructor. Chemical reactions between natural waters, atmospheric gases and earth materials in surface and near-surface environments.

ESS 439. Cooperative Education.
(1 to 8 hrs.); I, II, III.

Prerequisites: ESS 339 and consent of department chair. Participation in supervised work experience in a professional environment.

ESS 440. Biogeochemical Cycles.
(2-2-3); I. even years.

Prerequisites: ESS 325 and ESS 350. The study of cycles as a model for the Earth's climate, its changes, and the integrated nature of the oceans, atmosphere, geology, and biology.

***ESS 450. Economic Geology.**
(3-0-3); on demand.

Prerequisite: ESS 262 or consent of instructor. Formation and occurrence of major metallic and nonmetallic mineral deposits of the world.

ESS 476. Special Problems.
(1 to 6 hrs.); I, II, III.

Prerequisite: consent of instructor. Topic to be approved prior to registration.

ESS 499. Selected Topics.
(1 to 6 hrs.); on demand.

ESS 499D. Geology Field Camp.

**Field trip required or recommended.*

Economics Courses

ECON 101. Introduction to Economics.
(3-0-3); on demand.

Introduction to the structure and policies of the American mixed economic system including an explanation of how a price-market system allocates resources and distributes goods, with an introductory comparison to other economic structures. This course cannot be used to satisfy the requirements for the B.B.A. degree; not open to those who have had ECON 201, 202, or equivalent. *This course satisfies area studies - social and behavioral sciences for general education.*

ECON 102. Economic History of the United States.
(3-0-3); on demand.

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. *This course satisfies area studies-social and behavioral sciences for general education.*

ECON 201. Principles of Macroeconomics.
(3-0-3); I, II.

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. *This course satisfies area studies-social and behavioral sciences for general education.*

ECON 202. Principles of Microeconomics.
(3-0-3); I, II.

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. *This course satisfies area studies-social and behavioral sciences for general education.*

ECON 300. Quantitative Methods in Business and Economics.

(3-0-3); on demand.

Prerequisites: ECON 202, MATH 152, 354, or equivalent. A study of mathematical applications as used in business when analyzing data. Cross listed with MNGT 300.

ECON 302. Labor Economics.

(3-0-3); on demand.

Prerequisite: ECON 101 or higher. Labor management relations, the labor movement, labor legislation, government control and regulation, economic inequality, standards of living, and industrial conflicts.

ECON 305. Comparative Economic Systems.**(3-0-3); on demand.**

Prerequisite: ECON 101 or higher. A study of influential theories of the major economic systems: Capitalism, Marxism, and Communism. Descriptive analysis of the operation of the corresponding economies.

ECON 315. Resource Economics.**(3-0-3); on demand.**

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.); I, II.**

Prerequisite: consent of departmental cooperative education coordinator required. Work experience with an in-depth exposure representative of the student's academic level and experience analogous to a junior level status. Maximum of three hours of cooperative education credit (ECON 339/439) available for option credit.

ECON 341. Public Finance.**(3-0-3); on demand.**

Prerequisite: ECON 101 or higher. Public expenditures; public revenue; taxation; public credit; financial administration of government.

ECON 342. Money and Banking.**(3-0-3); on demand.**

Prerequisite: ECON 101 or higher. Origin, development and functions of money; banking functions and processes; the Federal Reserve System and monetary policy. Cross listed with FIN 342.

ECON 350. Intermediate Microeconomics.**(3-0-3); on demand.**

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); on demand.**

Prerequisite: ECON 201. This course examines and explains, at the intermediate level, what determines the level of output in the economy and the rate of growth in the level of output, as well as the factors that determine the unemployment rate, the price level, the rate of inflation, the interest rate, and foreign exchange rates. In addition, it examines the effects of government policies, especially monetary and fiscal policy, on the above factors.

ECON 389. Honors Seminar in Economics.**(3-0-3); on demand.**

Prerequisite: membership in University Honors Program. Analysis of contemporary economic problems and policy alternatives. Topics may vary each semester.

ECON 399. Selected Workshop Topics.

(1 to 4 hrs.); on demand. Workshops on various economic subjects will be presented periodically to supplement the basic course offerings in economics. Credit toward degree programs must be approved by the student's advisor and the department chair.

ECON 401. Environmental Economics.**(3-0-3); on demand.**

Prerequisite: ECON 101 or higher. Analysis of the economic reasons contributing to environmental degradation and exploration of economic policies to reduce this problem.

ECON 403. Urban and Regional Economics.**(3-0-3); on demand.**

Prerequisite: ECON 101 or higher. Analysis of location patterns, land use, urban and regional structure and growth, and development strategies. Emphasis is placed on contemporary problems and possible solutions.

ECON 410. History of Economic Thought.**(3-0-3); on demand.**

Prerequisite: ECON 101 or higher. The origin and development of economic theories from the Mercantilist through modern times.

ECON 439. Cooperative Education IV.**(1 to 8 hrs.); I, II.**

Prerequisite: consent of departmental cooperative education coordinator required. Work experience with an in-depth exposure representative of the student's academic level and experience analogous to a senior level status. Maximum of three hours of cooperative education credit (ECON 339/439) available for option credit.

ECON 447. International Economics.**(3-0-3); on demand.**

Prerequisite: ECON 101 or higher. International trade theory, international monetary relationships, and the balance of payments. Emphasis is placed on contemporary problems and possible solutions. Cross listed with IST 447.

ECON 455. Economic Development and Growth.**(3-0-3); on demand.**

Prerequisite: ECON 101 or higher. Classical and modern theories of growth and development and their application in both advanced and underdeveloped nations.

ECON 456. Introduction to Econometrics.**(3-0-3); on demand.**

Prerequisite: ECON 300 or consent of instructor. Application of statistical methods to economic and managerial theories. These methods are used to both test the theories with observed data and to estimate the nature and strength of the relationship predicted by the theories.

ECON 476. Special Problems in Economics.**(1 to 3 hrs.); on demand.**

Prerequisites: completion of 21 hours in economics and finance combined and prior consent of department chair. This course is an independent study of economic problems of special interest. Students must present in writing a suggested problem and justification for the study prior to registration. Each request will

be considered on its own merit in relation to the special needs of the student.

ECON 499. Selected Workshop Topics.
(1 to 4 hrs.); on demand.

Workshops on various economic subjects will be presented periodically to supplement the basic course offerings in economics. Credit toward degree programs must be approved by the student's advisor and the department chair.

Education (Adult and Higher) Courses

EDAH 094. ACT Preparation.
(1-0-1); I, II.

Prerequisite: must be full-time with an ACT score under 21. This course is designed to help MSU students enhance standardized test-taking skills and remediate academic deficiencies in order to improve ACT scores. Individualized tutorials outside of class time will be a significant part of the course.

EDAH 102. Study Skills.
(1-0-1); I, II, each nine-week period.

Course is designed to provide special training in the skills and techniques necessary for college level study.

EDAH 199. Selected Topics.
(1 to 3 hrs.); I, II, III.

Investigation of specific problem areas in the field of study. May be repeated in additional subject areas.

EDAH 299. Selected Topics.
(1 to 3 hrs.); on demand.

Workshop for specifically designated task orientation in education. May be repeated in additional subject areas.

Education (Early Childhood) Courses

EDEC 125. Introduction to the Early Childhood Profession.
(3-0-3); I, II, III.

A focus on the principles of child growth and development from birth through age five; it will explore techniques for observing and recording children's behavior, strategies to manage an effective program operation, and maintaining a commitment to professionalism. This course is only open to those in the Child Development Associate Program (CDA).

EDEC 150. Skills for Preschool Teachers.
(3-0-3); I, II, III.

A study of skills needed by teachers of children ages birth to five that will promote the physical, intellectual, social, and emotional development of young children. This course is only open to those in the Child Development Associate Program (CDA).

EDEC 199. Workshop.
(1 to 3 hrs.); on demand.

Workshop for specifically designated task orientation in early childhood education. Conferences with instructor by arrangement. Maximum of six semester hours may be earned

under this course number.

EDEC 276. Independent Study.
(1 to 3 hrs.); I, II.

Directed study of specific areas in early childhood education. Conferences with instructor by arrangement. Maximum of six semester hours may be earned under this course number.

EDEC 399. Workshop.
(1 to 3 hrs.); on demand.

Continuation of EDEC 199.

EDEC 426. Activities and Materials in Early Childhood Education: Infants & Toddlers.
(3-1-3); I.

Prerequisites: HS 253, EDEE 305, IECE 365, senior status and admission to TEP. This course investigates the needs and interests of infant and toddlers and develops professional views in selecting, implementing and designing appropriate teaching materials as well as instruction that can foster children's growth in each developmental area-cognitive, aesthetic, emotional, social, and physical. Laboratory experiences are an integral part of this course.

EDEC 428. Activities and Materials in Early Childhood Education: 3-5 year olds.
(3-1-3) I.

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.

EDEC 470. Research Problems.
(1 to 3 hrs.); I, II.

Directed research study of a professional nature. Conferences with instructor by arrangement. Maximum of six semester hours may be earned under this course number.

Education (Early Elementary – P-5) Courses

EDEE 305. Learning Theories and Practices in Early Elementary.
(3-0-3); I, II.

Prerequisites: EDF 207 and 211. A comprehensive study of contemporary developments in the field of early elementary education including the applications of learning theories to classroom practices; the historical and philosophical origins of current curricular content and practices in early education; and an examination of research findings; study of the impact of familial, economic, and social factors on school performance of learners in the P-5 range. Field experience in P-5 are an integral part of this course.

EDEE 321. Teaching Math in Early Elementary Grades,
(2-2-3); I, II.

Prerequisites: MATH 231. Co-requisite: 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); I, II.

EDEE 323. Language Arts for Early Elementary.
(2-2-3); I, II.

Prerequisites: EDEM 330. Corequisite: EDEE 323 and EDEE 331. Requires TEP admission. 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 327. Literature and Materials for Young Readers.
(3-0-3); I, II.

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

EDEE 331. Reading for Early Elementary Teachers.
(2-2-3); I, II.

Prerequisite: EDEM 330. Corequisite: 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 subskills of reading readiness, vocabulary development, comprehension, and study skills. Assessment and interpretation of reading abilities will be utilized in designing classroom instruction. Field experiences in P-5 are an integral part of this course.

EDEE 423. Supervised Student Teaching Practicum.
(4 to 12 hrs.); I, II.

Prerequisite: completion of requirements for admission to the professional semester. Student is assigned to student teaching center during which time observation, participation, and student teaching are done. The student teaching must be done in nonadjacent grades splitting the six-week period between two of the grades. Special conferences with supervising teacher, attendance, and participation in faculty meetings and out-of-school activities required.

Education (Early Elementary and Middle Grades) Courses

EDEM 330. Foundations of Reading.
(2-2-3); I, II.

Prerequisites: EDF 207, EDF 211, EDSP 230, EDEE 305 or EDMG 306. Co-requisites: EDEL 302 and EDSP 367 (5-9 students, EDMG 347). 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.

EDEM 499C. Student Teaching Seminar.
(3-0-3); I, II.

Prerequisite: completion of requirements for professional semester. Corequisite; one of the following: EDEE 423, EDMG 446, EDSP 435, 437, IECE 425. An orientation to the student teaching semester and the role of responsible teaching in the public school.

Education (Elementary) Courses

EDEL 096. Strategic Reading I.
(3-0-3); I, II.

Developmental reading course for students whose ACT Enhanced reading score is 15 or below, or whose SAT verbal score is below 401. Course provides diagnostic comprehension, and reading rates are stressed.

EDEL 097. Strategic Reading II.
(3-0-3); I, II.

Developmental reading course for students whose ACT Enhanced reading score is 16 or 17 or whose SAT verbal score is between 401 and 440. Students whose ACT or SAT scores are lower than these levels must take EDEL 096 as a *Prerequisite* to this course. Course provides diagnostic, independent, guided improvement of reading skills. Vocabulary, comprehension, and reading rates are stressed.

EDEL 112. Reading English as a Second Language.
(2-2-3); on demand.

Individualized program for teaching vocabulary and reading skills to the non-English speaking student.

EDEL 199. Workshop.
(1 to 3 hrs.); on demand.

Workshop for specifically designated task orientation in elementary education. Maximum of six semester hours may be earned under this course number.

EDEL 250. Practicum.
(3 to 6 hrs.); I, II, III.

Students will demonstrate competency in skills necessary to nurture and promote children's physical, social, emotional, and intellectual growth in a child development framework. Experiences include placement with children from birth to age five in either a classroom or simulated classroom laboratory. This course is open only to those candidates enrolled in Child Development Program training.

EDEL 276. Independent Study.
(1 to 3 hrs.); I, II.

Directed study of specific areas in elementary education. Topic must be approved in advance by instructor. Conferences with instructor by arrangement.

EDEL 302. Integrating Technology into the Classroom.
(3-0-3); I, II.

Prerequisite: CIS 101 or EDUC 222. Corequisites: EDSP 367None

EDEL 333. Fundamentals of Elementary Education.
(3-1-4); on demand.

Prerequisites: admission to TEP and approval of department chair.

Introduction to content areas of the elementary curriculum, including teaching methods and materials. Emphasis is placed on the role of special teachers in the total school program.

**EDEL 470. Research Problems.
(1 to 3 hrs.); I, II.**

Independent research study of a professional nature. Conferences with instructor by arrangement. Maximum of six semester hours may be earned under this course number.

Education (Foundations) Courses

**EDF 207. Foundations of Education.
(3-0-3); I, II, III.**

Orientation for students considering teaching as a career. Course will survey the scientific, historic, philosophic, political and social foundations of the teaching profession. Field experiences are an integral part of course.

**EDF 211. Human Growth and Development.
(3-0-3); I, II, III.**

Survey of developmental patterns from birth to adolescence and their implications for improving the quality of life for the community of life-long learners. Eight hours of field experience (observation and participation) is required and is a foundational element of the course. *This course satisfies the area studies-social and behavioral sciences for general education.*

**EDF 311. Learning Theories and Assessment in Education.
(3-0-3); I, II.**

Prerequisites: admission to TEP and EDF 211. Theories, principles, and concepts of human development, learning, motivation, and assessment are presented and applied to the interpretation and explanation of human behavior in relation to classroom practices and the teaching profession. Twelve hours of field experience (observation) in a school or other educational agency is required and is a foundational element of the course.

**EDF 322. Gender and Education.
(3-0-3); I.**

This course explores gender issues that affect male and female students from preschool to postsecondary education. Crosslisted with WST 322.

**EDF 360. History of Education.
(3-0-3); on demand.**

Education in ancient, medieval, and modern periods; early American backgrounds; early campaigns for improvement of instruction and teacher training; development of present practices; great educators of each period and their contributions.

**EDF 364. The Black Family.
(3-0-3); on demand.**

This course focuses on the impact of historical events including slavery, emancipation, reconstruction and the civil rights movement on the structure and function of the African-American family. Historical perspective, cultural heritage, public policy, education and social formations will be included in this interdisciplinary survey.

Education (Guidance and Counseling) Courses

**EDGC 105. Career Planning.
(2-0-2); I, II.**

Systematic information and guidance in career development provided which assists the student in making a realistic career decision consistent with needs, abilities, attitudes, and personal goals.

Education (Middle Grades – 5-9) Courses

**EDMG 306. Development and Learning in Middle Grades.
(3-0-3); I, II.**

Prerequisites: EDF 207 and 211. A study of the principles of learning and motivation as they are applied in the middle grades.

**EDMG 332. Teaching Reading in the Middle Grades Content Areas..
(3-0-3); II.**

Prerequisites: admission to TEP and EDF 207, 211, EDEM 330. (Orientation/Exploration, Preparation Level Industrial Education and Vocational Family and Consumer Science students are exempt from *Prerequisites* not required in their program. EDEM 330 is a *Prerequisite* for all students). An explanation and evaluation of materials and methods of teaching the advanced reading skills in grades 5-9. The students are taught how to teach the skills needed for comprehension, study skills, and content area reading. Assessment and interpretation of reading abilities will be utilized to design classroom instruction. Field experiences in grades 5-9 are an integral part of this course.

**EDMG 341. Teaching Math in Middle Grades.
(3-0-3); I.**

Corequisites: admission to TEP and EDEM 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. Field experiences in grades 5-9 are an integral part of this course.

**EDMG 342. Teaching Social Studies in Middle Grades.
(3-0-3); I.**

Prerequisites: admission to TEP and EDEM 330. Course will explore the scope and sequence of understandings, attitudes, and skills taught in middle grade social studies programs; and will examine various methodologies used in the middle grades of 5-9. Field experiences in grades 5-9 are an integral part of this course.

**EDMG 343. Teaching Language Arts in Middle Grades.
(3-0-3); II.**

Prerequisites: admission to TEP, EDEM 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.

Field experiences are an integral part of this course.

EDMG 347. Literature and Materials for the Middle Grades.

(3-0-3); I, II.

A survey of literature for the middle grades in which students will examine materials across the different genres as well as various types of media appropriate for levels of certification in grades 5-9. Emphasis on criteria for evaluation and selection of materials, reading interest, needs, and abilities of preadolescence.

EDMG 446. Supervised Student Teaching.

(4 to 12 hrs.); I, II.

Prerequisite: completion of requirements for admission to the professional semester. Placement in a student teaching center during which time observation, participation, and student teaching are done. Special conferences with the supervising teacher, attendance, and participation in faculty meetings and co-curricular activities are also required.

Education (Professional) Courses

EDUC 222. Computing Tools for Educators.

(3-0-3); I, II.

An introduction to educational computing through lecture and directed hands-on computer activities. The course will focus on the computer as a tool for educators. No previous computer experience required. *This course satisfies the computer competency requirement.*

EDUC 476. Reading in the Secondary School.

(2-2-3); I, III.

Prerequisite: admission to TEP. Emphasis is centered around instruction in junior high and high school. Materials are included for instruction and studies of administrative problems involved. Field experiences are an integral part of course.

EDUC 482. Classroom Management and Assessment.

(2-2-3); I, II.

Prerequisite: EDEM 330. Corequisites: SCI 490 and EDEE 321 and TEP admission. Designed to provide assistance in establishing an organized, well managed classroom in grades P-9 and to develop an understanding of educational assessment terms and methods. Field experience in P-5 is an integral part of this course and is required.

Education (Secondary) Courses

EDSE 276. Independent Study.

(1 to 3 hrs.); I, II.

Directed study of specific areas in secondary education. Conferences with instructor by arrangement. Maximum of six semester hours may be earned under this course number.

EDSE 312. Educational Methods and Technology.

(2-2-3); I, II.

Prerequisites: admission to TEP and EDF 311. 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. Field

experiences are an integral part of this course.

EDSE 333. Field Experiences in Secondary Classrooms.

(1-1-2); I, II.

Prerequisite: admission to TEP. The course provides students with opportunities to develop the pedagogical knowledge and skills required to perform successfully the tasks of planning, implementing, and evaluating instruction.

EDSE 399. Selected Topics.

(1 to 3 hrs.); I, II.

Investigation of specific problem areas in the field of study. May be repeated in additional subject areas.

EDSE 416. Clinical Practice.

(12-0-12); I, II.

This integrated professional clinical experience is comprised of two parts: 1) A seminar component, and 2) A public school classroom component. Eligible teacher candidates must successfully complete all aspects of this course as determined by state, university, an assigned university supervisor and public school cooperating teacher.

EDSE 470. Research Problems.

(1 to 3 hrs.); I, II.

Independent research study of a professional nature. Conferences with instructor by arrangement. Maximum of six semester hours may be earned under this course number.

EDSE 483. Classroom Organization and Management for Secondary Teachers.

(3-0-3); I, II.

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. Field experience required with this class.

EDSE 499C. Teacher in Today's Schools.

(2-0-2); I, II.

Prerequisite: admission to professional semester. An application of previous learning in development of an instructional unit taught during student teaching; an orientation to student teaching experience; miscellaneous activities relating to areas of teacher concerns, i.e., school law, pupil accounting, professional organizations, principles of classroom organization and management; and human interaction skills. Field experiences are an integral part of this course. *This course satisfies the integrative component for general education.*

Education (Special) Courses

EDSP 199. Workshop.

(1 to 3 hrs.); on demand.

Workshop for specifically designated task orientation in special education. May be repeated in additional subject areas. Maximum of six semester hours may be earned under this course number.

EDSP 230. Education of Exceptional Children.

(3-0-3); I, II.

Procedures for identification, education, and treatment of exceptional children — the gifted, those with low intelligence, and handicapped — including behavioral deviations.

EDSP 231. Field Experiences.

(0-2-1); I.

Involves the student in on-site experiences in a variety of schools, institutions, and agencies providing services to the trainable mentally handicapped.

EDSP 276. Independent Study.

(1 to 3 hrs.); I, II.

Independent study of a professional problem in special education.

EDSP 320. Introduction to Corrective Speech.

(3-0-3); I, II, III.

Introductory course in speech correction for classroom teacher. Crosslisted with CMSP 320.

EDSP 350. Characteristics of Individuals with Mental Retardation and Orthopedic Handicaps.

(2-2-3); I, II.

Prerequisite: EDSP 230 or appropriate introductory course. Biological, physical, etiological, psychological, and educational characteristics of individuals demonstrating significant deviations in mental or physical behavior. The likely needs of these mentally retarded and orthopedically impaired individuals discussed in light of their presenting problems.

EDSP 353. Language Arts for Students with Behavior Disorders.

(2-2-3); II.

Prerequisites: admission to TEP; EDEM 330 and EDSP 367. Designed to prepare the teacher of students with learning and behavior disorders in curriculum development and specialized procedures for teaching language arts, including reading, spelling, handwriting, language, and written composition.

EDSP 355: Teaching Students with LBD.

(2-2-3); I.

Prerequisites: admission to TEP 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 teaching methodology in systematic 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.

EDSP 356. Applied Behavior Analysis.

(2-2-3); I, II.

EDSP 357. Mathematics and Content Area Teaching for Students with LBD.

(2-2-3); I, II.

Prerequisites: EDSP 230 and 350; (For students in MSD program, this is part of the methods block and all block courses must be taken concurrently). Provides student 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.

EDSP 359. Practicum in Teaching for Students with LBD.

(0-2-1); I, II.

Corequisite: EDSP 355. This practicum is designed to provide trainee teachers with supervised experience in instructional planning, management, and systematic delivery of specially designed instruction for individuals with learning disabilities, behavior disorders, and mild mental disabilities in public schools.

EDSP 360. Characteristics of Individuals with Learning Disabilities and Behavior Disorders.

(2-2-3); I, II.

Prerequisite: EDSP 230 or appropriate introductory course. Biological, physical, etiological, psychological, and educational characteristics of individuals demonstrating significant deviations in learning and behavior disorders. The likely needs of learning disabled and behavior disordered individuals discussed in light of their presenting problems.

EDSP 363. Assistive Technology.

(3-1-3); II.

Prerequisites: EDEL 302, EDSP 230, 350, and general education computer technology course. 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.

EDSP 365. Including Students with Diverse Needs in the Classroom.

(2-2-3); I, II.

EDSP 367. Educational Assessment.

(2-2-3); I, II.

Prerequisite: EDSP 230. Corequisite: either EDEE 321 or 331 and TEP admission. 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.

EDSP 370. Transdisciplinary Assessment of Students with Moderate and Severe Disabilities.

(3-0-3); II.

Prerequisite: EDSP 350 or consent of instructor. Corequisite: EDSP 371. Involves procedures for comprehensive assessment of the educational need of individuals with moderate to severe disabilities including teaming with related services personnel, parents, and others to design and implement an appropriate individual instructional program.

EDSP 371. Field Experiences in Transdisciplinary Assessment and Services for Students with Moderate and Severe Disabilities.

(0-2-1); II.

Prerequisite: EDSP 350 or consent of instructor. Corequisite: EDSP 370. This field placement in programs serving students with moderate and severe disabilities will provide the student with an opportunity to understand the relevant characteristics of this group, understand the roles of various personnel working with these students, and apply the assessment strategies being studied in the corequisite course.

EDSP 372. Transition to Adult Life.

(3-3-3); I, II.

Prerequisites: EDSP 230 and 350. Prepares teachers of students with moderate and severe disabilities to effectively plan for and support students moving from school to adult life. This entails skill development in the area of planning processes, vocational training, support development, developing functional skills and preparation of Individualized Transition Plans (ITPs).

EDSP 373. Curriculum for Students with Moderate and Severe Disabilities.

(3-0-3); I.

Prerequisites: EDSP 350 and 370 and admission to the TEP. This course is part of the MSD block and all block courses must be taken concurrently. Examines the components of functional curriculums for students with moderate and severe disabilities. Also examines strategies to manage a program of community-based instruction, to support the inclusion of students with moderate and severe disabilities in a variety of school and community settings and to conduct authentic assessment of student learning.

EDSP 374. Teaching Students with Moderate and Severe Disabilities.

(3-1-3); I.

Prerequisite: admission to TEP, EDSP 350, 370, or consent of instructor. This course is part of the MSD block and all block courses must be taken concurrently. Examines the critical components of an effective educational program for students with moderate and severe disabilities including the development of Individual Education Plans (IEPs), techniques for effective instruction, strategies for behavior management, approaches to systematic data based instruction, collaboration with families, and interdisciplinary collaboration.

EDSP 375. Practicum in Education of Students with Moderate and Severe Disabilities.

(0-4-2); I.

This course is part of the MSD block and all block courses must be taken concurrently. Field placement in programs serving students with moderate and severe disabilities will provide the student with an opportunity to understand the physically, behaviorally, and educationally relevant characteristics of this group and apply planning and teaching strategies being studied in the corequisite course.

EDSP 399. Workshop.

(1 to 3 hrs.); on demand.

Workshop for specifically designated task orientation in special education. May be repeated in additional subject areas. Maximum

of six semester hours may be earned under this course number.

EDSP 435. Supervised Teaching Practicum.

(4 to 12 hrs.); I, II.

Prerequisites: admission to TEP, attainment of scholastic standing of 2.5 on residence courses at MSU, minimum standing of 2.5 on all work completed in area of concentration, major(s), and minor(s), minimum of one semester residence, and approval of the University Teacher Education Council. Placement is in public school special education and elementary education classrooms on the basis of one week placement for each credit hour unit. Application made through coordinator of professional laboratory experiences.

EDSP 437. Student Teaching Practicum in Education of Students with Moderate and Severe Disabilities.

(6 to 12 hrs.); I, II.

Prerequisites: admission to TEP, attainment of 2.5 GPA on residence courses at MSU, 2.5 GPA on all work in area(s) of concentration, major(s), and minor(s), minimum of one semester residence, 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 470. Research Problems.

(1 to 3 hrs.); I, II.

Independent research study of a professional problem. Conferences with instructor by arrangement.

Electrical, Electronics, Telecommunications and Computer Technology Courses

ITEC 140. Basic Electricity.

(2-2-3); I, II.

General course on the laws, theories, and applications of electricity. Options of electricity, electronics, or manufacturing robotics should take ITEC 141. Lab required.

ITEC 141. DC Circuits.

(2-2-3); I, II.

An introduction to fundamentals of electricity and electronics, including electronics principles, components, quantities, measurements, and design and analysis of DC circuits.

ITEC 144. Network Fundamentals.

(2-2-3), II.

Prerequisite: ITEC 141. This course will study computer networks including the theory of network operation, selection of hardware, and topology design for such applications as Peer-to-Peer, Local Area Networks (LAN) and Wide Area Networks (WAN). The course will also survey current network protocols used for signal transport over networks, packet switching, and routing techniques.

ITEC 215. Basic Control Systems.

(2-2-3); I.

Prerequisite: ITEC 141. Control of AC and DC loads in commercial

and industrial applications. Course content will include the selection and application of control devices and control relays, and the design of control circuits using electromechanical devices and programmable controllers.

ITEC 240. Residential Wiring.
(2-2-3); I, II.

Prerequisite: ITEC 141. Designing, planning, estimating, and methods of constructing electrical systems for single family dwellings. Based on most recent National Electrical Code. Lab required.

ITEC 241. AC Circuits.
(2-2-3); I, II.

Prerequisites: ITEC 141 and MATH 141 or higher. 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); I.

Prerequisite: ITEC 241. This course will study the technical foundations of all electronic communications systems. The students will examine the key concepts in electronic communications, including principles of modulation, the distinction between analog and digital communications, and basics of transmission path engineering.

ITEC 244. Fiber Optic Theory and Applications.
(2-2-3); II.

Prerequisite: ITEC 242. This course covers the theory of fiber optic transmission media and their application to various 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); II.

Prerequisite: ITEC 241. Functional and logical operation of digital circuits, including logic gates, combinational logic, multivibrators, counters and registers.

ITEC 342. Electronic Devices and Circuits.
(2-2-3); II.

Prerequisite: ITEC 242. Solid state devices and integrated circuits along with their applications. Topics include FETs, operational amplifiers, thyristors and other specialized devices, oscillators, active filters, and voltage regulators.

ITEC 343. Motors and Generators.
(2-2-3); II.

Prerequisite: ITEC 241. Characteristics, selection, and control of AC and DC motors, solenoids, and other commercial or industrial loads. Selection and application of control devices and relays. Design of control circuits using relay logic and programmable controllers. Lab required.

ITEC 344. Wireless Communications.
(2-2-3); I.

Prerequisite: ITEC 242. The course covers fundamental concepts of wireless communications including analog and digital modulation, radio propagation, antennas, transmitter and receiver circuitry, and cellular telephony and radio.

ITEC 345. Microprocessor Electronics.
(2-2-3); I.

Prerequisite: ITEC 245. Components and operation of a microprocessor system, including program counters, address counters, accumulators, arithmetic logic units, instruction decoders, controller-sequencers, and registers.

ITEC 346. Programmable Logic Controllers (PLC).
(2-2-3); II.

Prerequisite: ITEC 215. This course covers the study of Programmable Logic Controllers, including the theory of PLC operation, selection of a PLC for an application, and PLC networking and programming.

ITEC 355. Digital and Microcontroller System Design.
(2-2-3); I.

Prerequisite: ITEC 245. Sequential digital logic design technique. Design using Large Scale Integration (LSI) and Very High Speed Integrated Circuit Hardware Description Language (VHDL) Technology. Design techniques for solving problems using state-of-the-art VHDL and microprocessor components.

ITEC 400. Digital Signal Processing I.
(2-2-3); I.

Prerequisite: ITEC 344. This course provides an introduction to the exciting 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 450. Digital Signal Processing II.
(2-2-3); II.

Prerequisite: ITEC 400. This course provides an introduction to advanced topics in digital signal processing- linear estimation and production analysis, signal modeling, lattice filters, special estimation and adaptive filters; signal processing algorithms and techniques used in a broad range of applications.

ITEC 443. Industrial Electricity.
(2-2-3); II.

Prerequisites: ITEC 240 and 241. Design, theory, and wiring techniques for commercial and industrial applications. Multi-family dwellings, commercial buildings, and hazardous locations are some of the topics covered. Based on the most recent National Electrical Code. Lab required.

ITEC 444. Satellite Communications.
(2-2-3); II.

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.

ITEC 445. Computer Electronics.
(2-2-3); II.

Prerequisite: ITEC 345. Computer architecture, addressing modes,

instruction sequence, memories, IO systems, AD systems, assemblers, interpreters, operating systems and microprocessor interfacing.

ITEC 480. Digital Communication and Networking. (2-2-3); I.

Prerequisite: ITEC 445. An intensive study of digital electronic communication and networking. The topics include digital modulation, transmission media characteristics, interface standards, network configurations, and testing equipment.

English Courses

ENG 090. Developmental Writing. (3-0-3); I, II, III.

Prerequisite: ACT score of 13 or below. A placement composition course that reviews basic grammar, punctuation, and mechanics and emphasizes writing/revising for clarity and correctness. ENG 090 does not satisfy the general education requirement for written composition. ENG 090 does not count as hours toward degree.

ENG 099. Basic Writing Skills. (3-0-3); I, II, III.

Prerequisite: ACT score in English of 14-17 or successful completion of ENG 090. This course is designed to provide students with an intensive opportunity to develop entry-level writing skills of critical importance in ENG 100 — specifically, a basic ability to read, write, and reason analytically as well as to incorporate and document basic research into one's own writing. ENG 099 does not satisfy the general education requirement for written composition. ENG 099 does not count as hours toward degree.

ENG 100. Writing I. (3-0-3); I, II, III.

Prerequisite: 18 ACT English subscore or successful completion of ENG 099. This course is designed to help students understand and develop their writing, reading, and thinking abilities through the production and rhetorical examination of personal and academic texts. *This course satisfies the required core-writing I for general education.*

ENG 120. Approaches to Literature. (3-0-3); I, II, III.

Prerequisites: An ACT score of 18 in English and in reading or a grade of "C" or better in ENG 099 and EDEL 097. Introduction to literary appreciation for nonmajors, with emphasis on ways of reading and understanding literary texts. Topics for individual sections of the course will be designated in the course schedule for each semester. *This course satisfies area studies-humanities for general education.* Crosslisted with WST 120.

ENG 200. Writing II. (3-0-3); I, II, III.

Prerequisites: ENG 100 and either completion of 24 semester hours or consent of instructor. Builds on skills learned in ENG 100 by leading students to analyze and write critically about readings that are related to one of the area studies within general education. *This course satisfies the core-writing II requirement for general education.*

ENG 205. Language: Culture and Mind. (3-0-3); I, II.

Introduction to the study of human language. Topics include language and culture, language and the mind, meaning and communication, the acquisition of language, and sound and writing systems. *This course satisfies area studies-humanities for general education.*

ENG 211. Introduction to World Literature I. (3-0-3); I.

Prerequisites: An ACT score of 18 in English and in reading or grade of "C" or better in ENG 100 and EDEL 097. A comparative study of dramatic, lyric, and narrative ancient literatures. *This course satisfies area studies-humanities for general education.* Crosslisted with IST 211.

ENG 212. Introduction to World Literature II. (3-0-3); II.

Prerequisites: An ACT score of 18 in English and in reading or grade of "C" or better in ENG 100 and EDEL 097. A comparative study of dramatic, lyric, and narrative literatures of the world after the 16th century. *This course satisfies area studies-humanities for general education.* Crosslisted with IST 212.

ENG 280. Introduction to Teaching English in Secondary Schools (3-0-3); I.

Introduction to Teaching English in Secondary Schools 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. Up to 15 hours of Level II field experience may be required.

ENG 292. Technical Composition. (3-0-3); I, II, III.

Prerequisites: English 100 (or its equivalent) and 24 or more credit hours completed. English 292 builds on skills learned in English 100 with emphasis on the writing of scientific-industrial directions, letters, and memos, abstracts, minor project reports, and the use of visual aids. *This course satisfies the core writing-II requirement for general education.*

ENG 293. Introduction to Creative Writing. (3-0-3); on demand.

Prerequisite: ENG 100. Introduction to creative writing, with an emphasis on production in several genres. All sections will include at least three of the following: fiction, poetry, creative nonfiction, and drama. *This course satisfies the area studies-humanities for general education.*

ENG 300. Introduction to Literary Studies in English. (3-0-3); II.

Prerequisite: ENG 100 (or equivalent). This course is an advanced introduction to literary studies in English. The course will focus on basic literary terminology, literary research and documentation techniques, and fundamental theoretical issues in studying literature. It is strongly recommended that students take ENG 300 before taking any upper-level literature courses.

ENG 305. Introduction to Linguistics.
(3-0-3); II.

Introduction to the major areas of contemporary linguistics.

ENG 311. Global English Literature.
(3-0-3); on demand.

Prerequisite: ENG 100 (or equivalent). This course is an introduction to the English language literature produced outside of a British or American literary tradition.

ENG 315. Structure of English.
(3-0-3); I, II.

Prerequisite: ENG 100 or equivalent. The structures of the English language from the perspective of descriptive and structural linguistics.

ENG 320. Women Writers and Feminist Perspectives.
(3-0-3); on demand.

Prerequisite: ENG 100 or equivalent. Women writers of the 19th and 20th centuries, their feminine vision and voice. Focus on primary works; attention given to feminist criticism in both theory and practice. Crosslisted with WST 320.

ENG 325. Religious Literature of the World.
(3-0-3); on demand.

Prerequisite: ENG 100 or equivalent. The literature of major religions of the world. Crosslisted with IST 325.

ENG 331. British Literature to 1750.
(3-0-3); I, II.

Prerequisite: ENG 100 or equivalent. A survey of British literature from Beowulf through Dr. Johnson.

ENG 332. British Literature since 1750.
(3-0-3); I, II.

Prerequisite: ENG 100 or equivalent. A survey of British literature from Wordsworth to the present.

ENG 341. American Literature to 1865.
(3-0-3); I, II.

Prerequisite: ENG 100 or equivalent. A survey of American literature from its colonial beginnings to the end of the Civil War.

ENG 342. American Literature since 1865.
(3-0-3); I, II.

Prerequisite: ENG 100 or equivalent. A survey of American literature from the end of the Civil War to the present.

ENG 344. The Short Story and the Novel.
(3-0-3); I, II.

Prerequisite: ENG 100 or equivalent. Study of representative forms of the short story and the novel.

ENG 348. African-American Literature.
(3-0-3); on demand.

Prerequisite: ENG 100 or equivalent. A study of African-American poets, playwrights, autobiographers, and novelists of the 19th and 20th centuries.

ENG 360. Appalachian Literature.
(3-0-3); on demand.

Prerequisite: ENG 100 or equivalent. Regional literature including selected works by such major writers of the region as Harriette

Arnow, Jesse Stuart, and Wilma Dykeman.

ENG 365. Literature of the South.
(3-0-3); on demand.

Prerequisite: ENG 100 or equivalent. Readings in the major representative Southern authors.

ENG 367. Old Testament Literature.
(3-0-3); on demand.

Prerequisite: ENG 100 or equivalent. A critical study of the history and literature of the Old Testament.

ENG 368. New Testament Literature.
(3-0-3); on demand.

Prerequisite: ENG 100 or equivalent. A critical study of the history and literature of the New Testament.

ENG 381. Teaching Literature in Secondary Schools.
(3-0-3); I, II.

Prerequisites: admission to TEP, completion of EDF 207, EDF 211, ENG 280, and at least six hours of 300-level literature courses. This course focuses on preparing secondary English teaching candidates to teach literature in the high school classroom. The course covers theories of literacy appropriate to the high school classroom, research on adolescent reading development, and theories and methodologies for teaching literature to adolescents. The course will include selections not only from canonical and contemporary literature but also from Kentucky's Core Content and Program of Studies for Literature. Students will engage in a variety of individual, small-group, and large-group activities in order to both learn and practice methods and strategies for literature instruction. The course includes a 10-hour component in Level II and III field experience.

ENG 382. Teaching Writing in Secondary Schools.
(3-0-3); I, II.

Prerequisites: admission to TEP and completion of EDF 207. 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.

ENG 389. Honors Seminar in Literature.
(3-0-3); on demand.

Prerequisite: ENG 100 or equivalent. Intensive analytical study of a technique, movement, theme, author, or genre. Restricted to Honors Program students.

ENG 390. Professional Writing.
(3-0-3); I, II.

Prerequisites: Successful completion of the general education writing requirements, and the general education computer competency requirement. A writing-intensive course which teaches intermediate-level students the formal, rhetorical, and mechanical aspects of technical writing to prepare them for writing case reports, memoranda, technical specifications, process descriptions, and other work-related documents.

ENG 391. Advanced Expository Writing.
(3-0-3); on demand.

Prerequisite: ENG 200 or equivalent. Practice in the writing of expository prose, and long essays based on research. Crosslisted with WST 391.

ENG 392. Teaching Writing in Elementary and Middle Schools.
(3-0-3); on demand.

Prerequisite: ENG 200 or equivalent. Study of composition theory, research, and practice in a context of a student's own writing through workshops and classroom demonstrations.

ENG 393. History of the English Language.
(3-0-3); on demand.

Prerequisite: ENG 100 or equivalent. The major developments in the evolution of English from an early Germanic dialect to its present form.

ENG 394. Language and Society.
(3-0-3); I.

Prerequisite: ENG 100 or equivalent. Introduction to sociolinguistics. Focus on language variation and issues of language, gender, race, power, and education.

ENG 395. Poetry Writing.
(3-0-3); on demand.

Prerequisite: ENG 200 or equivalent. Instruction in poetry writing: structural principles, use of metaphor, image, detail, voice, rhythm, the line and other concerns of poetics. A writing workshop format with emphasis on poetry in the contemporary idiom.

ENG 396. Fiction Writing.
(3-0-3); on demand.

Prerequisite: ENG 200 or equivalent. Instruction in fiction writing: plot, conflict, characterization, point of view, atmosphere and other concerns of contemporary fiction. Writing workshop format with emphasis on fiction in the contemporary idiom.

ENG 397. Writing Creative Nonfiction.
(3-0-3); on demand.

Prerequisite: ENG 200 or equivalent. Instruction in writing creative nonfiction (including memoir, personal essay, autobiography, and general literary nonfiction). Topics include developing themes from subjects, dramatizing life experience, developing a voice and persona, and other concerns of contemporary creative nonfiction. Writing workshop format.

ENG 398. Gay and Lesbian Literature.
(3-0-3); on demand.

Prerequisite: ENG 100 or equivalent. This course is an introduction to the growing field of literature and sexuality studies. In particular, the course will focus on the formation of a gay and lesbian literary canon in contemporary English Studies. *Equates with WST 394.*

ENG 399. Special Courses.
(1 to 3 hrs.); on demand.

Prerequisite: ENG 100 or equivalent. These courses are usually specialized offerings for the undergraduate student. The purpose of these courses is to enhance the existing program in English.

ENG 400. Studies in English for Teachers.
(3-0-3); I.

Prerequisite: senior standing and admission to TEP. Must be admitted to the Teacher Education Program. 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. The course may include up to 15 clock hours of Level III field experiences.

ENG 401. Semantics.
(3-0-3); on demand.

Prerequisite: ENG 305 or 315. A linguistic approach to the study of meaning in language.

ENG 404. Linguistics: Grammar.
(3-0-3); on demand.

Prerequisite: ENG 305 or 315. Principles of grammar from current theoretical perspectives.

ENG 405. Introduction to Old English.
(3-0-3); on demand.

Introduction to the language and literature of the Anglo-Saxon period.

ENG 422. Studies in American Literature to 1900.
(3-0-3); I or II.

Prerequisite: ENG 341 or ENG 342 with a grade of "C" or better. Studies in American Literature to 1900 provides intensive appreciation and analysis of literary texts from the colonial period to 1900. Depending on the particular orientation an instructor might choose, students will learn about such movements as: 1) Romanticism and Gothicism, 2) Transcendentalism, 3) Literary Nationalism, 4) Regionalism, and/or 5) Realism

ENG 423. Studies in American Literature, 1900-1965.
(3-0-3); I or II.

Prerequisite: ENG 341 or ENG 342 with a grade of "C" or better. Studies in American Literature, 1900-1965 provides intensive analysis and appreciation of literary texts from the turn of the century to the onset of postmodernism. Depending on the particular orientation an instructor might choose, students will learn about such movements as: 1) Realism, 2) Naturalism, 3) Modernism, 4) The Harlem Renaissance, and/or 5) Expatriatism.

ENG 424. Studies in Contemporary American Literature,
(3-0-3); I or II.

Prerequisite: ENG 341 or ENG 342 with a grade of "C" or better. Studies in Contemporary American Literature provides intensive analysis and appreciation of literary texts from 1965 to the present day. Depending on the particular orientation an instructor might choose, students will learn about: 1) postmodern literature, 2) such contemporary movements as hypertexts and e-poetry, and/or 3) the many multi-ethnic literatures currently dominating the American literary landscape.

ENG 432. The English Novel.
(3-0-3); on demand.

Prerequisite: ENG 331 or 332. Development of the English novel from its beginnings to the 20th century.

ENG 435. Shakespeare.**(3-0-3); II.**

Prerequisite: ENG 200 or equivalent. A study of selected comedies, histories, and tragedies in their historical and critical context.

ENG 436. The English Renaissance.**(3-0-3); on demand.**

Prerequisite: ENG 331 or ENG 332 with grade of "C" or better. Selected literature from 1500 to 1600, including works by Skelton, Wyatt and Surrey, Sidney, Spenser, and Shakespeare (excluding his plays).

ENG 439. Senior Cooperative Education.**(3-0-3); on demand.**

Prerequisites: ENG 390, 391, and 497. Work experience in the technical or writing field in a position approved through an application process.

ENG 441. Restoration and Eighteenth Century British Literature.**(3-0-3); on demand.**

Prerequisite: ENG 331 or ENG 332 with grade of "C" or better. Representative selections of English literature, including works by Dryden, Pope, Swift, Addison and Steele, and Johnson.

ENG 442. Romantic Writers.**(3-0-3); on demand.**

Prerequisite: ENG 331 or ENG 332 with grade of "C" or better. Representative selections of English literature, including works by Wordsworth, Coleridge, Byron, Shelley, Keats, and the essayists.

ENG 443. Victorian Writers.**(3-0-3); on demand.**

Prerequisite: ENG 331 or ENG 332 with grade of "C" or better. Representative selections of English literature, including works by Browning, Tennyson, Arnold, and Carlyle.

ENG 444. Twentieth Century British Literature.**(3-0-3); on demand.**

Prerequisite: ENG 331 or ENG 332 with grade of "C" or better. Study of modern British literary genres.

ENG 445. Seventeenth Century British Literature.**(3-0-3); on demand.**

Prerequisite: ENG 331. A study of literature from the time of James I to the Restoration with emphasis on works by Donne and Jonson.

ENG 453. Modern Drama.**(3-0-3); on demand.**

Prerequisite: ENG 300. Representative dramas from the advent of realism to the present.

ENG 455. Early Dramatic Literature.**(3-0-3); on demand.**

Prerequisite: ENG 300. Representative drama from the Greeks to the mid-19th century.

ENG 463. American Fiction.**(3-0-3); on demand.**

Prerequisite: ENG 341 or 342. The development of American fiction from Charles Brockden Brown to Faulkner.

ENG 466. American Poetry.**(3-0-3); on demand.**

Prerequisite: ENG 200 or equivalent. The development of American poetry from its beginning to the present, with emphasis on such poets as Bradstreet, Whitman, Dickinson, Frost, Eliot, and Stevens.

ENG 470. Film and Literature.**(3-0-3); on demand.**

Prerequisite: ENG 200 or equivalent. An introduction to the study of film as literature with extensive reading in the history of film and viewing of selected film classics.

ENG 475. Senior Cooperative Education.**(3-0-3); on demand.**

Prerequisites: ENG 390, 391, and 497. Work experience in the professional writing field in a position approved through an application process. Not available for option credit.

ENG 476. Directed Studies.**(1 to 3 hrs.); on demand.**

Prerequisite: consent of instructor and department chair. This course is an independent study in English for the undergraduate 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); on demand.**

Prerequisite: ENG 293 or 395. Advanced instruction in poetry writing: organic and traditional structures; tone and persona; the sentence and the line; the lyric, dramatic, narrative, and meditative stances; and other concerns of poetics. An intensive writing workshop format with emphasis on poetry in the contemporary idiom.

ENG 484. Advanced Fiction Writing.**(3-0-3); on demand.**

Prerequisite: ENG 293 or 396. Advanced instruction in fiction writing: plot, conflict, characterization, point of view, atmosphere, and other concerns of contemporary fiction. An intensive writing workshop format with emphasis on contemporary fiction and the audience and market for literary fiction.

ENG 485. Advanced Nonfiction Writing.**(3-0-3); I or II.**

Prerequisite: ENG 200 or equivalent or consent of the instructor. Advanced instruction in creative nonfiction writing. Focus on the diversity of types of creative nonfiction including memoir, personal essay, autobiography, literary memoir, literary nature writing, literary journalism, literary travel writing, literary science writing, literary cultural criticism and other general literary nonfiction. Writing workshop format.

ENG 495. Seminar: Major Writers.**(3-0-3); on demand.**

Prerequisite: ENG 300. Intensive study of one or more major figures in the literature of the world.

ENG 497. Technical Editing.**(3-0-3); on demand.**

Prerequisite: ENG 390. Study of the practice and management of editing for technical, scientific, professional, and corporate reports and writings.

ENG 499C. Senior Seminar in English.**(3-0-3); I, II, III.**

Prerequisites: senior standing, completion of at least 24 hours in English courses, including ENG 331, 332, 341 and 342. Examination, in a seminar setting, of issues and opportunities for English majors. *This course satisfies the integrative component for general education.*

Finance Courses

FIN 199. Selected Workshop Topics.**(1 to 4 hrs.); on demand.**

Workshops on various finance subjects will be presented periodically to supplement the basic course offerings in finance. Credit toward degree programs must be approved by the student's advisor and the department chair.

FIN 252. Mathematics of Finance.**(3-0-3); on demand.**

Application of mathematical techniques for business and economic analysis. Topics covered include: interest annuities, amortization, sinking funds, bond valuation, and other relevant quantitative subjects.

FIN 264. Personal Finance.**(3-0-3); on demand.**

Planning personal finance, financial statements, budgeting, managing financial and non-financial assets, taxes, insurance, and estate planning. *This course satisfies area studies-practical living for general education.*

FIN 325. Bank Management.**(3-0-3); on demand.**

Prerequisite: ACCT 281, ECON 101 or higher. Organization and operation of the commercial bank.

FIN 339. Cooperative Education III.**(1 to 8 hrs.); I, II.**

Prerequisite: consent of departmental cooperative education coordinator. Work experience with an in-depth exposure representative of the student's academic level and experience analogous to a junior level status. Maximum of three hours of cooperative education credit (FIN 339/439) available for option credit.

FIN 342. Money and Banking.**(3-0-3); on demand.**

Prerequisite: ECON 101 or higher. Origin, development, and functions of money; banking functions and processes; the Federal Reserve System and monetary policy. Crosslisted with ECON 342.

FIN 360. Business Finance.**(3-0-3); I, II.**

Prerequisites: ACCT 282, ECON 101 or higher, MATH 152 or equivalent. Financial management, management of cash, receivables, inventories, plant assets, short-term debt, long-term

debt, intermediate-term debt, owner's equity.

FIN 365. Financial Issues for Small Business.**(3-0-3); on demand.**

Prerequisites: ACCT 282 and FIN 360. Examines the financial issues small businesses deal with at start-up and on a day-to-day basis. Students will learn how small businesses can apply financial principles to benefit the company. Crosslisted with MNGT 365.

FIN 370. Working Capital Management.**(3-0-3); on demand.**

Prerequisites: ACCT 282 and FIN 360. Focus on short-term financial management decision-making covering topics which include: accounts receivable management, inventory management and control, cash management, accounts payable management, liquidity analysis, and short-term investing and financial alternatives. Short-term financial management decisions facing small businesses are emphasized.

FIN 372. Retirement Planning and Employee Benefits.**(3-0-3); on demand.**

Prerequisites: FIN 264 and 360. Covers retirement planning issues such as types of retirement plans, distribution options, retirement needs analysis, suitability of an investment portfolio for a qualified plan, Social Security, Medicare, and Medicaid; and employee benefit issues such as life, medical, and disability insurance.

FIN 373. Investments.**(3-0-3); on demand.**

Prerequisites: ECON 202 and FIN 360. Investment risks, security analysis, investment policy-making, both individual and institutional.

FIN 374. Estate Planning and Taxation.**(3-0-3); on demand.**

Prerequisites: FIN 264 and 360. Covers estate planning and taxation issues such as documentation, legal ownership to property, trusts, the federal gift tax, probate, and asset valuation.

FIN 375. Accounting Analysis and Financial Decision Making.**(3-0-3); on demand.**

Prerequisites: ACCT 282, CIS 101, and FIN 360. Interpretation and development of accounting and financial data and statements incorporating spreadsheet analysis and applications. Crosslisted with ACCT 375.

FIN 376. Risk Management and Insurance.**(3-0-3); on demand.**

Prerequisites: FIN 264 and 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.); on demand.**

Workshops on various finance subjects will be presented periodically to supplement the basic course offerings in finance. Credit toward degree programs must be approved by the student's advisor and the department chair.

FIN 420. Financial Markets and Institutions.**(3-0-3); on demand.**

Prerequisite: FIN 360 or equivalent, or consent of instructor. Analysis of the flow of funds in financial markets; characteristics of money and capital markets; characteristics of financial instruments; interest rate determination; purposes and characteristics of financial institutions; interactions of financial markets and financial institutions domestically and internationally.

FIN 439: Cooperative Education IV.
(1 to 8 hrs.); I, II.

Prerequisite: consent of the departmental cooperative education coordinator. Work experience with an in-depth exposure representative of the student's academic level and experience analogous to a senior-level status. Maximum of three hours of cooperative education credit (FIN 339/439) available for option credit.

FIN 460. Advanced Business Finance.
(3-0-3); I.

Prerequisite: FIN 360. Includes intensive study of capital budgeting, cost of capital, capital structure, special topics in finance.

FIN 472. Portfolio Analysis.
(3-0-3); on demand.

Prerequisites: FIN 360 and 373. Includes study of portfolio theory, risk analysis, portfolio management. Applications including computer analysis of financial data stressed.

FIN 476. Special Problems in Finance.
(1 to 3 hrs.); on demand.

Prerequisite: completion of 21 hours in finance and economics, combined with prior consent of department chair. This course is an independent study of finance problems of special interest. Students must present in writing a suggested problem and justification for the study prior to registration. Each request will be considered on its own merit in relation to the special needs of the student.

FIN 485. International Finance.
(3-0-3); on demand.

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); on demand.

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); II.

Prerequisites: FIN 373 and 460. Examination and application of contemporary financial theory and analysis. Study of classical literature and the evolution of contemporary financial theory. Examination of the role of events and institutions on the

evolution of financial thought.

FIN 499. Selected Workshop Topics.
(1 to 4 hrs.); on demand.

Workshops on various finance subjects will be presented periodically to supplement the basic course offerings in finance. Credit toward degree programs must be approved by the student's advisor and the department chair.

Fine Arts Courses

FNA 160. Understanding the Visual Arts.
(3-0-3); I, II, III.

An examination of visual art from various cultures. It includes a study of materials, techniques, subjects, styles, issues, functions, and meanings related to visual art. *This course satisfies the area studies-humanities for general education.*

FNA 187. Opera Workshop.
(0-2-1); I, II.

An introduction to the techniques of musical theatre with emphasis placed on the integration of music and action-dramatic study of operatic roles.

French Courses

FRN 101. Beginning French I.
(3-0-3); I, II, III.

Emphasis on developing communicative skills. Listening, speaking, reading, writing. Basic grammar and orientation to French culture. Video and audio components. *This course satisfies the area studies-humanities for general education.*

FRN 102. Beginning French II.
(3-0-3); I, II, III.

Prerequisite: FRN 101. Continuation of FRN 101. Use of four skills for effective communication in a variety of situations.

FRN 201. Intermediate French.
(3-0-3); I.

Prerequisite: FRN 102. Continuation of FRN 102. Increased emphasis on interactive language and grammatical competency.

FRN 202. Conversation and Composition.
(3-0-3); II.

Prerequisite: FRN 201. Continuation of FRN 201. Listening and reading for proficiency. Creative personal expression in speaking and writing.

FRN 203. Introduction to France.
(3-0-3); on demand.

Prerequisite: FRN 102. Continuation of FRN 202. Implementation of four skills into broad-based dialogue and discussion relating to all aspects of French culture and civilization.

FRN 205. French Culture and Civilization.
(3-0-3); II.

Survey of art, architecture, music and history of France. Cuisine, fashion, and cinema. The imprint of France on America and the Third World. Taught in English; some knowledge of French helpful but not required. *This course satisfies the area studies-*

humanities for general education. Crosslisted with IST 205.

FRN 206. Business French.
(3-0-3); I, II.

Prerequisite: FRN 102. Introduction to the French-speaking business world. Special attention to etiquette, interpersonal relations, and daily culture. Investigation of current French practices in marketing, banking, real estate, advertising and the media. Study of authentic documents and regalia. Comparison of French and American systems of job training and placement. Course taught in English, some knowledge of French helpful. Crosslisted with IST 206.

FRN 301. Conversation and Composition.
(3-0-3); II.

Pre-requisite: 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); II.

Prerequisite: FRN 202. In-depth analysis of phonology and articulation. Speaking practice in a variety of styles, emphasizing corrective pronunciation and fluency. May be taken two times for credit.

FRN 303. Survey of French Literature I.
(3-0-3); on demand.

Prerequisite: FRN 202. A survey of major works and authors in French literature up to 1750, including the following periods: Medieval, Renaissance, Baroque, Classicism, and Enlightenment.

FRN 304. Survey of French Literature II.
(3-0-3); on demand.

Prerequisite: FRN 202. A survey of major authors from the French Revolution to the present, including the following movements: Pre-Romanticism, Romanticism, Realism, Symbolism, Modernism, Surrealism, Existentialism, Absurdism, and Post Modernism.

FRN 402. Advanced French Conversation.
(1-0-1); on demand.

Prerequisite: FRN 301. Analysis and imitation of native speech patterns. Practice in aural/oral communication for a variety of situations. May be taken three times for credit.

FRN 403. Seminar in French Literature I.
(3-0-3); on demand.

Prerequisite: FRN 303 or 304. A seminar on an author, genre, or period in Medieval or Early Modern French literature (up to 1750). May be taken three times for credit.

FRN 404. Seminar in French Literature II.
(3-0-3); on demand.

Prerequisite: FRN 303 or 304. A seminar on an author, genre, or period in modern French literature (after 1750) such as film. May be taken three times for credit.

FRN 405. Linguistics and Language Teaching.
(6 hrs); on demand.

Prerequisite: Must be admitted to the Teacher Education Program. The

application of current linguistic theories to the methodology of teaching French and Spanish; micro-teaching practice and field experiences in the four skills, grammar, and culture. This course includes 30 clock hours of field experience (grades P-12). Equated with SPA 405.

FRN 476. Directed Studies.
(1 to 3 hrs.); on demand.

This course is a directed study in French for undergraduate French majors. Each request for the course will be considered on its own merits in relation to the special need of the student. May be taken three times for credit.

FRN 499C. Senior Collegium in French.
(3-0-3); I.

Prerequisites: senior standing and 18 hours in French courses, including FRN 403 or 404. An integrative capstone course in French. This course satisfies the integrative component for general education.

Geography Courses

GEO 100. Fundamentals of Geography.
(3-0-3); I, II, III.

Investigation of global patterns and processes with focus placed on both physical and cultural environmental aspects. The approach is issue oriented and must involve integration of information from a variety of disciplines in order to gain understanding and to suggest solutions. *This course satisfies area studies-social and behavioral sciences for general education.*

GEO 101. Physical Geography.
(3-0-3); I, II.

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 general education area studies-natural and mathematical sciences.*

GEO 201. Map Interpretation and Analysis.
(2-1-3), I.

An introduction to the basic concepts of spatial analysis and applications of analytical techniques to geographically referenced information. Discussion will center on types of spatial data, data collection, presentation, and basic techniques for analyzing and mapping spatial distributions.

GEO 202. Basic Computer Techniques in Regional Analysis.

(2-2-3); II.
Prerequisites: SOC 101 (Computer Enhanced) or MATH 152 or ACT Math subscore of 20 or higher. An introduction to the basic concepts of computers and systems structures. The basic skills of spreadsheet analysis and data base management tools will be introduced along with advanced word processing and integration of graphics. The more specific graphing, statistics, and mapping tools needed for regional analysis will also be introduced. Internet communications and the method of transmitting and receiving data will be discussed. Crosslisted with RAPP 202.

GEO 211. Economic Geography.
(3-0-3); II.

World commodities and their regional distribution. Analysis of land uses, agriculture, manufacturing, and extractive industries against a background of natural cultural environments; consideration of economic factors in current international affairs.

GEO 241. United States and Canada.
(3-0-3); I.

Major land-use regions of the United States and Canada, their physical and cultural landscapes. Crosslisted with IST 241.

GEO 300. World Geography.
(3-0-3); I, II.

A general survey of the human and physical geography of the major regions of the world with a concentration on development. Emphasis is on the interaction between individuals and the physical and cultural landscape in various settings. *This course satisfies the area studies-social and behavioral sciences for general education.* Crosslisted with IST 300.

GEO 305. Cultural Geography.
(3-0-3); on demand.

Analysis of the role of culture in the formation of landscape patterns. This includes an introduction to geographical approaches to landscape evolution, diffusion processes, identity, nature, culture regions, and environmental perception.

GEO 306. Geography of World Population.
(3-0-3); on demand.

This course will familiarize students with the geographic distribution, growth dynamics, and migration processes of human populations. Students will gain insight into the causes and outcomes of population growth and decline through examination of population theories and selected case studies.

GEO 310. Australia.
(3-0-3); on demand.

Resources of Australia, New Zealand, and islands of the Pacific; significance of position and political connection of these lands. Crosslisted with IST 310.

GEO 311. Geography of the Global Economy.
(3-0-3); on demand.

Spatial analysis of higher level economic activities. Focus is on wholesaling, interregional and international trade and transportation, producer services, and investment. Crosslisted with IST 311.

GEO 315. Urban Geography.
(3-0-3); on demand.

A survey of urban evolution, urbanization, economic structure, land use, and urban planning.

GEO 316. Dynamic Landscapes and Land Use.
(3-0-3); on demand.

Geographic perspectives on the ways in which humans employ the land and its resources. Consideration is given to human and physical systems that influence land cover and land use change.

GEO 320. Latin America.
(3-0-3); on demand.

The geographic study of Mexico, the Central American Republics,

the islands of the Caribbean, and South America.

GEO 326. Cuba and the Caribbean.
(3-0-3); on demand.

The people and places of the Caribbean basin with a concentration on climate, culture, economics and tourism. A special focus will address the dynamics of Cuban socioeconomic development. Crosslisted with IST 326.

GEO 328. Africa.
(3-0-3); on demand.

Resources, both natural and cultural; changing political conditions and affiliations of African countries, recognition of, and reasons for, the growing importance of this continent in world affairs. Geographic factors in the economic, social, and political structure of Europe; emphasis on natural regions, resource distribution, and industrial development. Crosslisted with IST 328.

GEO 331. Europe.
(3-0-3); on demand.

A study of the cultural and physical regions of Europe including the socioeconomic and political structure of the European Union.

GEO 341. Appalachia.
(3-0-3); on demand.

A geographic analysis of the various physical and human elements of the Appalachian Highlands. Emphasis is placed on the relationship of the physical environment to human activities in the region.

GEO 344. Kentucky.
(3-0-3); on demand.

Physiographic divisions and subdivisions; interpretations of natural features; occupations and land use; a survey of political units and consideration of traditions and potentialities.

GEO 345. Global Environmental Issues.
(3-0-3); on demand.

Prerequisite: GEO 101 or consent of instructor. The study of environmental concepts, issues and dynamics from a spatial and geographic perspective.

GEO 349. Introduction to GIS/Cartography.
(3-0-3); on demand.

History of map-making; properties and qualities of maps; characteristics of map projections; construction of basic projections; basic techniques of mapping spatial data.

GEO 351. Geographic Information Systems.
(3-0-3); on demand.

Prerequisite: GEO 349. This course addresses selected layers of spatial data for the base and body of maps, and includes field mapping techniques and digital map development and reproduction.

GEO 353. GIS Applications.
(3-0-3); on demand.

Prerequisite: GEO 349. This course will familiarize students with the different types of projects and questions that Geographic Information Systems can be used to address. Students will gain an understanding of different techniques through real-world examples and hands-on practice.

**GEO 355. Remote Sensing of Environment.
(2-2-3); on demand.**

Introduction to principles, techniques, and applications of remotely sensed data. Provides training needed to map and monitor the environment through digital image processing of satellite data and air photos. The course will develop abilities for inventory, mapping, and monitoring of land use, vegetation, and other geographic features.

**GEO 360. Physical Geography of North America.
(3-0-3); on demand.**

Prerequisite: GEO 101 or GEOS 108. Description and detailed analysis of the physiographic provinces. An explanation and interpretation of surface features and their evolution.

**GEO 361. The World of Caves.
(3-0-3); on demand.**

Prerequisites: GEO 101 or GEOS 106 or consent of department chair. Introduction to the physical processes that create cavern systems and produce a characteristic surface landscape with sinkholes, sinking streams, and springs, known as "karst" terrain. Course includes field trips to several cave regions in Kentucky.

**GEO 366. Political Geography.
(3-0-3); on demand.**

A study of principles and concepts of political geography and their application to understanding the variation of political phenomena from place to place on earth. Crosslisted with GOVT 372.

**GEO 370. Geography of World Religions.
(3-0-3); on demand.**

Prerequisite: GEO 100 or 300. Analysis of the distributions and geographic patterns of modern religions. Particular attention is paid to the geographic patterns that were created as a result of and that helped to create the rituals and traditions of the major world religions. Crosslisted with IST 324.

**GEO 383. Asia.
(3-0-3); on demand.**

The human-land relations characterizing this large and diverse region. An evaluation of a continent in the midst of change in terms of geographic potentials. Crosslisted with IST 383.

**GEO 385. The Middle East.
(3-0-3); on demand.**

A study of the Middle East, its neighbors, and Islam with a focus on the physical resources, religious divisions, cultural groups and the geopolitics of the region. Crosslisted with IST 385.

**GEO 390. Weather and Climate.
(3-0-3); on demand.**

Prerequisite: GEO 101. Introduction to the physical elements of weather and climate; classifications of types and their distribution, with particular reference to the effects of climate on the earth's physical and cultural landscapes.

**GEO 399. Selected Topics in Geography.
(3-0-3); on demand.**

Special courses which supplement regular course offerings. May be repeated if the subtitle indicates a different course is being offered. Additional Prerequisites, if any, will depend upon the

course offered.

**GEO 476. Special Problems.
(1 to 3 hours); on demand.**

Prerequisite: consent of instructor. Research project or directed readings on a special topic developed with the instructor.

**GEO 495. Internship to Geography.
(3 to 12 hours); on demand.**

Prerequisites: nine hours of geography courses and approval of internship coordinator. A supervised work study experience involving a field within geography. Only six hours will count toward geography major.

**GEO 499C. Senior Seminar in Geography.
(3-0-3); II.**

A course intended for geography majors and minors with senior status and at least 21 hours in geography. Students will conduct quantitative research projects, including written and oral presentations. Course examines professional and graduate opportunities in geography. *This course satisfies the integrative component for general education.*

German Courses

**GER 101. Beginning German I.
(3-0-3); on demand.**

Fundamentals of structure: basic vocabulary, reading, writing, pronunciation and some conversation.

**GER 102. Beginning German II.
(3-0-3); on demand.**

A continuation of GER 101.

**GER 201. Intermediate German I.
(3-0-3); on demand.**

A review of grammar and pronunciation, with emphasis on reading of contemporary writings.

**GER 202. Intermediate German II.
(3-0-3); on demand.**

Prerequisite: GER 201. A continuation of GER 201.

**GER 203. Expository German.
(3-0-3); on demand.**

Techniques of reading for accurate information in expository writing in the natural and social sciences and the humanities.

**GER 301. Grammar and Conversation.
(3-0-3); on demand.**

Further development of language skills. Extensive experience in the language laboratory is required.

**GER 302. Composition and Conversation.
(3-0-3); on demand.**

Prerequisite: GER 301. A continuation of GER 301 with greater emphasis on stylistics.

Government Courses

GOVT 141. United States Government. **(3-0-3); I, II, III.**

A study of the Constitution; public opinion, interest groups, and political parties; the organization and operation of national government; and domestic and foreign policy. *This course satisfies area studies-social and behavioral sciences for general education.*

GOVT 180. Introduction to Political Theory. **(3-0-3); I, II.**

An introductory course in political philosophy with an emphasis on familiarity with concepts of human nature, society, democracy, and revolution. *This course satisfies the area studies-humanities for general education. Crosslisted with WST 210.*

GOVT 230. Introduction to Comparative Politics. **(3-0-3); I, II.**

An introduction to the concepts and themes of comparative government, showing the evolution of political systems, and their response to problems of organization, order and governance. *This course satisfies the area studies-social and behavioral sciences requirement.*

GOVT 242. State and Local Government. **(3-0-3); I, II.**

A study of the nature, organization, powers, and functions of American state and local governments.

GOVT 289. Methods of Political Inquiry. **(3-0-3); I, II.**

Prerequisites: GOVT 141, 180, and 230. CIS 101 recommended. An introduction to the basic concepts and methods of the logic of political inquiry and empirical research, with an emphasis on understanding the fundamental perspectives of political inquiry and the use of basic empirical and computer techniques to conduct political inquiry.

GOVT 301. Comparative Politics of Development. **(3-0-3); I, alternate years.**

Prerequisites: GOVT 230 and 289. Thematic study of political, economic, and social problems in developing and newly industrialized countries, with emphasis on the politics of underdevelopment, state autonomy, and development strategies.

GOVT 302. Politics of Culture. **(3-0-3); II, alternate years.**

Prerequisite: GOVT 289. A study of the relationship between a society's ideas and practices of the good, the true, and the beautiful and its ideas about politics and political life.

GOVT 303. Comparative Constitutional Law and Politics. **(3-0-3); I, alternate years.**

Prerequisite: GOVT 230 and 289. A comparative cross-national study of constitutional law and politics with particular emphasis on governmental powers and individual rights issues in the United States, Great Britain, Canada, and Germany. Crosslisted with IST 334.

GOVT 304. Politics of Transition. **(3-0-3); II, alternate years.**

Prerequisites: GOVT 230 and 289. Analysis and discussion of change in political structures and institutions including changes from military to democratic forms and the impact of economic liberalization.

GOVT 305. Political Behavior. **(3-0-3); on demand.**

Prerequisites: GOVT 141 and 289. A study of mass and elite political behavior including political socialization, attitudes, and opinions; voting behavior; and government decision making.

GOVT 312. Western Political Thought. **(3-0-3); I.**

Prerequisite: 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); II, alternate years.**

Prerequisites: GOVT 141, 180, and 289. A study and discussion of American political ideas as they are expressed in a variety of sources, including pamphlets, literature, poetry, autobiography, and political philosophy.

GOVT 316. Modern Ideologies. **(3-0-3); II, alternate years.**

Prerequisites: GOVT 180 and 289. A study of the doctrines of liberalism, conservatism, socialism, fascism, and anarchism as political ideas, their major proponents, and their use as tools of political action.

GOVT 317. Feminist Political Thought. **(3-0-3); I, alternate years.**

Prerequisites: GOVT 180 and 289. History and development of feminist political thought. Perspectives include those of Fuller, Millet, Collins, MacKinnon, and Irigaray. Cross listed with WST 317.

GOVT 318. Twentieth Century Political Thought. **(3-0-3); II.**

Prerequisites: GOVT 180 and 289. A study of the major developments in 20th century social and political theory, including trends in liberal thought, critical theory, psychoanalysis, post-modernism, and conservatism.

GOVT 321. Constitutional Law: Governmental Powers. **(3-0-3); I.**

Prerequisites: GOVT 141 and 289. A study of the development, origins, and current character of the U.S. Constitution, with particular attention to separation of powers and federal-state relations.

GOVT 322. Courts and Civil Liberties. **(3-0-3); I.**

Prerequisites: GOVT 141 and 289. A study of the federal and state court systems and of the Bill of Rights and the 14th Amendment, with particular attention to questions of freedom of speech, religion, and association; due process of law; privacy; and discrimination.

GOVT 324. Environmental Law and Policy. **(3-0-3); I.**

Prerequisite: GOVT 141. A study of the political and legal aspects of major environmental policies including the impact of energy policies on environmental health and safety.

GOVT 328. Law, Government and Privacy in the Computer Age.

(3-0-3); on demand.

Prerequisite: GOVT 289. An in-depth study of information gathering policies and procedures with an examination of the technologies, agencies and organizations which shape them. Privacy legislation and competing values affecting information policy will be discussed, and students will have the opportunity to develop skill in online research in government documents.

GOVT 329. North American Politics: United States and Canada.

(3-0-3); I, III.

A comparative study of the governments and politics of the United States and Canada, their political cultures, public opinion, interest groups and political parties; the evolution, structure, and operation of their governments, the behavior of their public officials, and their public policies. Crosslisted with IST 329.

GOVT 330. Parliamentary Democracies.

(3-0-3); I, alternate years.

Prerequisites: GOVT 230 and 289. A study of the constitutional development, political organization, legislatures, administration, and courts of the governments of the United Kingdom, France, and Germany.

GOVT 331. Politics of the Middle East and North Africa.

(3-0-3); II, alternate years.

Prerequisites: GOVT 230 and 289. Analysis of major themes and cases in Middle Eastern/North African Politics. Includes issues of religion, ethnic conflict, modernization, and democratization. Crosslisted with IST 302.

GOVT 332. Politics of Latin America and the Caribbean.

(3-0-3); I, alternate years.

Prerequisites: GOVT 230 and 289. Analysis of major themes and cases in Latin American/Caribbean politics. Includes issues of debt, development, and democratization. Crosslisted with IST 303.

GOVT 333. Politics of Sub-Saharan Africa.

(3-0-3); on demand.

Prerequisites: GOVT 230 and 289. Analysis of major themes and cases in African politics. Includes issues of debt, development, and democratization. Cross listed with IST 304.

GOVT 334. Russia and Eastern European Governments.

(3-0-3); II.

Prerequisites: GOVT 230 and 289. A study of the Russian political system; ideological base, governing structures, and political processes; and an analysis of the major Eastern European governments and their political life. Crosslisted with IST 338.

GOVT 337. Politics of Asia.

(3-0-3); on demand.

Prerequisites: GOVT 230 and 289. Survey of politics in China, Japan, India, and Vietnam. Emphasis on themes of traditional order and its collapse and persistence. Development of Asian nationalism and clash between Marxist revolution and evolutionary democracy. Cross listed with IST 337.

GOVT 342. The American Presidency.

(3-0-3); I, alternate years.

Prerequisites: GOVT 141 and 289. A study of the presidency in American politics emphasizing the Constitution, presidential selection, presidential power, interbranch relations, role of the public, psychological theories of the presidency, and presidential policy-making.

GOVT 343. Political Parties and Elections.

(3-0-3); I, alternate years.

Prerequisites: GOVT 141 and 289. A study of the nature and role of parties and interest groups; party structure and development, functions of primaries, nomination system and campaign methods, and policy-making.

GOVT 344. Kentucky Government.

(3-0-3); I, alternate years.

Prerequisite: GOVT 289. A study of the nature, organization, powers, and functions of Kentucky state government.

GOVT 347. American Public Policy.

(3-0-3); II, alternate years.

Prerequisites: GOVT 141 and 289. A study of major national domestic and foreign policy problems, including health, education, labor, transportation, defense, and national security, focusing on their nature, formulation, implementation, and impact.

GOVT 349. African-American Politics.

(3-0-3); II, alternate years.

Prerequisites: GOVT 141 and 289. A study of 20th century African-American legal and political action with particular emphasis on the Civil Rights Movement and political conflicts over racial equality in education, public accommodations, voting, housing, and employment.

GOVT 351. Public Administration.

(3-0-3); on demand.

Prerequisites: GOVT 141 and 289. A study of the historical evolution, theory of organization and administration, and the personnel, financial, and legal aspects of public administration.

GOVT 353. Public Personnel Administration.

(3-0-3); on demand.

Prerequisites: GOVT 289 and 351. A study of personnel utilization; concepts, principles and practice of the merit system; leadership; decision-making processes; and motivation of public employees.

GOVT 354. Congress and the Federal Bureaucracy.

(3-0-3); II, alternate years.

Prerequisites: GOVT 141 and 289. A study of the role of Congress and federal bureaucracy in American government. Emphasis is placed on historical and comparative analysis of these institutions since 1950.

GOVT 355. Women and Politics.

(3-0-3); II, alternate years.

Prerequisites: GOVT 141 and 289. Participation of women in American government. Gender differences in political attitudes and voting; impact of electoral laws on election of women; and impact of women on creation and implementation of policy. Crosslisted with WST 355.

GOVT 360. United Nations and World Organizations. (3-0-3); II.

Prerequisites: GOVT 230 and 289. A study of the evolution of international organizations from the League of Nations to the United Nations and of the contemporary problems and issues of present world organizations. Crosslisted with IST 360.

GOVT 362. Current World Problems. (3-0-3); I, III.

A study of major international problems since World War II, with emphasis on Russian-American relations, regional political conflicts, and major world issues including food, population, and human rights policies. *This course satisfies area studies-social and behavioral sciences for general education.* Crosslisted with IST 362.

GOVT 364. International Relations. (3-0-3); I, alternate years.

Prerequisite: GOVT 289 or consent of department. A study of international relationships in theory and practice; concepts of power and its application; machinery of foreign policy making and implementation; world politics and law; and the world community. Crosslisted with IST 306.

GOVT 367. Politics of International Economic Relations. (3-0-3); I, alternate years.

Prerequisite: GOVT 289. Study of essential, issues and contending analytical frameworks. Includes examination of politics of economic relations of the U.S., Japan, Europe, and between the "North" and "South." Crosslisted with IST 307.

GOVT 368. Human Rights and Global Justice. (3-0-3); I.

Prerequisite: GOVT 289. A study of the human rights idea; human rights movement; national and international human rights charters and organizations; political, civil, social, and economic rights; rights of women, children, and minorities; and human rights remedies for collective violence, genocide and terrorism. Crosslisted with IST 368.

GOVT 372. Political Geography. (3-0-3); on demand.

Prerequisite: GOVT 289. A study of the principles and concepts of political geography and their application to an understanding of political phenomenon worldwide. Crosslisted with GEO 366.

GOVT 373. Introduction to Women's Studies. (3-0-3); on demand.

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); on demand.

Prerequisite: open only to juniors and seniors in the Honors Program. An analysis and discussion of political ideas, institutions, and policies. Topics will vary from semester to semester.

GOVT 399. Selected Topics in Government. (3-0-3); on demand.

Prerequisite: GOVT 289. Special courses which supplement regular course offerings. May be repeated if the subtitle indicates a different course is being offered.

GOVT 476. Special Problems in Government. (1 to 3 hrs.); on demand.

Prerequisites: GOVT 289, consent of instructor, and senior standing. Original research project or readings in a particular subject area of government and politics. Open only to government majors and minors with senior standing.

GOVT 492. Washington Center Seminar Program. (3 hrs.); I, II, III.

Prerequisites: GOVT 141 and junior standing. Prior approval of department chair is required. A two-week intensive study course in Washington, D.C., during January, May, or August on major current legal, political, domestic and foreign policy issues.

GOVT 494. Washington Center Internship Program. (15 hrs.); I, II, III.

Prerequisites: GOVT 141 and junior standing. Prior approval of department chair is required. A semester-long work study experience in a congressional or administrative agency office in Washington, D.C. Only six semester hours of this internship may be used in satisfaction of government major or minor elective credit.

GOVT 496. Frankfort Legislative Intern Program. (15 hrs.).

Prerequisite: prior approval of department chair is required. Five months of work study experience with the Kentucky General 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.); on demand.

Prerequisites: related course work in GOVT recommended, and prior approval of GOVT internship coordinator. Only six hours will count toward government major or minor. A supervised work study experience in local, state, national, and international government.

GOVT 499C. Senior Seminar. (3-0-3); I, II.

Prerequisites: GOVT 289 and senior standing. A capstone course for senior government majors in which students will read and analyze specialized literature in political science, conduct research projects, and formally present their research findings. *This course satisfies the integrative component for general education.*

Health and Physical Education Courses

HPE 160. Foundations of Health and Physical Education.

(3-0-3); I, II.

History, principles, philosophy, outcomes, standards, and assessments that establish the theoretical foundation of future health and physical education teachers, health and experience science professionals.

HPE 300. Methods of Teaching Elementary Physical Education.

(2-2-3); I.

Prerequisites: PHED 212, PHED 218 and admission to TEP.

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 experiences and supervised experienced in the public schools are integral parts of the course.

HPE 301. Classroom Assessment in Health and Physical Education.

(3-0-3); I, II.

Prerequisite: HPE 160. Methods, techniques, and procedures used in assessment of students in physical education and health education.

HPE 302. Methods of Teaching Elementary Health.

(2-2-3); I.

Prerequisite: Admission to TEP. 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 experiences, and supervised experiences in the public schools are integral parts of the course.

HPE 303. Methods of Teaching Secondary Physical Education.

(2-2-3); II.

Prerequisites: PHED 215, PHED 214, and admission to TEP.

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 experiences, and supervised experiences in the public schools are integral parts of this course.

HPE 304. Methods of Teaching Secondary Health.

(2-2-3); II.

Prerequisite: Admission to the TEP. 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 experiences, and supervised experiences in the public schools are integral parts of this course.

HPE 499C. Senior Seminar in Health/Physical Education Teacher Education.

(3-0-3); I, II.

Prerequisites: senior standing and admission to the professional semester in education. Corequisite: EDSE 416None. 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 New Teacher Standards.

Health Courses

HLTH 151. Wellness: Theory to Action.

(3-0-3); I, II, III.

An understanding of the multifaceted nature of wellness, identify their current health status, and acquire knowledge of methods or techniques which can be used to promote positive change and optimal well-being. *This course satisfies area studies-practical living for general education.*

HLTH 203. Safety and First Aid.

(3-0-3); I, II, III.

Safety education and first aid care for victims of accident or sudden illness. *This course satisfies area studies-practical living for general education.*

HLTH 205. Psychological Health.

(3-0-3); II.

Prerequisite: PSY 154. Health psychology: foundations, biopsychosocial factors, psychoneuroimmunology perspective.

HLTH 206. Principles of Nutrition.

(3-0-3); I, II.

Basic description of the elements of human nutrition, their function in the body, and food sources. Guide for healthy nutritional practices and nutritional needs throughout the life cycle. Crosslisted with HS 201.

HLTH 230. Community Health.

(3-0-3); I.

Prerequisites: HLTH 151 and 160. Foundations of health as applied to the community: population, health promotion, health protection, health services.

HLTH 301. Health, Safety, and Nutrition for Early Elementary.

(3-0-3); I, II, III.

Prerequisite: HLTH 151. Educational theory and methods as applied to teaching health education to young children. Focuses upon content, resources, and methodologies. Laboratory experiences are an integral part of the course.

HLTH 310. Health and Wellness Promotion.

(3-0-3); I.

Emphasis on the study of the continual balancing of the different dimensions and the dynamic pursuit of holistic human needs — physical, spiritual, social, emotional, intellectual and occupational.

HLTH 360. Family Health.

(3-0-3); II.

Family and family living; nature of family, love, marriage preparation, marriage, parenthood issues.

HLTH 377. Clinical and Field Experiences in School Health (P-12).

(0-4-2); I, II.

Prerequisites: admission to TEP, HPE 302 and 304. Clinical and field experiences related to planning, implementing, and evaluating health instruction.

HLTH 408. General School Safety.

(3-0-3); I, II, III.

Prerequisite: senior standing. An exploration of the principles and practices in establishing and maintaining a safe school environment. The course gives special emphasis to current issues that affect school safety as well as the relationship between safety and health.

HLTH 414. Principles of Epidemiology, (3-0-3); I.

Prerequisite: Senior Standing. A study of the factors and causes of disease in a population for the purpose of its control and prevention. The course will introduce students to the discipline of epidemiology and its application to public health issues and practices with regard to both infectious and non-infectious disease processes.

HLTH 418. Use and Abuse of Drugs. (3-0-3); I, II, III.

Prerequisite: senior standing. A survey of the field of psychoactive drugs with emphasis upon both the behavioral and health effects of these agents. Prevention and intervention options are also explored.

HLTH 425. Planning, Managing, and Evaluating Health/Wellness Promotion Programs. (3-0-3); II.

Prerequisites: CIS 101 and HLTH 310. The course emphasizes knowledge, methods in planning, designing, managing and improving health/wellness promotion programs.

HLTH 430. Consumer Health. (3-0-3); II.

Prerequisite: junior or senior standing. Analysis of the selection, purchase, and use of various health-related products, services, insurance policies, and/or health care facilities which impact individual health throughout the life span.

HLTH 435. Health Counseling. (3-0-3); III.

Prerequisites: junior/senior standing and PSY 154. Focuses on conceptual framework and practical health counseling strategies and skills used in a variety of settings to help individuals initiate and maintain health-orientated behavior changes. Appropriate for individuals who plan to work in schools, human service agencies, private practices, health-care organizations, business, or other environment which work with clients interested in changing life-style health behaviors.

HLTH 470. Practicum. (0-24-15); I, II.

Prerequisites: senior standing, and 2.5 or above overall and program content GPA, and HLTH 499C. Practical full-time experience under professional supervision in a selected and approved setting.

HLTH 471. Practicum. (0-24-12); I, II.

Prerequisites: senior standing, 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 475. The School Health Program. (3-0-3); I.

All aspects of elementary and secondary level school health: philosophy, organization and administration, environment, services, education, evaluation, the school age child.

HLTH 477. Field Experience in Health. (0-6-3); I, II, III.

Prerequisite: HLTH 230. On-site work experience in a community health setting under qualified supervision. Laboratory experiences are integral part of course.

HLTH 480. Workshop. (1 to 3 hrs.); I, II, III.

Prerequisite: senior standing. The workshop format is an interactive learning experience designed to build and/or improve specific skills with a health.

HLTH 489. Special Problems in Health. (1-3 hrs.); I, II, III.

Prerequisite: Senior Standing. Intensive study of approved, specific health problems, under direction of instructor.

HLTH 499C. Senior Seminar in Health Promotion. (3-0-3); I, II (on demand).

Prerequisite: senior standing in health promotion. Students are required to take this course in the fall semester prior to HLTH 470. The course is designed to document and refine student progress relative to the professional preparation and practice of health promotion. Each student will integrate theory with practice through the design and completion of a health promotion project and a student portfolio. Graduate and professional job opportunities will be explored. Students will complete preparation leading to placement in an approved agency for the HLTH 470 Practicum. *This course satisfies the integrative component in health promotion for general education.*

History Courses

HIS 201. Global Studies. (3-0-3); I, II.

This course will introduce students to the study of world cultures and provide an understanding of contemporary global issues. Using historical and literary texts, CD-ROM technology and films in a multimedia approach, students will examine selected social, political, economic, and cultural phenomena in the context of world history. *This course satisfies the area studies-humanities for general education.* Crosslisted with IST 201.

HIS 202. American Studies. (3-0-3); I, II.

Entry level course using historical and literary texts and multimedia approaches to familiarize students with the nation's social, political, economic, and cultural development. *This course satisfies the area studies-humanities for general education.*

HIS 210. Early World Civilization.**(3-0-3); I, II.**

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. *This course satisfies the area studies-social and behavioral sciences for general education.*

HIS 220. Early American History.**(3-0-3); I, II, III.**

Analysis of historic themes and issues from the Age of Discovery through the Civil War.

HIS 250. Practicing History.**(3-0-3); I, II.**

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.

HIS 300. Colonial America.**(3-0-3); on demand.**

Prerequisite: HIS 250. Critical analysis of events from the Age of Discovery to the Revolutionary War.

HIS 301. American Revolution and Federal Period.**(3-0-3); on demand.**

Prerequisite: HIS 250. Critical analysis of events from the American Revolution to the Jeffersonian era.

HIS 302. The Age of Jackson.**(3-0-3); on demand.**

Prerequisite: HIS 250. Analysis of national, political, and social movements when America sought compromise but found Civil War.

HIS 303. The Civil War and Reconstruction.**(3-0-3); II.**

Prerequisite: HIS 250. The role of the southern states in the rebirth of the American nation.

HIS 306. The United States, 1939-present.**(3-0-3); on demand.**

Prerequisite: HIS 250 or consent of department chair. America from World War II to the end of the Cold War. Emphasis is placed on social conditions and issues.

HIS 307. Vietnam and Watergate.**(3-0-3); II.**

Prerequisite: HIS 250. Study of the Vietnam War and the Watergate scandal in the context of policy developments in America since 1945.

HIS 308. The U. S. in the Industrial Age, 1877-1939.**(3-0-3); on demand.**

Prerequisite: HIS 250 or consent of department. History of the United States from the end of Reconstruction until entry into World War II. The course focuses on industrialization and the expansion of

corporate life, the social, cultural, and demographic changes (especially migration and immigration) that accompanied industrial and commercial transformation, and social and political movements of the Gilded Age, Progressive, Depression, and New Deal eras.

HIS 310. African-American History.**(3-0-3); I.**

Prerequisite: HIS 250. African-American history from the origins of slavery to contemporary times.

HIS 311. Native American History.**(3-0-3); II.**

Prerequisite: HIS 250. Historical development of native Americans from their entrance into this hemisphere to current conditions and issues.

HIS 312. Women in American History.**(3-0-3); II.**

Prerequisite: HIS 250. Experiences and perceptions of women throughout American history. Significant roles and issues are emphasized. Crosslisted with WST 313.

HIS 313. Religion in American History.**(3-0-3); I.**

Prerequisite: HIS 250. Religion's interaction with facets of American society. The role of religion in molding the nation.

HIS 317. United States Foreign Relations.**(3-0-3); on demand.**

Prerequisite: HIS 250. Survey of foreign relations of the United States from its conception to United Nations involvement.

HIS 318. American Military History.**(3-0-3); on demand.**

Prerequisite: HIS 250. Origins, course, and effects of American involvement in war.

HIS 319. American Life and Thought.**(3-0-3); on demand.**

Prerequisite: HIS 250. Survey of American intellectual heritage from Puritanism to the contemporary era.

HIS 321. The American Frontier.**(3-0-3); I.**

Prerequisite: HIS 250. The westward movement and the shaping of American life and institutions.

HIS 322. History of Appalachia.**(3-0-3); II.**

Prerequisite: HIS 250. A social, economic, and political history of the people and the events of the Appalachian Mountains.

HIS 323. History of Kentucky.**(3-0-3); I, II.**

Colonial birth to the creation of the Commonwealth with emphasis on constitutional and social development.

HIS 325. History of the South.**(3-0-3); on demand.**

Prerequisite: HIS 250. A study of southern sectionalism and the ongoing development of regional characteristics.

HIS 336. History of Canada.**(3-0-3); II.**

Prerequisite: consent of department chair. A study of Canada's intellectual, political, economic, and social development, including its colonial origins, the creation and evolution of its confederation, and the nature of its involvement international affairs. Cross listed with IST 331.

HIS 351. England to 1688.**(3-0-3); I.**

Prerequisite: HIS 250. The political, social, and economic institutions of England through the fall of the Puritan Commonwealth. Crosslisted with IST 351.

HIS 352. England since 1688.**(3-0-3); II.**

Prerequisite: HIS 250. Study of England from the Restoration to the rise of the British Commonwealth. Crosslisted with IST 352.

HIS 353. Russia to 1917.**(3-0-3); I.**

Prerequisite: HIS 250. The story of Russia from Kievan times to the overthrow of the Romanov dynasty. Crosslisted with IST 353.

HIS 354. Russia since 1917.**(3-0-3); II.**

Prerequisite: HIS 250. Detailed account of Soviet Russia from revolution through the end of the Cold War. Cross listed with IST 354.

HIS 355. Modern Germany.**(3-0-3); on demand.**

Prerequisite: HIS 250. History of Germany from unification to the present in the context of European and world events. Crosslisted with IST 355.

HIS 356. Medieval Europe.**(3-0-3); I.**

Prerequisite: HIS 250. Western history from the collapse of Rome to the Renaissance of the 16th century.

HIS 357. The Renaissance and Reformation.**(3-0-3); II.**

Prerequisite: HIS 250. A social and intellectual history of the beginning of modern Europe.

HIS 358. Revolutionary Europe.**(3-0-3); on demand.**

Prerequisite: HIS 250. History of Europe from the Age of Absolutism to the collapse of the Napoleonic Empire. Crosslisted with IST 358.

HIS 359. Nineteenth Century Europe.**(3-0-3); on demand.**

Prerequisite: HIS 250. The politicians, nationalistic trends, and unification movements leading to World War I. Crosslisted with IST 359.

HIS 361. Twentieth Century Europe.**(3-0-3); on demand.**

Prerequisite: HIS 250. Detailed survey of World War II, the Cold War, and contemporary events. Crosslisted with IST 361.

HIS 370. African History.**(3-0-3); II.**

Prerequisite: HIS 250. Focus on early African states, the slave trade era, the rise and fall of imperial empires, and post independence events. Crosslisted with IST 370.

HIS 371. Traditional China.**(3-0-3); I.**

Prerequisite: HIS 250. Survey of early Chinese civilization and its institutions. Crosslisted with IST 371.

HIS 372. Modern China.**(3-0-3); II.**

Prerequisite: HIS 250. Survey of Chinese history since the nineteenth century. Crosslisted with IST 372.

HIS 373. Japanese Civilization.**(3-0-3); on demand.**

Prerequisite: HIS 250. Survey of Japanese history from the beginning of its civilization to its rise as world power. Crosslisted with IST 373.

HIS 374. The Middle East.**(3-0-3); on demand.**

Prerequisite: HIS 250. Survey of the Moslem world beginning with the Eighth Century and culminating in the present Middle Eastern situation. Crosslisted with IST 374 and WST 374.

HIS 376. Ancient History.**(3-0-3); on demand.**

Prerequisite: HIS 250. The earliest civilizations of the Nile and the Fertile Crescent and their impacts on western civilization.

HIS 377. Twentieth Century Asian Wars.**(3-0-3); on demand.**

Prerequisite: HIS 250 or consent of department chair. 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. Crosslisted with WST 377.

HIS 379. Latin American History.**(3-0-3); on demand.**

Prerequisite: HIS 250. The Indian background, the rise and fall of the Iberian empires, and major events since independence. Crosslisted with IST 379.

HIS 389. Honors Seminar.**(3-0-3); on demand.**

Prerequisite: consent of department chair. Analysis of historical events, and circumstances, their origins and effects.

HIS 399. Selected Topics in History.**(3-0-3); I, II.**

Prerequisite: HIS 250 and at least one other 300 level history course. Required of each history major. Common research effort will be undertaken.

HIS 451. Curriculum and Instruction for Social Studies.**(3-0-3); I.**

Prerequisites: admission to TEP, HIS 250, and completion of 24 of the required 27 hours of 300-level course work . Corequisite: HIS 499D.

Immerses students in Social Studies Curriculum and Instruction in preparation for professional semester. Paired with HIS 499D, this course provides intense emphasis and preparation for teaching core content and implementation of content teaching skills. Fifteen field hours required at Rowan County Senior High School, including at least two hours of whole class teaching. Credits not applied to history major or minor.

HIS 476. Directed Study.
(3-0-3); on demand.

Prerequisite: consent of department chair.

HIS 499C. Senior Seminar in History.
(3-0-3); II.

Prerequisites: senior standing history majors, HIS 250 and 399, or consent of department chair. Each student will complete a research project that integrates methodological and substantive aspects of the history discipline. Each student will prepare and present a paper to fellow students and a department committee. Course provides opportunity for review of professional and graduate opportunities. *This course satisfies the integrative component for general education.*

HIS 499D. Teaching Social Studies.
(3-0-3); I.

Prerequisite: HIS 250. Corequisites: admission to TEP, HIS 451, completion of all general education requirements and 24 of the required 27 hours of 300-level course work. Analysis of contemporary strategies and methods for secondary social studies instruction. Course will emphasize KDE standards and education reform. Teaching portfolio initiated with 15 field hours spent in collaboration with a secondary teacher. At least three field hours will be spent in whole class instruction. Credits are not applied to history major or minor. *This course satisfies the integrative component requirement for general education.*

Honors Courses

HON 101. The Age of Classicism.
(3-0-3); I.

Prerequisite: admission to Honors Program. An interdisciplinary study of great books and influential ideas from Greek and Roman contributions in the humanities and in the natural and social sciences. *This course satisfies three hours of an area studies-humanities, natural and mathematical sciences, or social and behavioral sciences for general education.*

HON 102. The Age of Faith.
(3-0-3); II.

Prerequisites: admission to Honors Program and HON 101. An interdisciplinary study of great books and influential ideas of the European Middle Ages, emphasizing contributions in the humanities and in the natural and social sciences. *This course satisfies three hours of an area studies-humanities, natural and mathematical sciences, or social and behavioral sciences for general education.*

HON 201. The Age of Enlightenment.
(3-0-3); I.

Prerequisites: admission to Honors Program, HON 101 and 102. An interdisciplinary study of the most important ideas and

movements in 16th, 17th, and 18th century Western culture (literature, art, and music), religion, philosophy, social theory, and science with the emphasis on the achievements of the Age of Enlightenment. *This course satisfies three hours of an area studies-humanities, natural and mathematical sciences, or social and behavioral sciences for general education.*

HON 202. The Age of Uncertainty.
(3-0-3); II.

Prerequisites: admission to Honors Program and HON 101, 102, and 201. An interdisciplinary study of great books and influential ideas of the Nineteenth and Twentieth centuries in the humanities and in the natural and social sciences. *This course satisfies three hours of an area studies-humanities, natural and mathematical sciences, or social and behavioral sciences for general education.*

Human Sciences Courses

HS 101. Nutrition and Well Being.
(3-0-3); I, II.

The relationship of nutrition to well-being will be studied. Emphasis will be placed on the physiological, socioeconomic, psychological, and political factors influencing food behavior and nutrient intake.

HS 201. Principles of Nutrition.
(3-0-3); I, II.

Basic description of the elements of human nutrition, their function in the body, and food sources. Guide for healthy nutritional practices and nutritional needs throughout the life cycle. Crosslisted with HLTH 206.

HS 239. Cooperative Education.
(1 to 12 hrs.); I, II, III.

Consent required. A supervised work experience for students planning careers in human sciences upon completion of the associate degree program.

HS 439. Cooperative Education.
(1 to 12 hrs.); I, II, III.

Consent required. Work experience with an in-depth exposure representative of the student's academic level and experience analogous to a senior level course.

HS 476. Special Problems.
(1 to 3 hrs.); I, II, III.

Consent required. Supervised study of a problem in some phase of family and consumer sciences chosen by the student on the basis of individual need or interest.

HS 201. Principles of Nutrition.
(1-4-3); on demand.

The study and preparation of gourmet foods. Emphasis on foods from different cultural backgrounds and geographical regions. Arranged laboratories.

Humanities Courses

HUM 170. Introduction to Film.
(3-0-3); I, II.

An introduction to film as an art form, its history and stylistic variation. *This course satisfies area studies-humanities for general education.*

HUM 203. Introduction to Medieval Culture.

(3-0-3); on demand.

Prerequisite: ACT of 18 or better in reading or the grade of "C" or better in EDEL 099. A team-taught course focusing on cross-disciplinary issues in the humanities in European and middle eastern cultural and historical development during the period 800-1500 C.E. *This course satisfies area studies-humanities for general education.*

HUM 340. Health and the Hispanic Community: Cultural Perspectives.

(3-0-3); I, II.

Prerequisite: sophomore standing. A foundation course for the development of cultural sensitivity through the examination of culturally diverse values and beliefs with a focus on the experience of Hispanic communities; the course includes individual projects where students will gather materials and develop skills needed to communicate with the Hispanic population of the United States. *This course satisfies area studies- humanities for general education.*

Imaging Sciences Courses

IMS 100. Orientation to Health Care Professions.

(1-0-1); on demand.

A study of career opportunities available in health care, the standard program requirements and an overview of the job responsibilities. Equates with NAHS 100 and NUR 100.

IMS 202. Medical Terminology.

(2-0-2); I, II.

The study of vocabulary components and terms related to sciences and medicine. Previous knowledge of medicine or related discipline is not necessary. Equates with NAHS 202 and NUR 202.

IMS 300. Ethical and Legal Issues in Health Care.

(3-0-3); I, II.

This course is an overview of the ethical and legal issues in today's health care environment. Emphasis includes such areas of discussion as confidentiality, HIV/AIDS, artificial life support, euthanasia, abortion, genetic science, allocation of resources and professional gatekeeping. Equates with NAHS 300 and NURS 300. *This course satisfies the area studies-social and behavioral sciences for general education.*

IMS 301. Selected Topics.

(1 to 3 hrs.); on demand.

Investigation of specific topics of interest related to nursing and/or allied health sciences.

IMS 302. Health Maintenance Throughout the Life Span.

(3-0-3); on demand.

This course is designed to increase one's awareness of the importance of health maintenance throughout the life span. Emphasis will be on the concepts of health maintenance through health promotion and illness prevention strategies for all stages of the life span. Equates with NAHS 302 and NURS 302. *This course satisfies the area studies-practical living for general education.*

IMS 303. Women's Health Care.

(3-0-3); on demand.

Increase one's awareness of the importance of women's health care in all dimensions. Emphasis will be placed on health maintenance issues for women that include women's developmental issues throughout their life span, general guidelines for health care (including screening and interventions), sexuality facts, health needs and problems related to the reproductive system, selected health care issues, and psychosocial concerns. Equates with NAHS 303, NURS 303 and WST 303. *This course satisfies the area studies-practical living for general education.*

IMS 304. Men's Health Issues.

(3-0-3); on demand.

This course is designed to increase one's awareness of the importance of men's health issues in all dimensions. Emphasis will be placed on health maintenance issues for men that include men's developmental issues throughout their life span, general guidelines for health care (including screening and interventions), sexuality facts, health needs and problems related to the reproductive system, selected health care issues, and psychosocial concerns. Equates with NAHS 304 and NURS 304.

IMS 321. Introduction to Multi-Disciplinary Health Services.

(3-0-3); on demand.

Restriction: admission to the University Studies — Health Service degree program or admission to the Bachelor of Imaging Sciences online degree program. A study of various health careers focusing on the roles and responsibilities, levels of education and credentialing, daily functions, and career advancement options.

IMS 331. Issues and Trends in Health Care Delivery Systems,

(3-0-3); on demand.

Restriction: admission to the University Studies — Health Service degree program or 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); on demand.

Restriction: admission to the Bachelor of Imaging Sciences online degree program. This course is designed to provide a solid foundation for acquiring knowledge of sectional anatomy utilized in the medical imaging profession. Emphasis will be placed on imaging planes and a systematic approach and evaluation of sectional anatomy as visualized by various imaging modalities.

IMS 345. Global Health.

(3-0-3); on demand.

Through this course, the student will develop a global awareness of societal aspects of health and disease through the critical examination of the sociopolitical constraints in health and health care of populations. The roles of community, national, and international health organizations will be examined. Meets general education requirement in the area of social and

behavioral sciences. Equates with IST 345, NAHS 345, and NURS 345.

IMS 351. Picture Archiving and Communication Systems.

(3-0-3); on demand.

Restriction: admission to the Bachelor of Science in Imaging Sciences online degree program. Picture Archiving and Communication Systems (PACS) are now part of the fundamental technological infrastructure supporting radiology practice in the digital age. This course is an introduction to concepts of PACS, networking fundamentals, DICOM, image acquisition, and the equipment used. Legal issues and formal PACS policies will also be discussed.

IMS 361. Leadership for the Health Care Professional.

(3-0-3); on demand.

Restriction: admission to the University Studies — Health Service degree program or admission to the Bachelor of Imaging Sciences online degree program. This course provides students with a knowledge base and foundations for the study and practice of leadership in health care systems. Emphasis is placed on the theories of leadership, structures of organizations in health care, and the effective/efficient use of human and material resources. Equates with NAHS 361 and NURS 361.

IMS 401. Health Care Law and Policy

(3-0-3); on demand.

Restriction: Admission to the Bachelor of Science of Imaging Sciences online degree program. This is a survey of the law and policy of health care, covering the history of health care law and policy, the fundamental principles of law as applied to health care, and the federal and state legislation and regulations related to health care. Equates with MNGT 401.

IMS 421. Program Planning, Evaluation, and Assessment.

(3-0-3); I.

Restriction: admission to the Bachelor of Imaging Sciences online degree program. This course is designed to provide a foundation for developing educational programs in medical imaging sciences. Emphasis will be placed on program development, accreditation, and evaluation.

IMS 431. Operations Management in Health Care.

(3-0-3); on demand.

Restriction: admission to the Bachelor of Science of Imaging Sciences online degree program. An in-depth study of the operations of the imaging sciences department. The course will focus on improving productivity and other areas of performance within the healthcare setting.

IMS 471. Teaching Methodologies in Imaging Sciences.

(3-0-3); on demand.

Restriction: admission to the Bachelor of Science 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); on demand.

Open to any interested student. Promotion of wellness of children and adolescents with emphasis on meeting the health care needs of children in the classroom and home. Discussion of basic first aid, common acute and chronic illness in children. Equates with NAHS 473 and NURS 473.

IMS 475. Human Sexuality: A Holistic Viewpoint.

(3-0-3); on demand.

Open to any interested student. A study of the biopsychosocial factors inherent with the sexuality of human beings and their influences on behavior. Equates with NAHS 475 and NURS 475.

IMS 481. Fiscal Management in Health Care.

(3-0-3); on demand.

Restriction: admission to the Bachelor of Science of Imaging Sciences online degree program. A study of the concepts of economics and financial management in the health care arena, including budgeting, breakeven analysis, financial reporting, and business plan preparation.

IMS 491. Curriculum Development in Imaging Sciences.

(3-0-3); on demand.

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 curricula in Imaging Sciences.

Industrial and Engineering Technology Courses

IET 100. World of Technology.

(3-0-3); on demand.

An introduction to basic concepts of industry. The identification of the major industries and the development of an understanding of their impact upon society.

IET 110. Fundamentals of Computer Technology.

(3-0-3); I, II, III.

A general introduction to the computer systems. Basic hardware concepts are covered. Main topics include an overview of components of a computer, the components of system unit, operating systems and utility programs, communications and networks, the Internet and World Wide Web, Web development programs, e-commerce, and system maintenance. Designed for students who have some basic familiarity with Microsoft Office application. *This course satisfies the computer competency requirement for general education.*

IET 111. Basic Wood Technics.

(2-2-3); on demand.

This is the beginning course in wood technology, consisting of theory and application with particular emphasis on individual and industrial values of secondary wood processing.

IET 120. Technology Systems.

(3-0-3); I, II, III.

Precollege curriculum requirements should be met. An introduction to major areas of technology including communication, construction, manufacturing, and transportation systems. *This course satisfies the area studies-practical*

living for general education.

IET 160. Introduction to Power and Fluid Mechanics.
(2-2-3); I.

Beginning instruction in energy sources and fluid systems. Steam engines, steam turbines, diesel engines, spark-ignition engines, and exhaust emissions are studied.

IET 211. Advanced Wood Technics.
(2-2-3); on demand.

Prerequisite: IET 111 or consent of instructor. This is a continuation of IET 111. It consists of advanced techniques and practices reflecting the wood industries through the study and use of theory, experimentation, and evaluation.

IET 222. General Crafts.
(2-2-3); on demand.

A survey of several craft media, involving a study of the common tools, skills, processes, and procedures in clay, glass, plastics, metal, stone, leather, and wood. Industrial applications of craft principles and processes will also be investigated.

IET 239. Cooperative Education I.
(1-3); I, II, III.

Designed to develop professional and technical work experience in a business, educational and or industrial organization.

IET 260. Hydraulics and Pneumatics.
(2-2-3); II.

Introductory course in the design and analysis of power transfer devices utilizing hydraulics and pneumatics, with emphasis on robotics applications.

IET 261. Power Mechanics.
(2-2-3); on demand.

Control mechanisms are studied along with rocket engines, various forms of jet engines, and advanced power systems.

IET 263. Technology Management I.
(6-0-6); on demand.

Technical competencies in the field of specialization. Offered only for technology management students.

IET 264. Technology Management II.
(6-0-6); on demand.

Practical specialized technical skills in the related fields. Offered only for technology management students.

IET 265. Technology Management III.
(6-0-6); on demand.

Attainment of advanced technical skills. Offered only for technology management students.

IET 300. Technology and Society.
(3-0-3); I, II, III.

Prerequisites: ENG 100 and MATH 123 or higher. A study of the issues that arise as technology becomes a creative human enterprise. Students will be engaged in reading, dialog, and group activities in order to increase their abilities to identify and assess the implications and ramifications of productively living in a technological society. *This course satisfies area studies-social and behavioral sciences for general education.*

IET 307. Materials Science.
(2-2-3); II.

Prerequisites: MATH 152 and PHYS 201, or consent of instructor. An organized investigation of engineering materials, including their classification, properties, and means of testing to determine their properties. The application of materials to manufactured and constructed products and the effects of manufacturing processes and in-service stress on materials will be considered.

IET 310. Engineering Economic Analysis.
(3-0-3); I.

Prerequisites: ECON 101 or ECON 201, and MATH 175. Engineering investment, decision analysis of alternate projects, machine depreciation methods, machine replacement policies, effect of taxes and inflation on engineering investment.

IET 311. Design and Construction.
(1-4-3); on demand.

Prerequisite: IET 211. Students design, plan, construct, and finish an appropriate product requiring knowledge of advanced principles and techniques in wood technology.

IET 317. Just In Time and Lean Systems.
(3-0-3); I, II.

Prerequisite: ITMT 186. Analysis of industrial production methods for profit improvement. Elements of lean manufacturing and just-in-time inventory control are covered.

IET 319. Quality Control.
(3-0-3); I, II.

Prerequisite: MATH 353. Analytical and statistical inference techniques for process and manufacturing product control.

IET 320. Industrial Project Management.
(3-0-3); I, II.

Prerequisites: IET 110, 120, and ENG 200; or consent of instructor. A study of industrial project management methods for the analysis and design of industrial-level projects. Content includes planning, scheduling, and control of project resources from an industrial perspective. Concepts and activities are integrated according to the Project Management Institute's Body of Knowledge.

IET 321. Wood Laminating and Turning.
(2-2-3); on demand.

Theory and practice of laminating and wood turning, with emphasis given to industrial and school shop practices. Introduction to tools, equipment, and their safe operations.

IET 327. Applied Industrial Management.
(3-0-3); II.

A study of basic industrial management practices and procedures. Designed to serve the technician, first-line supervisor, or lay management individual to provide an awareness rather than to prepare a practitioner of management.

IET 330. Industrial Design.
(2-2-3); I, II.

Prerequisites: junior/senior standing and all 100 level IET core courses and all departmental specific general education MATH requirements met. Conduct design with emphasis on consumer demands. The key principles, elements and precepts of modern design with

heavy emphasis on the design methodology in both collaborative and individual settings.

IET 339. Cooperative Education I.
(1 to 3 hrs.); I, II, III.

Designed to develop professional and technical work experience in a business, educational, and/or industrial organization.

IET 361. Automotive Mechanics.
(2-2-3); on demand.

Engine repair and maintenance procedures including computerized management systems. Braking systems, drive systems, and steering systems are also covered.

IET 362. Fluid Power.
(2-2-3); on demand.

To gain an in-depth knowledge of fluid systems as they are used in modern industry.

IET 365. Instrumentation.
(2-2-3); on demand.

Techniques of properly instrumenting test calls with such devices as pilot tubes, manometers, and electronic devices.

IET 371. Seminar for Industrial Education and Technology.
(1-0-1); I, II.

Participants will develop a further understanding of the underlying concepts of industrial career options by participation in one or more programs followed by informal discussion.

IET 381. Related Science, Mathematics, and Technology in Occupations.
(0-0-6); on demand.

Offered only through written examination. Courses will be offered only through a scheduled examination. (Written, performance, and oral examinations in the field of specialization that the candidate is preparing to teach.)

IET 382. Manipulative Skills in Occupations.
(0-0-6); on demand.

Offered only through technical competence examinations. Courses will be offered only through a scheduled examination. (Written, performance, and oral examinations in the field of specialization that the candidate is preparing to teach.)

IET 383. Knowledge of Related Subjects in Occupations.
(0-0-6); on demand.

Offered only through oral examinations. Courses will be offered only through a scheduled examination. (Written, performance and oral examinations in the field of specialization that the candidate is preparing to teach.)

IET 385. Staff Exchange.
(3 hrs.); I, II, III.

Designed to give an opportunity for an individual to upgrade in his/her specific technical skill in an ever changing technical world. Through this unique chance to work in industry learning the new techniques, developing new skills and expanding one's knowledge will enable the participant to take back to his/her classroom the latest innovations in technology as industry has

adopted for their use.

IET 387. Fundamentals of Metallurgy and Joining Technology.
(2-2-3); I, II.

Pressure, non-pressure, and brazing processes for material fabrication. Arc, oxyacetylene, inert gas, and special welding techniques. Coupon analysis required for destructive and nondestructive testing.

IET 398. Supervised Work Experience.
(1 to 9 hrs.); I, II, III.

Prerequisite: 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.); on demand.

Technology and industrial teacher education topics reflective of emerging industrial techniques or trends in technical-vocational education. Innovative, experimental, and hands-on techniques will frequently be used.

IET 411. Wood Technics.
(2-2-3); on demand.

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); I.

Prerequisites: IET 319 and 320, or consent of instructor. A study of total quality concepts and their impact on the quality and competitiveness of products.

IET 421. Design of Experiments.
(3-0-3); II.

Prerequisites: MATH 353 and 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); II.

A study of industrial safety codes, standards, regulations, and enforcement procedures. Explanations of worker safety as related to attitude and production. Review of current laws regulating

safety and those agencies related to enforcement and training.

IET 430. Facilities Planning.
(3-0-3); I.

Prerequisites: IET 310, IET 317, IET 320, and MATH 353. The study of concepts, principles and techniques used in planning, designing and analyzing industrial facilities with emphasis on manufacturing and services.

IET 439. Cooperative Education II.
(1 to 6 hrs.); I, II, III.

Designed to develop professional and technical work in a business, educational and/or industrial organization.

IET 460. Internal Combustion Engines II.
(2-2-3); on demand.

Detailed study of exhaust emissions and the gas turbine engine.

IET 463. Heating, Ventilating, and Air Conditioning.
(2-2-3); on demand.

A study of the ventilating and heating techniques in modern industrial application. Also includes industrial air conditioning and refrigeration.

IET 476. Special Problems.
(1 to 3 hrs.); I, II, III.

Prerequisites: upper division standing; consent of department chair. Designed for the purpose of permitting a student to do advanced work as a continuation of an earlier experience or to work in an area of special interest.

IET 496. Organization and Management of the Laboratory.
(2-0-2).

Principles of shop and class organization and management, including program planning and development of shops and laboratories; selecting and purchasing equipment and supplies; and organizing and administering the instructional program.

IET 499C. Senior Project.
(1-4-3); I, II.

Prerequisites: senior standing and completion of 18 hours in option. Problems using the scientific method of inquiry in conjunction with faculty members from the major area of study will be conducted. The proposed problem is inclusive of the statement, background, and parameters of the problem, as well as methods and procedures for the solution. *This course satisfies the integrative component for general education.*

Industrial Technology - Computer Aided Design Courses

ITCD 103. Computer Aided Design and Drafting I.
(2-2-3); I, II.

The study and application of producing two and three 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); II.

Prerequisite: ITCD 103. Breadth and depth are derived from the

background of principles and techniques developed previously in technical drawing. Focus on working drawings.

ITCD 215. Introduction to 3D Design and Modeling.
(2-2-3); I, II.

Prerequisite: ITCD 103 or consent of instructor. This course 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); I, even years.

Prerequisites: ITCD 103 and MATH 152 or higher. The layout and design of tooling, jigs, fixtures, gages, and equipment through computer aided design techniques.

ITCD 305. Residential Architectural Design.
(2-2-3); I, odd years.

Prerequisites: ITCD 103 and MATH 152 or higher. Instruction centers around the problems, practices, and techniques of the residential architectural design and drafting, including historical development.

ITCD 315. 3D Design, Modeling and Animation.
(2-2-3); II.

Prerequisite: ITCD 215 or consent of instructor. Content will include advanced dimensioning techniques, utilization of attributes, parametric modeling, illustration, presentations, animation, and programming.

ITCD 403. Computer Aided Design of Mechanisms.
(2-2-3); II, odd years.

Prerequisites: ITCD 403, ITCD 315 and MATH 152 or higher. 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.

ITCD 404. Commercial Architectural Design.
(2-2-3); II, even years.

Prerequisites: ITCD 215 and MATH 152 or higher. A technical course covering the fundamental principles, techniques, and practices of commercial architectural design and drafting.

ITCD 405. Civil Drafting.
(2-2-3); II, odd years.

Prerequisites: ITCD 103 and MATH 152 or higher. Computerized drawings involving roadways, bridges, large developments, plats, and deeds.

ITCD 415. Advanced Computer Aided Design.
(3-0-3); I, even years.

Prerequisites: senior computer aided design or consent of 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.

Industrial Technology - Construction Management Courses

ITCM 101. Introduction to Construction Technology. (3-0-3); I.

Discussion of various aspects of the construction industry including typical building methods, cost factors, and personnel requirements. Includes residential and commercial building.

ITCM 202. Structural Analysis. (2-2-3); I.

Prerequisite: MATH 152 or higher. Review of typical structural design methods with applied calculation using free body diagrams and other static load methods.

ITCM 203. Construction Methods and Materials I. (2-2-3); I.

An investigation of various construction and building techniques, including traditional and modified methods. Laboratory will include model and prototype development.

ITCM 204. Codes, Contracts, and Specifications. (3-0-3); II.

Exposure to local and state codes and architectural specifications necessary to meet contract requirements. Introduction to various code organizations and file systems.

ITCM 205. Estimating and Construction Costs. (3-0-3); II.

Estimating cost procedures typically used for bid specifications. Current and projected material and construction cost accounting procedures.

ITCM 304. Interpretation of Technical Drawings. (3-0-3); II.

Prerequisites: one introductory course (ITCM 101, ITEC 140, 141, or ITMT 186) and ITCD 103. A study of the application, interpretation, and visualization of technical drawings in residential and commercial industrial projects. Students will learn to use technical drawings to communicate ideas, and plan, schedule, and control industrial components, materials, and methods.

ITCM 306. Construction Project Management. (2-2-3); II.

Prerequisites: ITCM 101 and MATH 141 or higher or consent of instructor. The planning, scheduling, and control of project resources in the construction industry. Topics include work breakdown structures, precedence grids, precedence node diagrams, analytical methods for network solutions, resource scheduling, leveling and allocation, time-cost tradeoffs, and project-scheduling simulation.

ITCM 307. Hydrology. (3-0-3); on demand.

Prerequisites: GEOS 200. A study of surface and subsurface fluid flow systems. Basic areas will include open and closed channel flow, hydrogeology, sedimentation/erosion control, and applicable state/federal regulations.

ITCM 310. Principles of Surveying. (2-2-3); I.

Prerequisites: ITCM 101, MATH 141 or higher, technical drawing or CAD course. 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); II.

Prerequisites: ITCM 203. A continuation of ITCM 203, this course is a study of the technical and management methods in construction techniques, with concentration on heavy or horizontal construction. Topics include excavation methods, equipment requirements, types, selection and scheduling, commercial high explosives, blasting pattern design, and legal/safety considerations.

ITCM 410. Construction Surveying. (2-2-3); I.

Prerequisites: 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.

Industrial Technology - Manufacturing Courses

ITMT 106. Thermoplastic Processing. (2-2-3); I.

Introduction to the materials and techniques employed in the processing of thermoplastics.

ITMT 107. Thermosetting Plastics and Composites. (2-2-3); on demand.

Study of the various ways thermosetting plastic compounds are processed.

ITMT 170. Fundamentals of Robotics. (3-0-3); I, II.

An introduction to the operations and applications of robots. Android and industrial robots; emphasis on the history, development, sociological implications, and future trends. A survey class appropriate for any college major.

ITMT 186. Manufacturing and Fabrication. (2-2-3); I, II.

Ferrous and nonferrous metals, basic metallurgy and heat treating, sheet metal, basic welding, casting, forging, manufacturing processes and concepts.

ITMT 270. Robotics Systems Applications. (2-2-3); I.

Prerequisite: ITMT 170. Systems engineering for variable sequence, playback, numerical control, and intelligent industrial robots. Economic justification, application, safety, maintenance, and programming. Laboratory activities will include problem solving assignments with robots.

ITMT 286. Machine Tool Processes. (2-2-3); II.

Prerequisites: ITMT 186 and MATH 152 or higher. Various metal

forming and machining experiences; emphasis on exact tolerances and precise dimensions. Lathe, mill, and grinder experiences.

ITMT 306. Mold Design and Construction.
(2-2-3); II.

Prerequisite: one of the following; ITMT 106 and 386 or consent of instructor. Design of products in relationship to the physical characteristics of plastics, molding techniques, and mold construction methods.

ITMT 307. Automated Joining Technology.
(2-2-3); on demand.

Prerequisite: IET 387 or ITMT 270. Metal inert gas welding techniques adapted to robots and other automated welding systems. Suitable for both welding technology students and other students involved with the robotics engineering technology option.

ITMT 370. Robotics Interfacing Engineering.
(2-2-3); II.

Prerequisite: ITMT 270 or consent of instructor. Electronic, 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); I.

Prerequisites: ITMT 186 and MATH 152 or higher. Advanced tooling theory and numerical controlled and computer numerical controlled machine processes. Application and selection of carbide tooling emphasized in production applications.

ITMT 470. Robotics Applications Engineering.
(2-2-3); on demand.

Prerequisites: ITMT 370 and ITMT 386. Engineering design of a specific manufacturing problem and implementation in the laboratory. Emphasis on industrial engineering techniques, end-of-arm tooling, part orientation, and control devices for unmanned machine cells. An interdisciplinary approach will be used.

ITMT 486. Patternmaking and Foundry.
(2-2-3); on demand.

Prerequisite: ITMT 386. Casting of hot metals with activities in pattern development, sand testing, and mold design.

ITMT 484. Manufacturing Information Systems.
(2-2-3); I.

Prerequisite: ITMT 488. Advanced tool and machining theory, with emphasis on production machining, and progressive tooling for computerized numerical control applications.

ITMT 488. Flexible Manufacturing Engineering Technology.
(2-2-3); II.

Prerequisite: ITMT 386. Advanced tools and machining theory; use of carbides, with emphasis on production machining. Turret and progressive tooling design.

Industrial Technology-Computer Graphics Courses

ITCG 102. Graphic Arts I.
(2-2-3); I.

A survey course covering the broad practices, techniques and problems of the graphic arts industry. Study and experience include history, design and layout, composition methods, image reproduction, screen process and bindery applications.

ITCG 202. Graphic Arts II.
(2-2-3); II.

Prerequisite: ITCG 102. An advanced course for students to apply the principles and competencies developed in the initial course. Units include automatic press operation (letterpress and offset), bindery operations, and darkroom procedures for photography and photographic screen process applications to the graphic arts industry.

ITCG 302. Offset Lithography.
(2-2-3); II.

The study of the history and fundamentals of photo offset 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); II.

Prerequisite: ITCD 103. A study of the principles, practices and techniques used in industry to illustrate complex mechanisms in pictorial form.

ITCG 322. Electronic Imaging and Photography.
(2-2-3); on demand.

Introductory course emphasizing the techniques and mechanics of photography as they apply to composition and darkroom procedures. Students will provide their own equipment and supplies (focusing camera, film, and enlarging paper).

ITCG 350. Electronic Composition I.
(2-2-3); I. even years.

An introductory course of theory and practical involvement relating to computer image generated type styles and sizes as indicated on a properly prepared layout of the job elements. The course will cover background of direct entry, VDT, and newer machine principles as they are marketed and available to the graphic arts industry.

ITCG 351. Graphic Duplication.
(2-2-3); on demand.

Prerequisite: ITCG 202. A survey of the use of various methods and devices of the graphic arts currently used in the typical office or in-plant reproduction center. Experience will be gained in the preparation of direct and indirect methods of producing graphic images.

ITCG 450. Electronic Composition II.
(2-2-3); II. even years.

Prerequisite: ITCG 350. A continuation of ITCG 350, concentrating on the advanced commands and intricate facets of computer

image generated copy. A live job involvement to simulate an actual industrial experience in the classroom environment is the core of learning.

International Studies Courses

Cross listed courses can only be taken once for credit. If a cross listed course is taken a second time using the different prefix it will be considered a repeat.

IST 101. Introduction to International Studies. (3-0-3); I, II.

An exploration of global citizenship through the interdisciplinary perspectives of the humanities, technology, education, science and economics. Students will be challenged to critically examine the relationship of intercultural and international issues, and to use problem-solving skills as they investigate topics and issues of universal concern. *This course satisfies the area studies-humanities for general education.*

IST 201. Global Studies. (3-0-3); I, II.

This course will introduce students to the study of world cultures and provide an understanding of contemporary global issues. Using historical and literary texts, CD-ROM technology and films in a multimedia approach, students will examine selected social, political, economic, and cultural phenomena in the context of world history. *This course satisfies the area studies-humanities for general education.* Cross listed with HIS 201.

IST 204. World Food. (3-0-3); I, II, III.

Analysis of contemporary problems and issues of public concern relating to food, agriculture, and rural areas using the tools of fundamental economic concepts. Farm income, food prices, world food problems, natural resources, environment, and rural development issues will be studied. *This course satisfies area studies-social and behavioral sciences for general education.* Cross listed with AGR 204.

IST 205. French Culture and Civilization. (3-0-3); II.

Survey of art, architecture, music and history of France. Cuisine, fashion, and cinema. The imprint of France on America and the Third World. Taught in English; some knowledge of French helpful but not required. *This course satisfies the area studies-humanities for general education.* Cross listed with FRN 205.

IST 206. Business French. (3-0-3); I, II.

Introduction to the French-speaking business world. Special attention to etiquette, interpersonal relations, and daily culture. Investigation of current French practices in marketing, banking, real estate, advertising and the media. Study of authentic documents and regalia. Comparison of French and American systems of job training and placement. Course taught in English, some knowledge of French helpful. Cross listed with FRN 206.

IST 211. Introduction to World Literature I. (3-0-3); I.

A comparative study of dramatic, lyric, and narrative ancient literatures. *This course satisfies area studies-humanities for general*

education. Cross listed with ENG 211.

IST 212. Introduction to World Literature II. (3-0-3); II.

A comparative study of dramatic, lyric, and narrative literatures of the world after the 16th century. *This course satisfies area studies-humanities for general education.* Cross listed with ENG 212.

IST 221. World Religions I. (3-0-3); on demand.

Prerequisite: PHIL 200 is recommended. Origin, development, assumptions, values, beliefs, practices, great leaders, and principal events of Judaism, Christianity, Islam, and Zoroastrianism. Cross listed with REL 221.

IST 222. World Religions II. (3-0-3); on demand.

Prerequisite: PHIL 200 is recommended. Origin, development, assumptions, values, beliefs, practices, great leaders, and principal events of Hinduism, Buddhism, Confucianism, Taoism, Jainism, Sikhism, and Shintoism. Cross listed with REL 222.

IST 263. Art History I. (3-0-3); I, II.

An examination of prehistoric, ancient Near Eastern, Pre-Columbian, tribal, and Asian art. It includes a study of materials, techniques, subjects, styles, issues, functions and meanings. *This course satisfies the area studies-humanities for general education.* Crosslisted with ART 263.

IST 264. Art History II. (3-0-3); I, II.

An examination of ancient Greek and Roman, and Medieval art. It includes a study of materials, techniques, subjects, styles, issues, functions and meanings. *This course satisfies the area studies-humanities for general education.* Cross listed with ART 264.

IST 265. Art History III. (3-0-3); I, II.

An examination of art from the Renaissance to the present. It includes a study of materials, techniques, subjects, styles, issues, functions, and meanings. *This course satisfies the area studies-humanities for general education.* Cross listed with ART 265.

IST 300. World Geography. (3-0-3); I, II.

A general survey of the human and physical geography of the major regions of the world with a concentration on development. Emphasis is on the interaction between individuals and the physical and cultural landscape in various settings. *This course satisfies the area studies-social and behavioral sciences for general education.* Cross listed with GEO 300.

IST 301. International Studies Study Abroad. (0-1-1); I, II, III.

Prerequisites: IST 101 and consent of the Coordinator of International Studies or the Chair of International and Interdisciplinary Studies. This class will provide the student with experience in a foreign country for a minimum of a two-week period. A study abroad experience may be through one of the study abroad consortia in which Morehead State holds membership or through a pre-approved study trip. Prior application for IST 301 should be made to the

associate dean for international education.

IST 302. Politics of the Middle East and North Africa. (3-0-3); II. alternate years.

Prerequisites: GOVT 230 and 289. Analysis of major themes and cases in Middle Eastern/North African politics. Includes issues of religion, ethnic conflict, modernization, and democratization. Cross listed with GOVT 331.

IST 303. Politics of Latin America and the Caribbean. (3-0-3); I. alternate years.

Prerequisites: GOVT 230 and 289. Analysis of major themes and cases in Latin American/Caribbean politics. Includes issues of debt, development, and democratization. Cross listed with GOVT 332.

IST 304. Politics of Sub-Saharan Africa. (3-0-3); on demand.

Prerequisites: GOVT 230 and 289. Analysis of major themes and cases in African politics. Includes issues of debt, development, and democratization. Cross listed with GOVT 333.

IST 305. Cultural Anthropology. (3-0-3); I, II.

Prerequisite: BIOL 105, SOC 101, or consent of instructor. A study of literate and nonliterate cultures using the ethnographic approach. Universal aspects of human experience, including the family, economic, political and religious systems examined in cross-cultural perspective. *This course satisfies the area studies-social and behavioral sciences for general education.* Cross listed with WST 305 and SOC 305.

IST 306. International Relations. (3-0-3); I. alternate years.

Prerequisite: GOVT 289 or consent of instructor. A study of international relationships in theory and practice; concepts of power and its application; machinery of foreign policy making and implementation; world politics and law; and the world community. Cross listed with GOVT 364.

IST 307. Politics of International Economic Relations. (3-0-3); I. alternate years.

Prerequisite: GOVT 289. Study of essential issues and contending analytical frameworks. Includes examination of politics of economic relations of the U.S., Japan, Europe, and between the "North" and "South." Cross listed with GOVT 367.

IST 310. Australia. (3-0-3); on demand.

Resources of Australia, New Zealand, and islands of the Pacific; significance of position and political connection of these lands. Cross listed with GEO 310.

IST 311. Geography of the Global Economy. (3-0-3); on demand.

Prerequisite: GEO 211. Spatial analysis of higher level economic activities. Focus is on wholesaling, interregional and international trade and transportation, producer services, and investment. Cross listed with GEO 311.

IST 321. Eastern Philosophy. (3-0-3); on demand.

An examination of the major philosophical theories of Hinduism,

Buddhism, Confucianism, and Taoism. Cross listed with PHIL 320.

IST 324. Geography of World Religions. (3-0-3); on demand.

Prerequisite: GEO 100 or 300. Analysis of the distributions and geographic patterns of modern religions. Particular attention is paid to the geographic patterns that were created as a result of and that helped to create the rituals and traditions of the major world religions. Cross listed with GEO 370.

IST 325. Religious Literature of the World. (3-0-3); on demand.

The literature of major religions of the world. Cross listed with ENG 325.

IST 326. Cuba and the Caribbean. (3-0-3); on demand.

The people and places of the Caribbean basin with a concentration on climate, culture, economics and tourism. A special focus will address the dynamics of Cuban socioeconomic development. Cross listed with GEO 326.

IST 328. Africa. (3-0-3); on demand.

Resources, both natural and cultural; changing political conditions and affiliations of African countries, recognition of, and reasons for, the growing importance of this continent in world affairs. Geographic factors in the economic, social, and political structure of Europe; emphasis on natural regions, resource distribution, and industrial development. Cross listed with GEO 328.

IST 329. North American Politics: United States and Canada. (3-0-3); I, III.

A comparative study of the governments and politics of the United States and Canada, their political, cultures, public opinion, interest groups and political parties; the evolution, structure, and operation of their governments, the behavior of their public officials, and their public policies. Cross listed with GOV 329.

IST 330. Perspectives on Canada. (3-0-3); I, II.

A multidisciplinary study of the geography, history, society, politics, and economy focusing on contemporary Canadian domestic and international issues, including Quebec's role in the Canadian federation, transborder economic and cultural relationships with the United States, and Canada's participation in world affairs.

IST 331. History of Canada. (3-0-3); II.

Prerequisite: consent of instructor. A study of Canada's intellectual, political, economic, and social development, including its colonial origins, the creation and evolution of its confederation, and the nature of its involvement international affairs. Cross listed with HIS 336.

IST 332. First Nations of Canada. (3-0-3); II.

A comparative study of representative North American Native cultures focusing on first nations of Canada, including Ojibwe, Huron, Cheyenne, Lilloet, Nootka, Dene, and Inuit, and using ethnographic, ethnohistoric, and anthropological models.

IST 333. Government and Politics of Britain and Canada.

(3-0-3); II.

A comparative study of the parliamentary governments of Canada and Great Britain, their political cultures, public opinions, interest groups and political parties; the evolution, structure, and operation of their constitutional governments, the behavior of their public officials, and their public policies.

IST 334. Comparative Constitutional Law and Politics.

(3-0-3); I. alternate years.

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. Crosslisted with GOVT 303.

IST 335. Political Economy and Environmental Policy in Canada.

(3-0-3); I.

A study of political dimensions of the Canadian economy and Canada's domestic and international environmental policies, including U.S. Canadian environmental issues and Canada's role in crafting international environmental policies.

IST 336. Politics of the North American Auto Industry.

(3-0-3); I.

A study of the politics of United States and Canadian automobile industries focusing on its managerial practices, labor relations, the recruitment of Japanese auto manufacturers and the challenge of their production methods to the North American auto and its labor unions, and their responses.

IST 337. Politics of Asia.

(3-0-3); on demand.

Prerequisites: GOVT 230 and 289. Survey of politics in China, Japan, India, and Vietnam. Emphasis on themes of traditional order and its collapse and persistence. Development of Asian nationalism and clash between Marxist revolution and evolutionary democracy. Cross listed with GOVT 337.

IST 338. Russia and Eastern European Governments.

(3-0-3); II.

Prerequisites: GOVT 230 and 289. A study of the Russian political system; its ideological base, governing structures, and political processes; and an analysis of the major Eastern European governments and their political life. Cross listed with GOVT 334.

IST 340. Spanish Culture and Civilization.

(3-0-3); on demand.

Prerequisite: SPA 202. Study of the architecture, history, literature, music, customs, current events, and ways of life in Spain. Cross listed with SPA 304.

IST 341. Latin American Culture and Civilization.

(3-0-3); on demand.

Prerequisite: SPA 202. Study of the architecture, art, geography, history, literature, music, customs, current events, and ways of life on the Latin American world. Cross listed with SPA 306.

IST 345. Global Health.

(3-0-3); I, II.

Through this course, the student will develop a global awareness of societal aspects of health and disease through the critical examination of the sociopolitical constraints in health and health care of populations. The roles of community, national, and international health organizations will be examined. Meets general education requirement in the area of social and behavioral sciences. Cross listed with NAHS 345.

IST 350. Communication, Culture, and Diversity.

(3-0-3); I, II.

Prerequisite: CMSP 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. *This course satisfies the area studies-humanities for general education.* Cross listed with CMSP 350.

IST 351. England to 1688.

(3-0-3); I.

Prerequisite: HIS 250. The political, social, and economic institutions of England through the fall of the Puritan Commonwealth. Cross listed with HIS 351.

IST 352. England since 1688.

(3-0-3); II.

Prerequisite: HIS 250. Study of England from the Restoration to the rise of the British Commonwealth. Cross listed with HIS 352.

IST 353. Russia to 1917.

(3-0-3); I.

Prerequisite: HIS 250. The story of Russia from Kievan times to the overthrow of the Romanov dynasty. Cross listed with HIS 353.

IST 354. Russia since 1917.

(3-0-3); II.

Prerequisite: HIS 250. Detailed account of Soviet Russia from revolution through the end of the Cold War. Cross listed with HIS 354.

IST 355. Modern Germany.

(3-0-3); on demand.

Prerequisite: HIS 250. History of Germany from unification to the present in the context of European and world events. Cross listed with HIS 355.

IST 358. Revolutionary Europe.

(3-0-3); on demand.

Prerequisite: HIS 250. History of Europe from the Age of Absolutism to the collapse of the Napoleonic Empire. Cross listed with HIS 358.

IST 359. Nineteenth Century Europe.

(3-0-3); on demand.

Prerequisite: HIS 250. The politicians, nationalistic trends, and unification movements leading to World War I. Cross listed with

HIS 359.

IST 360. United Nations and World Organizations.
(3-0-3); II.

Prerequisites: GOVT 230 and 289. A study of the evolution of international organizations from the League of Nations to the United Nations and of the contemporary problems and issues of present world organizations. Cross listed with GOVT 360.

IST 361. Twentieth Century Europe.
(3-0-3); on demand.

Prerequisite: HIS 250. Detailed survey of World War II, the Cold War, and contemporary events. Cross listed with HIS 361.

IST 362. Current World Problems.
(3-0-3); I, III.

A study of major international problems since World War II, with emphasis on Russian-American relations, regional political conflicts, and major world issues including food, population, and human rights policies. *This course satisfies area studies-social and behavioral sciences for general education.* Cross listed with GOVT 362.

IST 368. Human Rights and Global Justice.
(3-0-3); I.

Prerequisite: GOVT 289. A study of the human rights idea; human rights movement; national and international human rights charters and organizations; political, civil, social, and economic rights; rights of women, children, and minorities; and human rights remedies for collective violence, genocide and terrorism. Cross listed with GOVT 368.

IST 370. African History.
(3-0-3); II.

Prerequisite: HIS 250. Focus on early African states, the slave trade era, the rise and fall of imperial empires, and post independence events. Cross listed with HIS 370.

IST 371. Traditional China.
(3-0-3); I.

Prerequisite: HIS 250. Survey of early Chinese civilization and its institutions. Cross listed with HIS 371.

IST 372. Modern China.
(3-0-3); II.

Prerequisite: HIS 250. Survey of Chinese history since the 19th century. Cross listed with HIS 372.

IST 373. Japanese Civilization.
(3-0-3); on demand.

Prerequisite: HIS 250. Survey of Japanese history from the beginning of its civilization to its rise as a world power. Cross listed with HIS 373.

IST 374. The Middle East.
(3-0-3); on demand.

Prerequisite: HIS 250. Survey of the Moslem world beginning with the eighth century and culminating in the present Middle Eastern situation. Cross listed with HIS 374.

IST 379. Latin American History.
(3-0-3); on demand.

Prerequisite: HIS 250. The Indian background, the rise and fall of

the Iberian empires, and major events since independence. Cross listed with HIS 379.

IST 383. Asia.
(3-0-3); on demand.

The human-land relations characterizing this large and diverse region. An evaluation of a continent in the midst of change in terms of geographic potentials. Cross listed with GEO 383.

IST 385. The Middle East.
(3-0-3); on demand.

A study of the Middle East, its neighbors, and Islam with a focus on the physical resources, religious divisions, cultural groups and the geopolitics of the region. Cross listed with GEO 385.

IST 399. Selected Topics in International Studies.
(3-0-3); I, II.

Prerequisite: consent of instructor. Special course which supplement regular course offerings. May be repeated if the subtitle indicates that a different course is being offered.

IST 401. Seminar in International Studies.
(3-0-3); II.

Prerequisites: IST 101 and nine hours of IST classes or consent of director of international studies. Analysis and discussion of problems and issues in international studies. With guidance of international studies faculty, students will prepare and present a major research project that applies an international context to their major disciplines/areas of study.

IST 409. International Management.
(3-0-3); on demand.

Prerequisite: MNGT 301. A global view of management within various cultures and countries. The course covers international competition, cross-national ethics, international strategy, cross-cultural management, international human resources, and international leadership. Cross listed with MNGT 409.

IST 430. Canadian Parliament Internship.
(3-0-3). III.

A five-week summer internship with a member of the Canadian Parliament in Ottawa. Prior approval of the internship supervisor is required.

IST 447. International Economics.
(3-0-3); on demand.

Prerequisite: ECON 101 or higher. International trade theory, international monetary relationships, and the balance of payments. Emphasis is placed on contemporary problems and possible solutions. Cross listed with ECON 447.

IST 469. International Marketing.
(3-0-3); II.

Prerequisite: MKT 304. The role of the United States in the competitive arena of world trade. Preparing students to operate and compete globally; how to find new markets to replace saturated markets, how to determine which products international customers want, how to customize products for these demands, how to best reach these customers, what pricing strategies are most appropriate, what distribution channels are adequate, and how to overcome barriers that hinder implementation of marketing programs. Cross listed with MKT

IST 481. German Art of the 20th Century.
(3-0-3); on demand.

Prerequisite: consent of instructor. This course will examine the visual expression of German, Austrian, and Swiss artists of the 20th century, including Die Brücke, 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. Cross listed with ART 481.

IST 482. Contemporary World Art.
(3-0-3); on demand.

This course will provide a worldwide survey of contemporary visual arts in historical context and will explore current issues in contemporary art. Cross listed with ART 482.

Italian Courses

ITL 190. Conversational Italian.
(3-0-3); on demand.

An introduction to the Italian language and culture. Emphasis on correct pronunciation, rapid speech, and fluency.

ITL 200. Conversational Italian II.
(3-0-3); on demand.

Emphasis on individual acquisition of correct, idiomatic Italian for communication.

Latin Courses

LAT 101. Beginning Latin I.
(3-0-3); on demand.

Drill in the basic elements of Latin grammar, word study, and reading of simple Latin selections.

LAT 102. Beginning Latin II.
(3-0-3); on demand.

A continuation of LAT 101.

LAT 201. Intermediate Latin I.
(3-0-3); on demand.

Selections from Catullus, Cicero, Horace, Pliny, Martial, Livy, and Ovid.

LAT 202. Intermediate Latin II.
(3-0-3); on demand.

Writings of Cicero; his life and influence.

LAT 301. Advanced Latin I.
(3-0-3); on demand.

Poets of the Augustan Age, together with the history of the period.

LAT 302. Advanced Latin II.
(3-0-3); on demand.

Further study of the poetry of the Augustan Age. Selections from Vergil's Aeneid.

Leadership Courses

LEAD 101. Leadership I.
(1-0-1); I.

This course focuses on the characteristics of leaders, types of power, habits of successful leaders, and self-assessment involved in a study of leadership. There is an emphasis on civic engagement and leadership within a community.

LEAD 102. Service to Society I.
(1-0-1); II.

Prerequisite: LEAD 101. Exploration of leadership as a service to society through critical reflection on community service to populations in need. Integration of service experiences, course readings on justice, charity, and contemporary society, and self-reflection on the obligations of service.

LEAD 201. Leadership II.
(1-0-1); I.

Prerequisite: LEAD 101 and 102. This course focuses on the analysis of historical concepts and contemporary theories of leadership. Emphasis on application of theoretical concepts to actual leadership situations.

LEAD 202. Service to Society II.
(1-0-1); II.

Prerequisite: LEAD 201. Apply leadership principles and critically think about leaders as servants to society through active participation in a civic engagement project. Integration of service experiences and course readings on principles related to developing the inner leader are accompanied by self-reflection on the obligations of service.

LEAD 301. Leading Groups.
(1-0-1); I.

Prerequisite: LEAD 202. Group theory, concepts, research, and principles of application. Understanding how groups function. Development of skills necessary to lead and work effectively in groups through group exercises, civic engagement and experiential learning.

LEAD 302. Leadership in Organizations.
(1-0-1); II.

Prerequisite: LEAD 301. Focus on leadership theory and research within and across formal organization settings such as public/private, and profit/nonprofit. Continue with group dynamics and explore the ethical use of power.

LEAD 401. Advanced Leadership I.
(1-0-1); I.

Focus on an intensive and integrative study of one or more leadership issues and an applied service learning experience in a leadership role.

LEAD 402. Advanced Leadership II.
(1-0-1); II.

Focus on an intensive and integrative study of leadership in society, leadership self-assessment and an applied service learning experience in a leadership role.

Library Science and Instructional Media Courses

LSIM 101. Introduction to Library Research. (2-0-1); I, II. second nine weeks. Introduction to the resources and services of Camden-Carroll Library including the online catalog, electronic databases, periodical literature, specialized reference sources, and the Internet. Emphasis on skills and tools needed for research projects. Designed for college freshmen. Taught on a pass/fail basis (K-Credit).

LSIM 201. Living in an Information Society. (3-0-3); II. A practical introduction to how information is created, organized, retrieved, and evaluated in both electronic and print environments. Uses a concept-based approach and hands-on exercises to teach information retrieval, critical thinking, and lifelong learning skills needed to live in a rapidly changing and technologically sophisticated society. *This course satisfies areas studies-practical living for general education.*

Management Courses

MNGT 160. Business and Society. (3-0-3); I, II. A basic introductory course designed to expose students to a variety of issues regarding management, marketing, finance, accounting, economics, technology, and business law. Through this course, students will develop an understanding and an appreciation of the interaction between the world of business and society. *This course satisfies area studies-practical living for general education.*

MNGT 199. Selected Workshop Topics. (1 to 4 hrs.); on demand. Workshops on various management subjects will be presented periodically to supplement the basic course offerings in management. Credit toward degree programs must be approved by the student's advisor.

MNGT 261. The Legal Environment of Business Organizations. (3-0-3); I, II. The forms of business organizations, including sole proprietorships, partnerships, and profit and nonprofit corporations. The regulatory environment and legal constraints on organizations; the relationship between business and government in policy formation; and basic legal concepts.

MNGT 300. Quantitative Methods in Business and Economics. (3-0-3); I, II. *Prerequisites: ECON 202, MATH 152, 354, or equivalent.* Application of mathematical and statistical techniques to business, the market systems, and the study of economic and finance. Cross listed with ECON 300.

MNGT 301. Principles of Management. (3-0-3); I, II. History of management, the management process, the principles of management and application in the operations of business. The

fundamental concepts of management applied to such areas of business activity as organization, personnel, production, and research.

MNGT 306. Production and Quality Management. (3-0-3); II. *Prerequisites: MATH 152 and 354, MNGT 301.* How Total Quality Management affects operations in manufacturing and service firms. Qualitative and quantitative means for evaluating alternatives for improving customer satisfaction by improving quality, speed and flexibility or by reducing waste are described and illustrated. Statistical quality control, lean production, just-in-time inventory and production procedures, facilities location, and equipment layout are concepts usually addressed using spreadsheet software, a real world approach that facilitates student understanding and problem solving.

MNGT 310. Small Business Organization. (3-0-3); II. Aspects of management that are unique to small firms; economic and social environment in which small firms function; student practice in making decisions on problems facing managers of small businesses.

MNGT 311. Human Resource Management. (3-0-3); I. *Prerequisite: MNGT 301.* Personnel management principles, job requirements; selection techniques; testing programs; facilitation of employee adjustment; wage and salary administration; legal aspects of labor relations; financial incentives.

MNGT 339. Cooperative Education III. (1 to 8 hrs.); on demand. Work experience with an in-depth exposure representative of the student's academic level and experience analogous to a junior level status. Maximum of three hours of cooperative education credit (MNGT 339/439) available for option credit.

MNGT 357. Business Information and Industry Analysis. (3-0-3); I. *Prerequisite: MNGT 301.* Purpose is to assist management students in understanding the range of business information, alternative sources for information in industry and component sectors of industry.

MNGT 362. The Legal Environment and Business Practices. (3-0-3); on demand. *Prerequisite: MNGT 261.* Business practices, emphasizing legal problem avoidance. Areas of the law which impact business success or failure; the Uniform Commercial Code, state and federal regulations, and laws.

MNGT 365. Financial Issues for Small Business. (3-0-3); on demand. *Prerequisites: ACCT 281, 282, and FIN 360.* Examines the financial issues small businesses deal with at start-up, and on a day-to-day basis. Students will learn how small businesses can apply financial principles to benefit the company. Cross listed with FIN 365.

MNGT 399. Selected Workshop Topics.**(1 to 4 hrs.); on demand.**

Workshops on various management subjects will be presented periodically to supplement the basic course offerings in management. Credit toward degree programs must be approved by the student's advisor.

MNGT 401. Health Care Law and Policy.**(3-0-3); II.**

Prerequisite: MNGT 301 or permission of the instructor. This is a survey of the law and policy of health care, covering the history of health care law and policy, the fundamental principles of law as applied to health care, and the federal and state legislation and regulations related to health care. Cross listed with IMS 401.

MNGT 409. International Management.**(3-0-3); on demand.**

Prerequisite: MNGT 301. A global view of management within various cultures and countries. The course covers international competition, cross-national ethics, international strategy, cross-cultural management, international human resources, and international leadership. Cross listed with IST 409.

MNGT 411. Labor Relations.**(3-0-3); on demand.**

Prerequisite: MNGT 311. Historical development of the U.S. labor movement and a comparative analysis with other Western culture labor movements. Emphasis on developing insights into labor's point of view. An introduction to labor-management negotiations and grievance procedures.

MNGT 417. Management and Marketing of Public and Nonprofit Organizations.**(3-0-3); on demand.**

Prerequisites: MKT 304 and MNGT 301. The application of principles of management and marketing to the specific needs of public and nonprofit organizations. Formulation, implementation, and evaluation strategies for management and marketing of these organizations is explored.

MNGT 420. New Venture Creation.**(3-0-3); on demand.**

Prerequisites: FIN/MNGT 365 and MKT 345. Examines the issues small businesses deal with at start-up and on a day-to-day basis. Students will learn the steps necessary to start a small business.

MNGT 425. Training and Development in Industry.**(3-0-3); I.**

Prerequisites: BIS 321 or 421, MNGT 301. Study of the relevant theories, issues, trends, and methods in training and developing adult learners in work organizations; includes program design, needs and task analysis, delivery methods, working with consultants, and program evaluations. Cross listed with BIS 425.

MNGT 436. Decision-Making and Project Management.**(3-0-3); on demand.**

Prerequisite: MNGT 306 or consent of instructor. Presents a decision-making framework that allows students to explore and weigh three critical elements of formulating solutions for unstructured problems; root cause analysis, option analysis, and risk analysis. Also presents project management concepts to deal with the

implementation of decisions and plans.

MNGT 439. Cooperative Education IV.**(1 to 8 hrs.); on demand.**

Work experience with an in-depth exposure representative of the student's academic level and experience analogous to a senior level course. Maximum of three hours of cooperative education credit (MNGT 339/439) available for option credit.

MNGT 463. Law and Ethics in Business.**(3-0-3); II.**

Prerequisite: MNGT 261. The social responsibility of business and individuals in commerce. Value systems, externally or self-imposed, their development and operation.

MNGT 465. Organizational Behavior.**(3-0-3); I, II.**

Prerequisite: MNGT 301. A study of human and interpersonal behavior critical to understanding, evaluating, and appraising business and social situations. Emphasis on skill and the ability to work with people, groups, and institutions.

MNGT 475. Business Leadership and Teamwork.**(3-0-3); I.**

Prerequisite: MNGT 465. An in-depth study of effective leadership within modern organizations focused primarily upon managerial leadership. The importance and use of teams and groups within modern organizations will also be examined. Theories, research, strategic importance, and skills in the areas of leadership and teamwork will be studied.

MNGT 476. Special Problems in Management.**(1 to 3 hrs.); on demand.**

Prerequisites: senior standing and consent of department chair. Self-directed independent study on a specific problem, based on written proposal and justification submitted by student prior to registration. Each request will be considered on its own merit in relation to the special needs, interest, and abilities of the student.

MNGT 486. Management Internship Program.**(3 to 12 hrs.); on demand.**

Prerequisites: junior or senior standing and 12 hours in major area, with 2.5 GPA in major area and consent of instructor. The internship program involves placement of students in positions in business comparable to those filled by professional career employees. Participants work under the supervision of high level officials possessing major departmental responsibilities. Available as option credit.

MNGT 499C. Strategic Management.**(3-0-3); I, II, III.**

Prerequisites: ECON/MNGT 300, FIN 360, MKT 304, MNGT 301, MNGT 465, and senior standing. Approaches for the integration of business functions and the development of strategies in managing domestic and global enterprises for competitive advantage. This course satisfies the integrative component for general education and is required for the B.B.A. core.

Marketing Courses

MKT 304. Marketing.**(3-0-3); I, II.**

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 339. Cooperative Education III.
(1 to 8 hrs.); on demand.

Work experience with an in-depth exposure representative of the student's academic level and experience analogous to a junior level status. Maximum of three hours of cooperative education credit (MKT 339/439) available for option credit.

MKT 340. Interactive E-Marketing.
(3-0-3); on demand.

Prerequisite: MKT 304. This course examines emerging interactive technologies and their impact on and implications for marketing strategy, consumer behavior, market segmentation, advertising, and media planning. Special emphasis is placed on applying the components of the traditional marketing mix to e-commerce.

MKT 345. Marketing Strategies for Small Business.
(3-0-3); on demand.

Prerequisite: MKT 304. Examines the marketing methods used by small to medium-sized companies operating with limited budgets. The class will explore the formulation of a marketing plan. In addition, pricing, distribution, and promotion issues for the small business will be investigated.

MKT 350. Personal Selling.
(3-0-3); I, II.

Prerequisite: MKT 304. The major promotional method used in American business, personal selling, involves person-to-person communication between a buyer and seller. The stages of the selling process, such as prospecting, the presentation, and the close will be explored.

MKT 351. Sales Management.
(3-0-3); on demand.

Prerequisite: MKT 304 or MNGT 301. Sales management is the administration of a firm's personal selling function. The sales manager has many tasks which will be examined: sales planning and budgeting, estimating market potential and forecasting sales; organizing the sales force; recruiting, selecting, and training; supervising; and evaluating the sales force.

MKT 354. Consumer Behavior.
(3-0-3), I.

Prerequisites: MKT 304 or consent of instructor; PSY 154 and SOC 101 recommended. 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 Marketing.
(3-0-3); on demand.

Prerequisite: MKT 304 or consent of instructor. This course examines the marketing of services from a managerial perspective. Includes topics such as the unique nature of services; managing the service encounter; pricing, promoting, and distributing services; and service quality.

MKT 370. Direct and Database Marketing
(3-0-3); on demand.

Prerequisite: MKT 304. This course examines marketing activities and strategies from a nonstore perspective. Topics covered include the interactivity of non-store and direct marketing, database management, the Internet, electronic technology, direct mail, and direct response marketing.

MKT 399. Selected Workshop Topics.
(1 to 4 hrs.); on demand.

Workshops on various marketing subjects will be presented periodically to supplement the basic course offerings in marketing. Credit toward degree programs must be approved by the student's advisor.

MKT 425. Marketing Ethics & Social Responsibility.
(3-0-3); on demand.

Prerequisite: MKT 304, MKT and MNGT 301, or consent of the instructor. This course will examine ethical theories and reasoning as a foundation for managerial decision-making, each addressed from the marketing perspective. Discussion will focus on how moral standards are applied to marketing decisions, behaviors and institutions. Topics will evaluate direction and meaning to problems in marketing ethics through reflection on concepts such as individual choice, freedom and responsibility, desire satisfaction, noncoercive exchanges, and instrumental efficiency.

MKT 439. Cooperative Education IV.
(1 to 8 hrs.); on demand.

Work experience with an in-depth exposure representative of the student's academic level and experience analogous to a senior level status. Maximum of three hours of cooperative education credit (MKT 339/439) available for option credit.

MKT 451. Retail Marketing.
(3-0-3); on demand.

Prerequisite: MKT 304. The role of retailing institutions to meet the fast-paced changes in society which confront final consumers in their purchases for personal, family, or household nonbusiness uses. The retailing process is critically analyzed along with the environment within which it operates, and the institutions and functions that are performed.

MKT 452. Marketing Research and Analysis.
(3-0-3); I.

Prerequisites: MATH 354 and MKT 304. Marketing research is used by a wide variety of organizations to collect information that will assist them in making better decisions. The process of designing, gathering, analyzing, and reporting data relevant to a specific decision will be explored.

MKT 453. Marketing Planning and Strategies.
(3-0-3); I, II.

Prerequisites: MKT 304, MNGT 301, and completion of or concurrent enrollment in all required marketing option courses, or consent of instructor. An integrated course in marketing, 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 454. Integrated Marketing Communication.
(3-0-3); II.

Prerequisite: MKT 304. Required for Marketing option in Business Administration. Promotional strategies is dedicated to demonstrating how organizations may communicate, compete and convince their target markets through the interrelationship of advertising, sales promotion, publicity and public relations.

MKT 455. Advertising.
(3-0-3); on demand.

Prerequisite: MKT 304. A discussion of the milestones in the evolution of advertising and a description of advertising's role in the marketing communication process. The course will investigate both the client and professional advertiser perspective. Theory and application are stressed.

MKT 469. International Marketing.
(3-0-3); II.

Prerequisite: MKT 304. The role of the United States in the competitive arena of world trade. Preparing students to operate and compete globally; how to find new markets to replace saturated markets, how to determine which products international customers want, how to customize products for these demands, how to best reach these customers, what pricing strategies are most appropriate, what distribution channels are adequate, and how to overcome barriers that hinder implementation of marketing programs. Cross listed with IST 469.

MKT 476. Special Problems in Marketing.
(1 to 3 hrs.); I, II, III.

Prerequisites: senior standing and consent of department chair. Self-directed independent study on a specific problem, based on written proposal and justification submitted by student prior to registration. Each request will be considered on its own merit in relation to the special needs, interest, and abilities of the student.

MKT 499. Selected Workshop Topics.
(1 to 4 hrs.); on demand.

Workshops on various marketing subjects will be presented periodically to supplement the basic course offerings in marketing. Credit toward degree programs must be approved by the student's advisor.

Mathematics Courses

MATH 090. Pre-Algebra.
(3-0-3); I, II, III.

Exponents, integers, fractions, decimals, square roots, percent with applications, introduction to algebra and basic geometry. This is a course in the developmental studies curriculum and does not count as credit toward graduation. A student should not expect other institutions to accept this course for transfer credit.

MATH 091. Beginning Algebra.
(3-0-3); I, II, III.

A first course in algebra for students with no previous experience with algebra or who have been unsuccessful in attempting a course in Algebra I at the secondary school level. This is a course in the developmental studies curriculum and does not count as credit toward graduation. A student should not expect other institutions to accept this course for transfer credit.

MATH 093. Intermediate Algebra.
(3-0-3); I, II, III.

Prerequisite: "C" or better in MATH 091 or minimum ACT Math subscore of 18. A second course in algebra, giving the student an opportunity to gain additional competency in algebra necessary for certain courses at the University. This is a course in the developmental studies curriculum and does not count as credit toward graduation. A student should not expect other institutions to accept this course for transfer credit.

MATH 110. Problem Solving Techniques.
(1-0-1); on demand.

A basic course emphasizing problem solving using graphing calculators.

MATH 123. Introduction to Statistics.
(3-0-3); I, II, III.

Prerequisite: "C" or better in MATH 091 or minimum ACT Math subscore of 18. Basic concepts of probability, sampling, and the algebra of events. Properties of selected discrete and continuous distributions. *This course satisfies the required core-math reasoning for general education.*

MATH 131. Mathematical Reasoning and Problem Solving.
(3-0-3); I, II, III.

Prerequisite: "C" or better in MATH 091 or minimum ACT Math subscore of 18. A course providing the student with experiences designed to improve the ability to make decisions and solve a variety of problems. Emphasis is on learning to investigate, organize, observe, question, discuss, reason, generalize and validate. Mathematical content includes topics which are related to consumer mathematics, geometry, graphs, probability and statistics. *This course satisfies the required core-math reasoning for general education.*

MATH 135. Mathematics for Technical Students.
(3-0-3); I, II, III.

Prerequisite: "C" or better in MATH 091 or minimum ACT Math subscore of 18. 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.

MATH 141. Plane Trigonometry.
(3-0-3); I, II, III.

Prerequisite: "C" or better in MATH 093 or minimum ACT Math subscore of 20. Trigonometric functions, trigonometric identities, inverse functions, and applications. *This course satisfies the required core-math reasoning for general education.*

MATH 152. College Algebra.
(3-0-3); I, II, III.

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); on demand.

Prerequisite: "C" or better in MATH 093 or minimum ACT Math subscore of 20. An introduction to finite mathematics and calculus. Systems of linear equations and inequalities, matrix algebra, linear programming, differentiation and integration; applications to business and economics.

MATH 170. Introduction to Computer Science.
(3-2-4); I, II.

Prerequisite: MATH 152 or minimum ACT Math subscore of 22. An overview of modern computer science; mathematical treatment of algorithms; implementation of fundamental programming principles in a modern programming language; techniques of problem solving related to computing. Designed for students who have basic familiarity with Microsoft Office applications. Cross listed with CS 170. *This course satisfies the computer competency requirement for general education.*

MATH 174. Pre-Calculus Mathematics.
(3-0-3); I, II.

Prerequisite: "C" or better in MATH 141 or minimum ACT Math subscore of 22. Exponential, logarithmic, and trigonometric functions; complex numbers, theory of equations. *This course satisfies the required core-math reasoning for general education.*

MATH 175. Calculus I.
(4-0-4); I, II.

Prerequisites: "C" or better in MATH 174, minimum ACT Math subscore of 25, or MATH 141 and 152. Functions and graphs; limits; continuity; differentiation; applications of the derivative; integration; applications of the definite integral. *This course satisfies the required core-math reasoning for general education.*

MATH 231. Mathematics for the Elementary Teacher I.
(2-2-3); I, II.

Prerequisite: completion of a general education required core course in mathematics. Number systems, primes, and divisibility; fractions; decimals; real numbers; algebraic sentences. Successful completion of a basic skills exam in mathematics is required for credit in this course. Designed for preservice teachers P-9.

MATH 232. Mathematics for the Elementary Teacher II.
(2-2-3); I, II, III.

Prerequisite: MATH 231. Introduction to probability and statistics; geometric shapes; geometry of measurement; congruence and similarity. *This course satisfies the area studies-natural and mathematical sciences for general education.* Designed for preservice teachers P-9.

MATH 252. Boolean Algebra.
(3-0-3); on demand.

Prerequisite: MATH 152 or consent of instructor. Study of the basic laws and operations of Boolean algebra; simplification techniques, circuit design.

MATH 260. FORTRAN Programming.
(3-0-3); I.

Prerequisite: MATH 170 or consent of instructor. Introduction to FORTRAN programming language. Application of mathematical techniques to problems in programming. Business, engineering, management, and modeling examples are employed to provide

comprehensive knowledge of the language.

MATH 275. Calculus II.
(4-0-4); I, II.

Prerequisite: MATH 175. Differentiation and integration of exponential, logarithmic, and trigonometric functions; techniques of integration; numerical methods; improper integrals, infinite series; polar coordinates.

MATH 276. Calculus III.
(4-0-4); I, II.

Prerequisite: MATH 275. Polar coordinates; parametric equations; vectors; differential calculus of functions of several variables; multiple integration; vector calculus.

MATH 300. Introduction to Mathematical Proof.
(3-0-3); I, II, III.

Prerequisites: MATH 141 and 152, or 174. Propositional calculus; sets; relations; functions; Boolean algebras; cardinality, mathematical proofs.

MATH 301. Elementary Linear Algebra.
(3-0-3); II.

Prerequisite: MATH 175 or consent of instructor. Vector spaces; determinants; matrices; linear transformations; eigenvectors.

MATH 303. Data Structures.
(3-0-3); I, II.

Prerequisite: CIS 205. Key concepts of data definitions, such as lists, stacks, and queues. Recursion, graphs and trees, sorting and searching. Structured program design, elementary data structures and the study of algorithms as a tool of program design. Cross listed with CIS 303 and CS 303.

MATH 308. Discrete Mathematics.
(3-0-3); I.

Prerequisites: MATH 170, 275, and either CS 303 or MATH 300. An introduction to the concepts of sets and functions, mathematical logic, and proof; elementary counting principles; recurrence relations and recurrence models; algorithmic efficiency; the fundamentals of graph theory.

MATH 312. Numerical Methods.
(3-0-3); I.

Prerequisite: MATH 275. A basic course in numerical analysis, including error analysis, series approximation, numerical integration techniques, practical applications of matrices, solution of simultaneous nonlinear equations, and curve fitting.

MATH 330. Geometry for Teachers (P-9).
(2-2-3); I, II.

Prerequisite: MATH 232. Experimental and axiomatic geometry; points, lines, and planes; separations, curves and surfaces; congruence; measures; parallelism and similarity; coordinate geometry; transformations in a plane.

MATH 332. Introduction to Finite Mathematics.
(3-0-3); II.

Prerequisite: MATH 152. Linear programming, combinatorial analysis, probability, matrices, game theory, and graph theory. Designed for preservice teachers P-9.

MATH 350. Introduction to Higher Algebra.**(3-0-3); II.**

Prerequisite: MATH 300. Groups, rings, integral domains and related topics.

MATH 353. Statistics.*(3-0-3); I, II, III.**

Prerequisites: MATH 123 or MATH 131, or MATH 135, or MATH 141, or MATH 152, or MATH 174, or MATH 175. This course satisfies the area studies - natural and mathematical sciences for general education. The purpose of this course is to present key concepts from a non-calculus point of view in descriptive statistics, probability, discrete and continuous distributions, regression and correlation analysis and modeling, sampling distributions, confidence intervals and hypothesis tests for one and two population parameters, and one-way analysis of variance. Applications will be in a wide variety of fields. Technology integration will be restricted to the ones used in the scientific community. *This course satisfies the area studies-natural and mathematical sciences for general education.*

**A student may receive credit toward graduation in only one of the following: MATH 353 or 354.*

MATH 354. Business Statistics.*(3-0-3); I, II, III.**

Prerequisite: completion of a general education math reasoning core course. Introduction to statistics with applications to business. *This course satisfies the area studies-natural and mathematical sciences for general education.*

**A student may receive credit toward graduation in only one of the following: MATH 353 or 354.*

MATH 355. Operations Research.**(3-0-3); I.**

Prerequisites: MATH 170 and 175. Linear, integer and dynamic programming, game theory, and scheduling.

MATH 363. Differential Equations.**(3-0-3); II.**

Prerequisite: MATH 275. Special types of first order differential equations; linear differential equations; operator methods; Laplace transforms; series methods; applications.

MATH 365. Introduction to Mathematical Statistics.**(3-0-3); I.**

Prerequisite: MATH 275. A calculus-based introduction to probability and statistics.

MATH 370. College Geometry I.**(3-0-3); I.**

Prerequisite: MATH 300. Sets of axioms, finite geometries, convexity, Euclidean geometry of the polygon and circle, geometric constructions.

MATH 371. College Geometry II.**(3-0-3); II.**

Prerequisite: MATH 370. Geometric transformations, non-Euclidean geometry, projective geometry, geometric topology, geometry of inversion.

MATH 389. Honors Seminar.**(3-0-3); on demand.**

Prerequisites: membership in the MSU Honors Program, and completion of the MSU general education mathematics requirement which include one of 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 Pre-calculus, or MATH 175 Calculus I. The course is designed for the liberal arts major. Topics may include the problem solving strategies derived from studying games, number contemplation and computation, encryption systems, the mathematical concept of infinity, applications in geometry, contortions of space, chaos and fractals, statistical thinking, probability, and various modes of mathematical decision making.

MATH 391. Dynamics.**(3-0-3); I.**

Prerequisite: PHYS 221 or 231. A study of motion of bodies. Kinematics and dynamics of particles and rigid bodies; work and energy; impulse and momentum. Cross listed with PHYS 391.

MATH 402. Integrated Biology, Mathematics, and Physical Science Teaching Methods.**(2-2-3); I.**

Prerequisites: admission to TEP and completion of at least 17 hours in mathematics. *Corequisite:* MATH 403. Methods course for students who desire to become teachers of middle school science and secondary school biology, physical science, or mathematics. The course provides integrated and content specific clinical experiences designed to prepare students for student teaching their subsequent roles as classroom teachers. Cross listed with BIOL 402.

MATH 403. Integrated Biology, Mathematics, and Science Field Experiences in Teaching.**(1-4-3); I.**

Prerequisites: admission to TEP and completion of at least 17 hours in mathematics. *Corequisite:* MATH 402. Course provides structured field experiences for students who desire to become teachers of secondary school biology, mathematics, or physical science. This course provides guided field experiences to acclimate the student into the culture of teaching. Cross listed with BIOL 403 and SCI 403.

MATH 404. Topology.**(3-0-3); on demand.**

Prerequisite: MATH 300 and 350. Elementary set theory; topological spaces; metric spaces; compactness and connectedness; mappings of topological spaces and related topics. Cross listed with MATH 604.

MATH 410. Introduction to Real Analysis.**(3-0-3); II.**

Prerequisites: MATH 276 and 300. Algebraic and topological properties of the reals; limits and continuity; differentiation; infinite series; Riemann integration.

MATH 411 Functional Analysis.**(3-0-3); on demand.**

Prerequisites: MATH 301 and 412. Linear spaces; normed and branched spaces; Hilbert spaces; applications to sequence spaces; and Fourier series. Cross listed with MATH 611.

MATH 412. Real Variables.

(3-0-3); on demand.

Prerequisite: MATH 410. Topological properties of Euclidean space; theory of differentiation and integration; sequences and series of functions. Cross listed with MATH 612.

MATH 418. Probability.

(3-0-3); I.

Prerequisites: MATH 275 and 365. A course in mathematical probability and its applications to statistical analysis. Cross listed with MATH 618.

MATH 420. Mathematical Statistics.

(3-0-3); II.

Prerequisite: MATH 418. Hypothesis testing and estimation; bivariate and multivariate distributions; order statistics; test of fit; nonparametric comparison of locations; distribution theory.

MATH 440 Biostatistical Methods.

(3-1-4); on demand.

Prerequisite: MATH 353. The purpose of this course is to extend students' knowledge in statistical concepts as applied to the health sciences, medicine, and biology. Topics include confidence intervals and hypothesis testing; sample size and power considerations; analysis of variance and multiple comparisons; correlation and regression; multiple regression and statistical control of confounding; logistic regression; survival analysis; and fundamentals of clinical trials. Cross listed with MATH 640.

MATH 442. Mathematical Models in Biology for Teachers.

(3-0-3); I.

Prerequisite: MATH 300. Discrete models across a variety of biological subdisciplines. Topics include linear and nonlinear models of population; Markov models of molecular evolution; phylogenetic tree construction; and infectious disease models. Cross listed with MATH 642.

MATH 453. Concepts in the Design of Experiments.

(3-0-3); I.

Prerequisite: MATH 353, 354, or 365. Single factor experiments; factorial experiments; qualitative and quantitative factors; fixed, random and mixed models; nested experiments. Cross listed with MATH 653.

MATH 455. Linear Statistical Models.

(3-0-3); II.

Prerequisites: MATH 353, 354, or 365 or equivalent. Linear and quadratic regression models; least squares estimates; statistical inference; multicollinearity; residual analysis; selection of regression models; lack of fit.

MATH 456. Nonparametric Statistics.

(3-0-3); II.

Prerequisite: MATH 353, 354, or 365. A course in basic nonparametric methods with applications. Cross listed with MATH 656.

MATH 463. Partial Differential Equations.

(3-0-3); I. in odd years or on demand.

Prerequisite: MATH 363. An introductory course in partial differential equations. Topics include partial differential

equations of first and second order and applications.

MATH 473. Projective Geometry.

(3-0-3); on demand.

Prerequisite: MATH 370. A synthetic treatment of projective geometry; conics; axiomatic projective geometry; and some descendants of real projective geometry. Cross listed with MATH 673

MATH 481. Mathematics for Engineers and Scientists.

(3-0-3); I.

Prerequisites: MATH 276 and 363. Fourier series, ordinary and partial differential equations, special functions, and integral transforms. Cross listed with PHYS 481.

MATH 485. Vector Analysis.

(3-0-3); on demand.

Corequisite: MATH 276. Vector algebra; vector functions of a single variable; scalar and vector fields; line integrals; generalizations and applications. Cross listed with MATH 685.

MATH 486. Complex Variables.

(3-0-3); on demand.

Prerequisite: MATH 276. Algebra of complex variables; analytic functions, integrals; power series; residues and poles; conformal mappings. Cross listed with MATH 686.

MATH 495. Topics in the Mathematics Curriculum.

(1 to 6 hrs.); on demand.

Prerequisite: consent of instructor. New curricula developments in mathematics. Cross listed with MATH 695.

MATH 499C. Senior Capstone.

(3-0-3); I, II.

Prerequisite: junior or senior standing. Designed to give the student an introduction to research and literature in mathematics. *This course satisfies integrative component for general education.* Cross listed with CS 499C.

Military Science Courses

MS 101. Introduction to Military Science.

(2-0-2); I.

Make your first new peer group at college one committed to performing well and enjoying the experience. Increase self-confidence through team study and activities in basic drill, physical fitness, rappelling, leadership reaction course, first aid, making presentations and basic marksmanship. Learn fundamental concepts of leadership in a profession in both classroom and outdoor laboratory environments. Participation in a weekend exercise is optional, but highly encouraged.

MS 101A. Leadership Laboratory.

(0-2-1). I.

Corequisite: MS 101. Only open to (and required of) students in the associated military science course. Series with different roles for students at different levels in the program. Learn and practice basic skills, gain insight into advanced course in order to make an informed decision whether to apply for it. Build self-confidence and team building leadership skills that can be applied throughout life.

MS 102. Introduction to Leadership.**(2-0-2); II.**

Learn/apply principles of effective leading. Reinforce self-confidence through participation in physically and mentally challenging exercises with upper division ROTC students. Develop communication skills to improve individual performance and group interaction. Relate organizational ethical values to the effectiveness of a leader. Participation in weekend exercise is optional, but highly encouraged.

MS 102A. Leadership Laboratory.**(0-2-1); II.**

Corequisite: MS 102. Only open to (and required of) students in the associated military science course. Series with different roles for students at different levels in the program. Learn and practice basic skills. Gain insight into advanced course in order to make an informed decision whether to apply for it. Build self-confidence and team building leadership skills that can be applied throughout life.

MS 201. Self/Team Development.**(2-0-2); I.**

Learn/apply ethics-based leadership skills that develop individual abilities and contribute to the building of effective teams of people. Develop skills in oral presentations, writing concisely, planning of events, coordination of group efforts, advanced first aid, land navigation, and basic military tactics. Learn fundamentals of ROTC's Leadership Assessment Program. Participation in a weekend exercise is optional, but highly encouraged.

MS 201A. Leadership Laboratory.**(0-2-1); I.**

Corequisite: MS 201. Only open (and required of) students in the associated military science course. Series with different roles for students at different levels in the program. Learn and practice basic skills. Gain insight into advanced course in order to make an informed decision whether to apply for it. Build self-confidence and team building leadership skills that can be applied throughout life.

MS 202. Individual/Team Military Tactics.**(2-0-2); II.**

Introduction to individual and team 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); II.**

Corequisite: MS 202. Only open to (and required of) students in the associated military science course. Series with different roles for students at different levels in the program. Learn and practice basic skills. Gain insight into advanced course in order to make an informed decision whether to apply for it. Build self-confidence and team building leadership skills that can be applied throughout life.

MS 301. Leading Small Organizations I.**(2-0-2); I.**

Corequisite: MS 301A. Series of practical opportunities to lead small groups, receive personal assessment and encouragement, and lead again in situations of increasing complexity. Uses small unit tactics and opportunities to plan and conduct training for lower division students both to develop such skills and as vehicles for practicing leading. Two hours and a required leadership lab, MS 301A, plus required participation in three one-hour sessions for physical fitness. Participation in one weekend exercise is also required, and one or two more weekend exercises may be offered for optional participation.

MS 301A. Advanced Leadership Laboratory.**(0-2-1); I.**

Corequisite: MS 301. Open only to students in the associated military science course. Series with different roles for students at different levels in the program. Involves leadership responsibilities for the planning, coordination, execution, and evaluation of various training and activities with basic course students and for the ROTC program as a whole. Students develop, practice, and refine leadership skills by serving and being evaluated in a variety of responsible positions.

MS 302. Leading Small Organizations II.**(2-0-2); II.**

Corequisite: MS 302A. Continues methodology of MS 301. Analyze tasks; prepare written or oral guidance for team members to accomplish task. Delegate tasks and supervise. Plan for and adapt to the unexpected in organization under stress. Examine and apply lessons from leadership case studies. Examine importance of ethical decision making in setting a positive climate that enhances team performance. Two hours and required leadership lab, MS 302A, plus required participation in three one-hour sessions for physical fitness. Participation in one weekend exercise is also required, and one or two more weekend exercises may be offered for optional participation.

MS 302A. Advanced Leadership Laboratory.**(0-2-1); II.**

Corequisite: MS 302. Open only to students in the associated military science course. Series with different roles for students at different levels in the program. Involves leadership responsibilities for the planning, coordination, execution, and evaluation of various training and activities with basic course students and for the ROTC program as a whole. Students develop, practice, and refine leadership skills by serving and being evaluated in a variety of responsible positions.

MS 339. Cooperative Education in Military Leadership.**(0-0-4); III.**

Attendance at ROTC Advanced Summer Camp. (Six weeks in duration.)

MS 401. Leadership Challenges and Goal Setting.**(2-0-2); I.**

Corequisite: MS 401A. Plan, conduct, and evaluate activities of the ROTC cadet organization. Articulate goals, put plans into action to attain them. Assess organizational cohesion and develop strategies to improve it. Develop confidence in skills to lead people and manage resources. Learn/apply various Army policies

and programs in this effort. Two hours and a required leadership lab, MS 401A, plus required participation in three one-hour sessions for physical fitness. Participation in one weekend exercise is also required, and one or two more weekend exercises may be offered for optional participation.

**MS 401A. Advanced Leadership Laboratory.
(0-2-1); I.**

Corequisite: MS 401. Open only to students in the associated military science course. Series with different roles for students at different levels in the program. Involves leadership responsibilities for the planning, coordination, execution, and evaluation of various training and activities with basic course students and for the ROTC program as a whole. Students develop, practice, and refine leadership skills by serving and being evaluated in a variety of responsible positions.

**MS 402. Transition to Lieutenant.
(2-0-2); II.**

Corequisite: . Continues the methodology from MS 401. Identify and resolve ethical dilemmas. Refine counseling and motivating techniques. Examine aspects of tradition and law as related to leading as an officer in the United States Army. Prepare for the future as a successful Army lieutenant. Two hours and a required leadership lab, plus required participation in three one-hour sessions for physical fitness. Participation in one weekend exercise is also required, and one or two more weekend exercises may be offered for optional participation.

**MS 402A. Advanced Leadership Laboratory.
(0-2-1); II.**

Corequisite: MS 402. Open only to students in the associated military science course. Series with different roles for students at different levels in the program. Involves leadership responsibilities for the planning, coordination, execution, and evaluation of various training and activities with basic course students and for the ROTC program as a whole. Students develop, practice, and refine leadership skills by serving and being evaluated in a variety of responsible positions.

**MS 476. Military Science Workshop.
(3-0-3); I, II.**

Prerequisite: permission by the chair. Restricted to students enrolled/contracted in Army ROTC who have completed all 300 and 400-level Military Science courses. Students must have approval from the instructor prior to registration. The workshop format is an interactive learning experience designed to build and/or improve specific skills in military science. A maximum of six semester hours with different workshop topics may be earned under this course number.

MSU (University Studies) Courses

**MSU 099. Learning for Success.
(1-0-1); I, II.**

This course is required for students who are readmitted by the Academic Standards and Appeals Committee. This course is designed to assist students with positive learning experiences to enhance academic success.

**MSU 101. Discovering University Life.
(1-0-1); I, II.**

This course is designed to support new students in making the academic, personal, and social adjustments needed for a successful University experience. This is a University required freshman course.

**MSU 339. Cooperative Education.
(1-8 hrs); I, II, III.**

Prerequisite: upper division standing. A total of eight hours may be applied to the degree. Competency-based practical/work experiences designed to integrate theoretical aspects of education with practical aspects of work experience in an organized and supervised fashion. Student must have consent of instructor prior to registration.

**MSU 399. Selected Topics/Workshop.
(1-3 hrs); on demand.**

Prerequisite: upper division standing. Courses/workshops on various subjects frequently utilizing innovative, experimental or hands-on techniques to supplement regular curricular offerings. Credit toward the degree must be approved by student's advisor and department chair.

**MSU 400. The World of Work.
(2-0-1); I, II.**

Prerequisite: senior standing or consent of instructor. Development of skills in self-assessment, researching companies, locating job opportunities, writing job search documents, and conducting a personalized job campaign.

**MSU 476. Special Problems.
(1-3 hrs); I, II, III.**

Prerequisites: upper division standing and consent of advisor. Designed for the purpose of permitting a student to do advanced work/research as a continuation of an earlier experience or to work in an area of special interest. Self-directed independent study based on a written proposal and justification submitted prior to the beginning of the semester. Student must have approval from the instructor prior to registration. Each request considered separately.

**MSU 499C. Senior Seminar.
(3-0-3); I, II.**

Prerequisite: open only to seniors pursuing a Bachelor of University Studies degree. An integrative course designed to forge an interdisciplinary learning experience centered around a relevant contemporary issue and to culminate the undergraduate experience by preparing for post-college life. *This course satisfies the integrative component for general education.*

Music (Class Applied) Courses

**MUSG 123. Class Piano I.
(0-2-1); I, II.**

**MUSG 124. Class Piano II.
(0-2-1); I, II.**

Prerequisite: MUSG 123 Class Piano I.

**MUSG 126. Traditional English and American Dance.
(0-2-1); on demand.**

Technique and style of American and English country dances on the circle, square, and contra formation.

MUSG 135. Class Guitar I.
(0-2-1); I, II.

MUSG 136. Class Classical Guitar.
(0-2-1); I, II.

MUSG 137. Class Banjo.
(0-2-1); on demand.

MUSG 183. Studio Improvisation.
(0-2-1); I, II.

Jazz styles, improvisational theories and techniques, with emphasis on small group playing and supervised improvisation. May be repeated for credit.

MUSG 211. Class Woodwinds.
(0-2-1); I.

Not for woodwinds majors.

MUSG 212. Advanced Woodwinds Techniques.
(0-2-1); II.

Prerequisite: MUSG 211 or one or more of the following: MUSP 201, 202, 203, 204, 205. May be substituted for MUSG 211.

MUSG 213. Class Brasswinds.
(0-2-1); I.

Not for brasswinds majors.

MUSG 214. Advanced Brasswind Techniques.
(0-2-1); II.

Prerequisite: MUSG 213 or one or more of the following: MUSP 206, 207, 208, 209, 210. Performance techniques and teaching procedures for brasswind instruments. May be substituted for MUSG 213.

MUSG 215. Class Harp.
(0-2-1); on demand.

MUSG 217. Class Percussion.
(0-2-1); I, II.

MUSG 223. Class Piano III.
(0-2-1); I, II.

Prerequisite: MUSG 124 Class Piano II.

MUSG 224. Class Piano IV.
(0-2-1); I, II.

Prerequisite: MUSG 223 Class Piano III.

MUSG 226. Class Strings.
(0-2-1); I, II.

MUSG 235. Class Guitar II.
(0-2-1); I, II.

MUSG 239. Class Voice.
(0-2-1); I, II.

MUSG 240. Diction for Singers I.
(0-2-1); I.

An introduction to the International Phonetic Alphabet and the

study of phonetic rules and principles of pronunciation as applicable for singing in English, Italian, Latin, and Spanish.

MUSG 245. Jazz Keyboard I.
(0-2-1); I.

Prerequisite: MUSG 124 or consent of instructor. An introduction to jazz keyboard techniques with emphasis on ensemble playing.

MUSG 246. Jazz Keyboard II.
(0-2-1); II.

Prerequisite: MUSG 245. Continuation of MUSG 245.

MUSG 345. Jazz Keyboard III.
(0-2-1); I.

Prerequisite: MUSG 246. Jazz keyboard techniques with emphasis on solo playing.

MUSG 346. Jazz Keyboard IV.
(0-2-1); II.

Prerequisite: MUSG 345. Continuation of MUSG 345.

MUSG 379. Double Reed Making.
(0-2-1); on demand.

Concepts and skills of making double reeds, oboe through contrabassoon. May be repeated for credit.

MUSG 383. Studio Improvisation.
(0-2-1); I, II.

Prerequisite: four hours of credit in MUSG 183. May be repeated for credit.

MUSG 483. Studio Improvisation.
(0-2-1); I, II.

Prerequisite: four hours of credit in MUSG 383. May be repeated for credit.

Music (Conducting) Courses

MUSC 271. Basic Conducting.
(2-0-2); I.

Prerequisite: full admission to a music-major or music-minor program as determined by audition. Fundamentals of score reading and baton technique.

MUSC 471. Choral Conducting.
(2-0-2); II.

Prerequisite: MUSC 271. Baton technique, rehearsal procedures, choral diction, and style and interpretation of choral works.

MUSC 472. Instrumental Conducting.
(2-0-2); II.

Prerequisite: MUSC 271. Baton technique, rehearsal procedures, and style and interpretation of instrumental works.

MUSC 473. Rehearsal Techniques for Jazz Ensembles.
(2-0-2); on demand.

Prerequisite: MUSC 271. Special techniques needed in rehearsing jazz, pop, and rock ensembles.

Music (Education) Courses

MUSE 215. Microcomputers and Music. **(3-0-3); II.**

Students must be able to read music in all clefs. Applications of microcomputers in music. An introduction to the current usage, implementation, and software. *This course satisfies the computer competency requirement for general education.*

MUSE 222. Music for the Elementary Teacher. **(3-0-3); I, II.**

Music rudiments of music theory and methods for teaching music to elementary school children.

MUSE 230. Introduction to Music Education. **(1-0-1); I, II.**

Orientation to music teaching in the public schools.

MUSE 325. Materials and Methods for Elementary Grades. **(2-2-3); I.**

Prerequisite: MUSE 230. Materials and methods for the elementary school with emphasis on the teaching of musical concepts through developmental techniques.

MUSE 335. Field Experience. **(1-3 hrs); on demand.**

Two full days weekly of teaching under supervision in public schools in nearby communities.

MUSE 336. Field Experience. **(1-3 hrs); on demand.**

Continuation of MUSE 335.

MUSE 375. Vocal Materials and Methods. **(2-0-2); II.**

The teaching of general music in the junior and senior high schools with emphasis on choral activities.

MUSE 376. Instrumental Materials and Methods. **(2-0-2); II.**

Instructional procedures and materials used in instrumental teaching from the elementary grades through high school.

MUSE 377. Instrumental Repair and Maintenance. **(1-1-1); I.**

Demonstration and practice in simple repairs and maintenance of band and orchestral instruments.

MUSE 378. Keyboard Pedagogy. **(2-1-2); II.**

Survey and evaluation of materials and methods for teaching class and private piano.

MUSE 458. Percussion Pedagogy. **(2-0-2); on demand.**

A study of the development of percussion instruments, literature, and performing techniques.

MUSE 479. Marching Band Techniques. **(2-0-2); I, III.**

Techniques of preparing marching bands for performance.

MUSE 415. Voice Pedagogy. **(3-0-3); on demand.**

An introduction to the physiological, acoustical, and phonetic bases of singing and private voice instruction. Emphasis on the relationship between scientific fact and the practical application of principle through the use of imagery and phonetic choice.

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 335. Clarinet Choir. **(0-2-1); on demand.**

MUSM 336. Woodwind Ensemble. **(0-2-1); I, II.**

MUSM 361. Trumpet Choir. **(0-2-1); on demand.**

MUSM 362. Trombone Choir. **(0-2-1); on demand.**

MUSM 363. Tuba and Euphonium Ensemble. **(0-2-1); on demand.**

MUSM 367. Brass Choir. **(0-2-1); I, II.**

Open to brass players.

MUSM 368. Brasswind Ensemble. **(0-2-1); on demand.**

MUSM 369. Percussion Ensemble. **(0-2-1); I, II.**

MUSM 370. Concert Band. **(0-2-1); II.**

Open to all students.

MUSM 371. Symphony Band. **(0-2-1); II.**

Open to all students.

MUSM 372. Marching Band. **(0-5-1); I.**

Open to all students. Required for wind and percussion music education students. Upper division credit after earning two hours of credit.

MUSM 378. String Ensemble. **(0-2-1); on demand.**

MUSM 379. Orchestra. **(0-2-1); I, II.**

Open to all string students and to selected wind and percussion players on demand.

MUSM 381. Jazz Ensemble II. **(0-2-1); I, II.**

Open to all students.

MUSM 382. Jazz Vocal Ensemble.
(0-2-1); I, II.

Open to all students.

MUSM 383. Traditional Music Ensemble.
(0-2-1); on demand.

MUSM 384. Guitar Ensemble.
(0-2-1); I, II.

MUSM 389. Keyboard Ensemble.
(0-2-1); I, II.

Preparation and performance of piano ensemble literature.

MUSM 390. Vocal Ensemble.
(0-2-1); on demand.

MUSM 391. University Chorus.
(0-3-1); I, II.

Open to all University students interested in singing.

MUSM 392. Concert Choir.
(0-2-1); I, II.

Open to all students.

MUSM 393. Chamber Singers.
(0-3-1); I, II.

Selected group of 16 singers.

MUSM 394. OperaWorks.
(0-2-1); on demand.

An introduction to the techniques of musical theatre with emphasis on the integration of music and action-dramatic study of operatic roles.

MUSM 200, 400. Student Recital.
(0-1-0); I, II.

Music students and faculty present a recital each Thursday afternoon. Music students are required to take this course each semester.

MUSM 337. Jazz Combo.
(0-2-1); I, II.

Jazz combos provide the opportunity for musicians to perform in small groups. Students will also have the opportunity to arrange and compose for these combos. This course may be repeated.

MUSM 345. Keyboard Chamber Music.
(0-2-1); I, II.

An audition is required for the purpose of placing students in appropriate groups with appropriate repertoire. This course will expand the student's repertoire for chamber music with keyboard instruments by performing from a cross section of various musical styles and periods. This course may be repeated.

MUSM 380. Jazz Ensemble I.
(0-2-1); I, II.

Jazz ensemble provides the opportunity for musicians to perform and study the music of the large jazz ensemble. Jazz ensemble music incorporates many styles of jazz and commercial

performance. Students will also have the opportunity to arrange and compose for this ensemble. This course may be repeated.

MUSM 387. Accompanying.
(0-2-1); I, II.

Two hours of studio accompanying per week.

Music (History and Literature) Courses

MUSH 329. Church Music.
(2-0-2); on demand.

Brief history; techniques of hymn and anthem playing and/or directing; planning the worship service.

MUSH 361. History of Music I.
(3-0-3); I.

Prerequisite: MUSH 171 Global Perspectives in Music A survey of the history of music in Western Europe from its ancient Greek beginnings through the early 18th century. *This course satisfies the area studies-humanities for general education.*

MUSH 362. History of Music II.
(3-0-3); II.

Prerequisite: MUSH 361 History of Music I.

The history of music in Western Europe, Russia, and America from the 18th century to the present. *This course satisfies the area studies-humanities for general education.*

MUSH 364. African-American Music.
(3-0-3); on demand.

A survey of African-American music in the U.S. from 1600 to present.

MUSH 365. Jazz History and Literature.
(3-0-3); I.

A survey of jazz history from its beginning (ca. 1850) to the present.

MUSH 465. Music in America.
(3-0-3); II.

A survey of the history of American music from colonial times to the present.

MUSH 481. Keyboard Literature.
(3-0-3); I.

Survey of the keyboard music from the 16th century to present.

MUSH 490. School Band Literature.
(2-0-2); on demand.

Examination and criticism of music for training and concert use by groups at various levels of attainment.

MUSH 492. Solo Vocal Literature.
(2-0-2); I.

A survey of the historical musico-poetic development of the art song with a look at its growth in Germany, Austria, France, Italy, Great Britain, the United States, Scandinavia, Spain, and eastern Europe from 1600 to the present day.

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. Bachelor of Music Education degree seekers must also successfully complete MUSE 230.

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 106, 206, 306, 406 Private Horn

MUSP 107, 207, 307, 407 Private Trumpet

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 130, 230, 330, 430 Private Double Bass

MUSP 135, 235, 335, 435 Private Classical Guitar

MUSP 136, 236, 336 Private Guitar

MUSP 137, 237, 337, 437 Private Electric Bass

MUSP 138, 238, 338, 438 Private Banjo

MUSP 140, 240, 340, 440 Private 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); I, II.**

Prerequisite: approval of the music faculty. Study and preparation with the appropriate private applied instructor of all components of a 30-minute solo recital performance.

**MUSP 470. Composition Recital.
(1-0-2); I, II, III.**

Prerequisite: approval of the music faculty. Preparation and performance in recital of student's compositions.

**MUSP 499C. Senior Recital.
(3-0-3); I, II.**

Prerequisite: approval of the music faculty. A formal recital with an accompanying research paper and oral presentation covering the works and composers to be performed. *This course satisfies the integrative component for general education.*

Music (Theory and Composition) Courses

Music students should enroll in the appropriate music theory and music reading courses each semester until the completion of MUST 233 and MUST 237.

**MUST 103. Practical Theory for Traditional Music.
(1-2-2); I, II, III.**

An introduction to music theory as applicable to tradition-based musical styles such as Bluegrass, country music, blues, and gospel. Areas covered include chord construction, various scales,

harmony, transposition, etc.

MUST 104. Traditional Vocal Harmony.
(1-2-2); I, II, III.

Practical guidance in singing lead, tenor, baritone, and bass harmonies as they are performed in Bluegrass, country music, and gospel groups. Public performances are optional.

MUST 131. Music Theory I.
(2-2-3); I, II.

Corequisite: MUST 133. An introduction to the basic elements of music theory followed by the study of diatonic functional harmonic elements including cadence types, seventh chords, and root position part-writing in SATB style. Melodic and rhythmic concepts will also be emphasized, and representative aural skills, analysis projects, and keyboard exercises will be included.

MUST 132. Music Theory II.
(2-2-3); I, II.

Prerequisite: MUST 131. Corequisite: MUST 135. A continuation of MUST 131, with emphasis on 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); I, II.

Corequisite: MUST 131. An introduction to the concepts and applications of reading music, vocally and instrumentally. Movable-do based solmization will be utilized, as will basic conducting patterns. Emphasis will be on diatonic major and diatonic minor melodies in treble and bass clefs, and simple and compound meter rhythmic exercises generally adhering to the common stressed/unstressed pattern of beats within duple, triple, and quadruple meters.

MUST 135. Music Reading II.
(0-2-1);

Prerequisite: MUST 133. A continuation of MUST 133, with emphasis on increased chromaticism melodically in treble and bass clefs, and increased complexity in the area of meter and rhythm. Movable do-based solmization will be utilized, as will basic conducting patterns.

MUST 233. Music Reading III.
(0-2-1); I, II.

Prerequisite: MUST 135. Corequisite: MUST 236. A continuation of MUST 135, with emphasis on increased chromaticism melodically in treble, bass, alto, and tenor clefs. Rhythmic complexity will also increase through the study of irregular divisions in simple and compound meters. Movable do-based solmization will be utilized, as will basic conducting patterns.

MUST 234. Music Reading IV.
(0-2-1). I, II.

Prerequisite: MUST 233. Corequisite: MUST 237. A continuation of MUST 233, with emphasis on increased chromaticism melodically, including late Romantic and 20th-21st century chromaticism, modality, and atonality in treble, bass, alto, and tenor clefs using movable do-based solmization where applicable.

Rhythmic/metric complexity will also increase through the study of asymmetric meter, shifting meters, composite meter, and other late Romantic through present day rhythmic/metric techniques. Basic and asymmetric conducting patterns will be utilized.

MUST 236. Music Theory III.
(1-2-2); I, II.

Prerequisite: MUST 132. Corequisite: MUST 233. A continuation of MUST 132, with emphasis on secondary dominants, chromatic harmony, and modulatory techniques. Part-writing in SATB style will be included, as will the study of larger formal structures. Melodic and rhythmic concepts will also be emphasized, and representative aural skills, analysis projects, and keyboard exercises will be included.

MUST 237. Music Theory IV.
(1-2-2); I, II.

Prerequisite: MUST 236. Corequisite: MUST 234. A continuation of MUST 236, with emphasis on harmonic, melodic, rhythmic, and formal elements from late Romanticism through the present day. Representative aural skills, keyboard, and an analytical term paper will be included. Students will gain a sense of overview by recognizing style characteristics, genre, form, period and composer for a variety of compositions from the Medieval Period through the present day via visual and aural score shows.

MUST 263. Elementary Composition I.
(1-1-2); on demand.

Prerequisite: MUST 237 or consent of instructor. Study and practice of basic formal compositional principles.

MUST 264. Elementary Composition II.
(1-1-2); on demand.

Prerequisite: MUST 263. Continuation of MUST 263.

MUST 331. Counterpoint.
(2-0-2); on demand.

Prerequisite: MUST 237. Writing of 16th and 18th century strict and free counterpoint, canon, invention, fugue. Some 20th century techniques.

MUST 363. Intermediate Composition I.
(1-1-2); on demand.

Prerequisite: MUST 264. Study and writing of original creative work. One hour weekly in private study; one hour in composition seminar-colloquium.

MUST 364. Intermediate Composition II.
(1-1-2); on demand.

Prerequisite: MUST 363. A continuation of MUST 363.

MUST 430. Arranging.
(2-0-2); on demand.

Prerequisite: MUST 237 or equivalent. Scoring, arranging, transcribing of selected or original materials for voices and/or instruments.

MUST 432. Advanced Arranging.
(2-0-2); on demand.

Prerequisite: MUST 430. Continuation of MUST 430.

MUST 461. Advanced Composition I.
(1-1-2); on demand.

Prerequisite: MUST 364. Study, writing, and performance of students' original creative work. Private conferences and composition seminar in colloquium.

MUST 462. Advanced Composition II.
(1-1-2); on demand.

Prerequisite: MUST 462. Continuation of MUST 461.

MUST 433. Arranging for Jazz Ensembles I.
(2-0-2); on demand.

Techniques of arranging for large and small jazz ensembles.

MUST 434. Arranging for Jazz Ensembles II.
(2-0-2); on demand.

Prerequisite: MUST 433. Continuation of MUST 433.

MUST 465. Form and Analysis.
(2-0-2); on demand.

Prerequisites: MUST 233 and 237. A study of the elements of musical design through aural and score analysis.

MUST 476. Special Problems in Music.
(1 to 3 hrs.); I, II, III.

Prerequisite: consent of department chair. Independent study and research in an area of the student's choosing. Requires completion of paper or other tangible evidence of the results of the study.

Nursing (Associate) Courses

NURA 103. Nursing I.
(4-6-6); I, II.

Prerequisites: BIOL 234, BIOL 235, ENG 100, MATH 135 and official admission into the Associate Degree Nursing Program. Corequisites: Computer competence, ENG 200, MSU 101 and PSY154. Emphasis is on wellness, health promotion and health maintenance throughout the lifespan. 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 104. Nursing II.
(5-9-4); I, II.

Prerequisite: successful completion of the first semester of the Associate Degree Nursing Program. Corequisites: CMSP 108, NURA 105, PSY 156. A continuation of NURA 103-Nursing I. This course continues to focus on wellness, health promotions and health maintenance issues. Emphasis is on the use of the nursing process to address acute illness and surgical care of clients across the lifespan. Students develop theoretical and clinical competence while caring for patients who are acutely ill.

NURA 105. Maternal Newborn Nursing.
(5-9-4); I, II.

Prerequisites: successful completion of NURA 103 and NURA 104. Corequisites: CMSP 108 and PSY 156. An individual and human needs approach to the study of the childbearing process. This course continues to focus on wellness, health promotion and health maintenance issues. Emphasis is on the roles of the associate degree nurse for nursing care of women's health, childbearing patients, and newborns. Students develop

theoretical and clinical competence while caring for female patients and newborns.

NURA 110. LPN to ADN Transition Course.
(3-0-3); I, II.

Prerequisite: successful completion of an accredited Licensed Practical Nursing Program (LPN). Restriction: must hold an active Licensed Practical Nurse license in Kentucky and have planned admission into the Associate Degree Nursing program within two years. This course is designed to facilitate the role transition from a licensed practical nurse to an associate degree nurse. The emphasis is on roles of the associate degree nurse; also focuses 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 the course, "K" credit will be awarded for NURA 103 - Nursing I, NURA 104 - Nursing II, and NURA 105 - Maternal Newborn Nursing. No more than two years may lapse between completion of NURA 110 and admission into the Associate Degree Nursing Program.

NURA 111. Paramedic/ADN Transition Course.
(4-6-6); I, II.

Prerequisites: successful completion of a National Standard Curriculum Paramedic Course. equivalent of one year work experience as a paramedic, and BIOL 234, BIOL 235, ENG 100, ENG 200, MATH 135, CIS 101, MSU 101, PSY 154 with a minimum grade of "C". Corequisites: CMSP 108, PSY 156. Restriction: must hold an active paramedic national certification, with no restrictions. This course is designed to facilitate the role transition from a Nationally Certified Paramedic to an associate degree nurse. Emphasis is on roles of the associate degree nurse, and is focused on the application of the nursing process in basic, medical-surgical, and maternity nursing. Following admission into the Associate Degree Nursing Program and successful completion of NURA 111 with a grade of "C" or higher, "K" credit will be awarded for NURA 103: Nursing I, NURA 104: Nursing II and NURA 105: Maternal Newborn Nursing. No more than one year may lapse between completion of NURA 111 and admission into the Associate Degree Nursing Program.

NURA 202. Nursing III.
(5-9-4); I, II.

Prerequisite: successful completion of the first two semesters of the Associate Degree Nursing Program. Corequisites: BIOL 217, BIOL 217L, Humanities Elective. This is the first course in the second year of the ADN. 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 health of individuals across the lifespan. Students develop theoretical and clinical competency while caring for chronically ill patients.

NURA 205. Psychiatric Nursing.
(5-9-4); I, II.

Prerequisites: successful completion of the first two semesters of the Associate Degree Nursing Program, and NURA 202. Corequisite: BIOL 217, BIOL 217L, Humanities Elective. A study of psychiatric nursing for individuals at any stage of the life span. Emphasis is on the role of the associate degree nurse in psychiatric nursing practice. Students use the nursing process to apply psychiatric nursing theories while caring for individuals with alterations in mental health.

**NURA 206. Nursing IV
(5-9-8); I, II.**

Prerequisites: successful completion of the first three semesters of the ADN. Corequisite: NURA 207. Final semester of the ADN. This course builds on all prior coursework. Emphasis is on application of the nursing process to address care of complex and critically ill individuals across the lifespan. Students continue to develop theoretical and clinical competence while caring for patients with complex and critical illness.

**NURA 207. Integrated Practicum.
(1-9-4); I, II.**

Prerequisite: Successful completion of the first three semesters of the nursing program. Corequisite: NURA 206. This course integrates concepts and practice 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. Includes 120 hours of concentrated clinical experience providing direct patient care. This course meets the Kentucky Board of Nursing requirement for an integrated practicum (KAR 20:320). Students apply theoretical and clinical skills to address health care issues of patients in health care facilities or health care organizations.

Nursing (Bachelor's) Courses

**NURB 260. Wellness and Health Promotion.
(4-0-4); I.**

Restriction: Admission to the BNP Program, pre-licensure component. This course emphasizes wellness, health promotion and health maintenance strategies that can reduce morbidity and mortality, and promote healthy lifestyles of individuals and families from diverse cultures across the lifespan. Students are introduced to the application of professional nursing standards and use of the nursing process

**NURB 262. Foundational Skills for Professional Nursing,
(3-6-5); I.**

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); II.**

Prerequisite: NURB 262. This course emphasizes theories and concepts related to the childbearing and childrearing families from diverse cultures. Using the nursing process, students promote family health with a focus on health promotion and maintenance during pregnancy and in children from birth through adolescence.

**NURB 266. Community-Based Nursing Care.
(3-6-5); II.**

Prerequisite: NURB 262. This course emphasizes health promotion, disease prevention, national health objectives and the role of the nurse in providing community-oriented care for healthy individuals, families and groups from diverse cultures across the lifespan.

**NURB 320. Care of Older Adults.
(3-6-5); I.**

Prerequisite: NURB 266. In the provision of nursing care, emphasis is on health promotion and health maintenance strategies for the physical, developmental and psychosocial dimensions of the older adult from diverse cultures.

**NURB 322. Mental Health Nursing.
(2-6-4); I.**

Prerequisite: NURB 266. This course emphasizes theories and concepts related to the nursing care of individuals and families who have alterations in mental health. Using the nursing process, students participate in an interdisciplinary approach in the provision of nursing care to individuals and families. Emphasis is placed on interpersonal functioning and ethical issues that are relevant to mental health care.

**NURB 324. Acute Alterations in Adult Health I.
(4-6-6); II.**

Prerequisite: NURB 322. This course is the first in a two-part series of courses in acute alterations in adult health. The focus of this course is on providing nursing care with an interdisciplinary approach to individuals and families of diverse cultures, throughout the lifespan, who have common acute alterations in health. Focus is also placed on ethical issues that are prevalent in the acute care setting.

**NURB 326. Advanced Health Assessment
(1-3-2); I, II.**

Restriction: RN license or junior standing in the Baccalaureate 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); I, II.**

Restriction: Baccalaureate post licensure students — registered nurses. Emphasis of this course is on the socialization and role transition of the registered nurse to professional nursing. Essential content includes concepts and theories of health, professional nursing standards, culture, and community based care and the nursing process.

**NURB 361. Introduction to Nursing Research.
(3-0-3); II.**

Prerequisites: successful completion of the first five semesters of the BNP curriculum or admission to the RN (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); I.**

Prerequisite NURB 324. This course is a continuation of Acute Alterations in Adult Health I. This course focuses on an interdisciplinary approach to providing nursing care for

individuals and families of diverse cultures throughout the lifespan, who have complex acute alterations in health. Emphasis is placed on progressive measures that sustain life and the ethical issues that are prevalent in the acute care setting.

NURB 422. Chronic Alterations in Health.
(3-6-5); I.

Prerequisite: NURB 326. This course focuses on the provision of nursing care to persons across the lifespan who are experiencing a variety of chronic alterations in health/ terminal illnesses. Emphasis is placed on current and emerging issues in health care delivery.

NURB 424. Public Health.
(3-0-3); I, II.

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); II.

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.); I, II, III.

Prerequisites: admission to BNP and junior or senior standing. Opportunity for in-depth study in an area of special interest in nursing.

NURB 499C. Advanced Nursing Practicum.
(2-12-6); I, II.

Prerequisite: NURB 424. 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 lifespan, who have alterations in health. *This course satisfies the integrative component for general education.*

Nursing 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. Cross listed with IMS 100.

NURS 120. Dosage Calculation for Health Care Professionals.
(2-0-2); I, II.

Prerequisite: "C" or better on MATH 091 or minimum ACT Math

subscore of 18. Increase the ability of health care professional majors to safely and accurately calculate medication dosages.

NURS 202. Medical Terminology.
(2-0-2); I, II.

The study of vocabulary components and terms related to sciences and medicine. Previous knowledge of medicine or related discipline is not necessary. Cross listed with IMS 202.

NURS 300. Ethical and Legal Issues in Health Care.
(3-0-3); I, II.

This course is an overview of the ethical and legal issues in today's health care environment. Emphasis includes such areas of discussion as confidentiality, HIV/AIDS, artificial life support, euthanasia, abortion, genetic science. Allocation of resources and professional gatekeeping. Cross listed with IMS 300. *This course satisfies the area studies-social and behavioral sciences for general education.*

NURS 301. Selected Topics.
(1 to 3 hrs.); on demand.

Prerequisite: consent of instructor. Investigation of specific topics of interest related to nursing and/or allied health sciences. Cross listed with IMS 301.

NURS 302. Health Maintenance Throughout the Life Span.
(3-0-3); I, II.

This course is designed to increase one's awareness of the importance of health maintenance throughout the life span. Emphasis will be on the concepts of health maintenance through health promotion and illness prevention strategies for all stages of the life span. Cross listed with IMS 302. *This course satisfies the area studies-practical living for general education.*

NURS 303. Women's Health Care.
(3-0-3); I, II.

Prerequisites: CIS 101, CMSP 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. *This course satisfies the area studies-practical living for general education.* Crosslisted with IMS 303 and WST 474.

NURS 304. Men's Health Issues.
(3-0-3); I, II.

Prerequisites: CIS 101, CMSP 108, ENG 100, 200. This course is designed to increase one's awareness of the importance of men's health issues in all dimensions. Emphasis will be placed on health maintenance issues for men that include men's developmental issues throughout their life span, general guidelines for health care (including screening and interventions), sexuality facts, health needs and problems related to the reproductive system, selected health care issues, and psychosocial concerns. Cross listed with IMS 304.

NURS 321. Introduction to Multidisciplinary Health Services.

(3-0-3); I.

Prerequisites: admission to the University Studies — Health Service 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. Cross listed with IMS 321.

NURS 331. Issues and Trends in Health Care Delivery Systems.

(3-0-3); II.

Prerequisites: admission to the University Studies — Health Service 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.

NURS 345. Global Health.

(3-0-3); I, II.

Through this course, the student will develop a global awareness of societal aspects of health and disease through the critical examination of the sociopolitical constraints in health and health care of populations. The roles of community, national, and international health organizations will be examined. *Meets general education requirement in the area of practical living.* Cross listed with IMS 345 and IST 345.

NURS 349. Pharmacology.

(3-0-3); I, II.

Open to licensed nurses and students from health related disciplines. The introductory study of pharmacological agents used to promote, maintain, and restore health. Focuses on concepts of medication administration and the role and function of the professional nurse as related to pharmacological agents. Three hours of theory per week.

NURS 361. Leadership for the Health Care Professional.

(3-0-3); I, II.

This course provides students with a knowledge base and 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. Cross listed with IMS 361.

NURS 473. Health Care Management of Children.

(3-0-3); I, II.

Open to any interested student. Promotion of wellness of children and adolescents with emphasis on meeting the health care needs of children in the classroom and home. Discussion of basic first aid, common acute and chronic illness in children. Cross listed with IMS 473.

NURS 475. Human Sexuality: A Holistic Viewpoint.

(3-0-3); I, II.

Open to any interested student. A study of the biopsychosocial factors inherent with the sexuality of human beings and their influences on behavior. Cross listed with IMS 475.

Paralegal Studies Courses

PLS 210. Introduction to Paralegalism.

(3-0-3); II.

A study of law and the legal system, the responsibilities and ethics of the paralegal, and the major elements of the paralegal program.

PLS 226. Law for the Layperson.

(3-0-3); I, II.

A study of practical criminal and civil law which every citizen should know; designed to provide an understanding of a person's legal rights and responsibilities, a knowledge of everyday legal problems, and the ability to analyze, evaluate, and, in some instances, resolve simple legal disputes. This course may not be taken for Paralegal Studies credit. *This course satisfies the area studies-practical living for general education.*

PLS 321. Legal Research.

(3-0-3); I.

Prerequisite: GOVT 141. A study of primary and secondary legal authority, the proper form of citations and techniques for searching, validating and analyzing legal authority.

PLS 322. Legal Writing.

(3-0-3); II.

Prerequisites: GOVT 141, PLS 210, and 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 325. Civil Litigation for the Paralegal I.

(3-0-3); I.

Prerequisite: PLS 210, 321, 322, 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 326. Civil Litigation for the Paralegal II.

(3-0-3); II.

Prerequisite: PLS 210, 321, 322, 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 pretrial, trial, and appeal stages of civil litigation, with emphasis on drafting documents related to the pretrial, trial and appeal stages of civil litigation.

PLS 332. Property Law.

(3-0-3); II.

Prerequisite: PLS 210. A study of real and personal property with an emphasis on related forms, documents, and procedures, including title examination and real estate transfers.

PLS 333. Family Law.

(3-0-3); I.

Prerequisite: PLS 210 or equivalent or consent of instructor. The main emphasis is the study of domestic law including modern divorce (marriage dissolution), annulments, antenuptial agreements, child support and custody, alimony, property division, and related tax consequences. Also studied briefly are spouse and child

abuse remedies, the rights of women and children and the juvenile court.

PLS 334. Torts, Personal Injury Litigation, and Insurance Law.

(3-0-3); II.

A study of the law of torts with emphasis on forms, documents, and procedures related to personal injury litigation and insurance claims.

PLS 335. Contracts and the Uniform Commercial Code.

(3-0-3); I.

A practical course in simple contract law and its evolution into modern day sales law under the Uniform Commercial Code. Additionally, the course studies other aspects of the Uniform Commercial Code such as Secured Transactions, Creditor/Debtor remedies, and Negotiable Instruments.

PLS 336. Wills, Trusts, and Estates.

(3-0-3); II.

Prerequisite: PLS 210 or equivalent, or consent of instructor. A study of the law and practice of wills, trusts, and estate administration for the paralegal with particular emphasis on forms and documents.

PLS 337. Corporate Law.

(3-0-3); II.

The business corporation is the most versatile form of business association. This course studies the law of business corporations with an emphasis on related forms and documents.

PLS 340. Criminal Law and Procedure.

(3-0-3); II.

Prerequisite: PLS 210. A study of the law of crimes against persons and property, defenses to prosecution and punishment, and of criminal procedure and evidence, with an emphasis on the Kentucky Penal Code and related forms and documents.

PLS 360. Paralegal Specialty Course.

(3-0-3); on demand.

Prerequisite: PLS 210 and consent of instructor. A practice-oriented study of specialized areas of law not examined in the core curriculum which will emphasize the use of forms and documents. A different legal specialty will customarily be chosen each time the course is offered. May be repeated once for credit.

PLS 476. Special Problems in Paralegal Studies.

(1 to 3 hrs.); on demand.

Prerequisite: consent of department chair. Open only to Paralegal Studies majors. Original research project or readings in a particular subject area.

PLS 490. Paralegal Internship.

(3-0-3); I, II, III.

Prerequisite: consent of department chair. The development and application of paralegal skills through a practicum requiring the student to work 120 hours under the direct supervision of an attorney in a law office or other appropriate legal environment.

PLS 499C. Senior Paralegal Practice Seminar.

(3-0-3); I.

Prerequisites: CIS 101 or equivalent, PLS 326, and senior standing or

consent of department chair. An advanced course to be taken prior to the paralegal internship. The course is a study in the use of and implementation of technology in the law office emphasizing document generation techniques, docket control and case management systems, time and billing systems and Computer Assisted Legal Research (CALR). *This course satisfies the integrative component for general education.*

Personal Development Institute Courses

PDI 100. Personal Development.

(1-0-1); I, II.

This is a nine-week elective course structured in the institute format. The course covers such areas as: personality enhancement, attitude improvement, building self-esteem, visual poise, sharpening social skills, and improved interpersonal relationships.

Philosophy Courses

PHIL 200. Introduction to Philosophy.

(3-0-3); I, II, III.

An introduction to some of the central problems of philosophy, such as problems about free will, personal identity, knowledge, the nature of reality, right and wrong, and the meaning of life.

This course satisfies the area studies-humanities for general education.

PHIL 203. Social Ethics.

(3-0-3); I, II, III.

An introductory survey of moral theories and their application to such contemporary moral issues as abortion, euthanasia, capital punishment, affirmative action, poverty and hunger, sexual morality, marriage, lying, cheating, lifestyle and personality, business practices, and so on. *This course satisfies the area studies-humanities for general education.*

PHIL 300. Philosophy of Science.

(3-0-3); II.

An examination of basic issues in the philosophy of science, such as scientific progress and cumulativeness, the nature of scientific explanation, the nature of scientific evidence, scientific realism, the relation between theory and observation, and the relation between science and value.

PHIL 306. Introduction to Logic.

(3-0-3); I, II, III.

An introduction to the central questions in logic: What makes reasoning valid or invalid? How can we test reasoning in order to decide whether or not it is strong? What are the main kinds of reasoning and mistakes in reasoning? *This course satisfies the area studies-humanities for general education.*

PHIL 307. Philosophy of Religion.

(3-0-3); on demand.

Basic issues in philosophy of religion. For example: Are there good arguments for or against the existence of the God worshiped by traditional theists (Judaism, Christianity, Islam)? Why is there evil? What is the relationship between faith, revelation, and evidence? Do people survive death?

PHIL 308. Philosophy of the Arts.

(3-0-3); on demand.

Major theories of art, aesthetic experience, the structure of art, problems in aesthetics, and art criticism.

PHIL 312. Symbolic Logic.

(3-0-3); on demand.

An introduction to symbolic logic: How can we use symbols to represent claims and test arguments? What are the philosophical implications of contemporary developments in symbolic logic?

PHIL 313. American Philosophy.

(3-0-3); I.

Examination of the writings of leading representatives of American philosophy with special emphasis on the writings of the "classical" period.

PHIL 320. Eastern Philosophy.

(3-0-3); on demand.

An examination of the major philosophical theories of Hinduism, Buddhism, Confucianism, and Taoism. Cross listed with IST 321.

PHIL 321. The Meaning of Life.

(3-0-3); on demand.

An investigation of various aspects of the philosophical problem of the meaning of life.

PHIL 333. Environmental Ethics.

(3-0-3); I, II.

Prerequisite: at least sophomore standing. An introduction to environmental ethics. Consideration to ethical theories and values as they apply to the natural environment. Emphasis on ethical aspects of such practical issues as preserving wilderness areas and wetlands, species extinction, population dynamics, forestry and mining policies, waste disposal, recycling, animal rights and liberation, domestic uses of animals and pets, sustainable agriculture, pesticide and herbicide usage, the status of embryos, genetics, biotechnology, animals as food, animal experimentation, economics, and the impact of environmental policies on diverse cultures and developing nations. *This course satisfies the area studies-humanities for general education.*

PHIL 341. Philosophy and Death.

(3-0-3); on demand.

An exploration of the central philosophical questions concerning death: What is death? Is death good, bad, or neutral? Is death something to be feared? What happens after we die?

PHIL 351. Philosophy of Love and Sex.

(3-0-3); on demand.

An exploration of the central philosophical questions concerning love and sex, with reference to classical and contemporary sources: What is love? Why do we love people? Are there different kinds of love? What is sex? What makes sex bad or good, right or wrong? What is the relationship between sex and love, if any? Cross listed with WST 351.

PHIL 355 Ancient and Medieval Philosophy.

(3-0-3); I.

The history of Western philosophy from its ancient origins through the medieval period and the beginning of the Renaissance. *This course satisfies the area studies-humanities for*

general education.

PHIL 356. Modern and Contemporary Philosophy.

(3-0-3); II.

A history of Western philosophy from Renaissance to the present. *This course satisfies the area studies-humanities for general education.*

PHIL 361. Social and Political Philosophy.

(3-0-3); on demand.

An exploration of the central issues in social and political philosophy, such as the nature of justice, equality, freedom, political authority, and the relationship between politics, religion, and ethics.

PHIL 389. Honors Seminar in Philosophy.

(3-0-3); on demand.

Prerequisite: admission to Honors Program. Contemporary moral issues are examined, discussed, and evaluated. The topics may vary from semester to semester.

PHIL 399. Special Courses.

(1 to 3 hrs.); on demand.

Prerequisite: variable. These courses are usually specialized offerings in philosophy for the advanced undergraduate student. The purpose of these courses is to enhance the existing program in philosophy.

PHIL 403. Ethical Theory.

(3-0-3); on demand.

Prerequisite: at least one course in philosophy. 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); on demand.

An examination, interpretation, and evaluation of the ideas of leading representatives of 20th century philosophies.

PHIL 420. Metaphysics.

(3-0-3); on demand.

Prerequisite: at least one course in philosophy. An examination of the ultimate nature of reality, including (for example) the nature of time, space, and causation, the nature of identity and substance, the relation between particulars and universals, and the nature of mind and freedom.

PHIL 430. Epistemology.

(3-0-3); on demand.

Prerequisite: at least one course in philosophy. An introduction to the central issues in epistemology: What is knowledge? When are beliefs rational, warranted, or justified? Do we know anything? How?

PHIL 476. Special Problems.

(1 to 3 hrs.); on demand.

Prerequisite: permission of instructor. The student selects an approved topic in philosophy on which to do a directed study.

PHIL 499C. Senior Seminar in Philosophy.

(3-0-3); I.

Prerequisites: senior standing and either 15 hours in philosophy or consent of the philosophy faculty. Examination, in a seminar setting,

of issues and opportunities for philosophy majors. *This course satisfies the integrative component for general education.*

Physical Education Courses

PHED 100. Golf.

(0-2-1); I, II, III.

Emphasis on skill, knowledge, and techniques for individual participation.

PHED 101. Tennis.

(0-2-1); I, II, III.

Emphasis on skill, knowledge, tactics, and techniques for individual participation.

PHED 102. Badminton.

(0-2-1); I, II.

Emphasis on skill, knowledge, tactics, and techniques for individual participation.

PHED 103. Archery.

(0-2-1); I, III.

Emphasis on skill, knowledge, tactics, and techniques for individual participation.

PHED 104. Gymnastics.

(0-2-1); I.

Emphasis on self-testing activities.

PHED 105. Conditioning.

(0-2-1); I, II.

Emphasis on developing fitness through a variety of exercises and activities.

PHED 107. Bowling.

(0-2-1); I, II.

Basic movement skills involved in bowling.

PHED 108. Restricted Physical Education.

(0-2-1); I, II.

Students with either a structural or functional problem. May be repeated one time for credit.

PHED 109. Elementary Horsemanship.

(0-2-1); I, II.

Cross listed with AGR 109.

PHED 110. Martial Arts/Self-Defense.

(0-2-1); I, II.

Activity course in basic martial arts techniques and etiquette, plus self-defense concepts and strategies.

PHED 113. Soccer.

(0-2-1); II.

Techniques and participation in soccer.

PHED 117. Stunts and Tumbling.

(0-2-1); I, II.

Skills that promote strength, individual control and development, and group perfection.

PHED 118. Volleyball.

(0-2-1); I, II.

Rules, techniques, and participation in volleyball.

PHED 120. Basic Rhythms.

(0-2-1); I, II.

Skills and knowledge in fundamentals of dance.

PHED 121. Modern Dance.

(0-2-1); I.

Movement as means of self-expression.

PHED 122. Social Dance.

(0-2-1); I, II.

Steps and combination of popular dances.

PHED 123. Folk and Square Dancing.

(0-2-1); I, II.

Movements of American square dance.

PHED 125. Basketball Skills.

(0-2-1); I, II.

Skills of basketball.

PHED 126. Team Sports.

(0-2-1); II or on demand.

Emphasis on skill, knowledge and strategy through practice and participation in at least three team sports which may include basketball, soccer, softball, ultimate disc, volleyball, or other team sports. This is a credit/no credit course. This course does not meet requirements for physical education teaching.

PHED 127. Racquetball.

(0-2-1); I, II.

Emphasis on skill, knowledge, and strategy.

PHED 130. Beginning Swimming.

(0-2-1); I.

Learning to swim well enough to care for one's self under ordinary conditions.

PHED 131. Intermediate Swimming.

(0-2-1); I.

Perfection of standard strokes, diving.

PHED 132. Lifesaving.

(0-2-1); I, II, III.

Rescue methods in all types of water.

PHED 133. Instruction to Water Safety.

(0-2-1); II, III. on demand.

Prerequisite: current Senior Lifesaving Certificate. Teaching methods and techniques in lifesaving.

PHED 140. Aerobics.

(0-2-1); I, II.

Emphasis on knowledge, techniques, aerobic fitness and safety methods involved with individual participation in a variety of aerobic formats.

PHED 141. Weight Training.

(0-2-1); I, II.

Emphasis on knowledge, techniques, methods, and training program development for those interested in strength development.

PHED 142. Softball.**(0-2-1); I, II.**

Emphasis on skill and performance enhancement, as well as increasing basic knowledge and strategic background.

PHED 143. Backpacking and Orienteering.**(0-2-1); I, II, III.**

Designed to develop a working knowledge pertaining to the fundamentals of survival camping. Focus on the development of stamina and physical endurance. Nine-week class.

PHED 204. Officiating.**(2-0-2); I, II.**

Interpretation of rules for major sports. Methods and techniques of officiating; laboratory experience in officiating.

PHED 205. Lifetime Fitness (A Scientific Approach).**(2-2-3); I, II, III.**

Prerequisite: complete physical examination within last year. Designed to provide the student with scientifically-based knowledge concerning practical application of physical fitness training and evaluation procedures while participating in a fitness program.

PHED 211. Lifeguard Training.**(1-2-2); II, III, on demand.**

Prerequisite: PHED 132 or CPR card. Responsibilities of lifeguards, equipment, health and sanitation, and inspection of waterfront areas.

PHED 212. Games and Rhythms for Elementary Teachers.**(3-0-3); I.**

Designed to expose students to a broad range of elementary school rhythmic activities and games, as well as provide opportunities to teach these activities.

PHED 213. Methods of Teaching Individual Sports.**(0-2-1); I, II.**

This course is designed to prepare students to develop safe and appropriate learning activities, content delivery, and assessment skills as these pertain to at least three different 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); I, II.**

This course is designed to prepare students to develop safe and appropriate learning activities, content delivery, and assessment skills as these pertain to at least three different racket activities so they are prepared to include these activities in a school's physical education curriculum.

PHED 215. Methods of Teaching Team Sports.**(0-2-1); I, II.**

This course is designed to prepare students to develop safe and appropriate learning activities, content delivery, and assessment skills as these pertain to at least three different team sports or activities so they are prepared to include these activities in a school's physical education curriculum.

PHED 216. Methods of Teaching Lifetime Sports.**(0-2-1); I, II.**

This course is designed to prepare students to develop safe and appropriate learning activities, content delivery, and assessment skills as these pertain to at least three different lifetime sports or activities so they are prepared to include these activities in a school's physical education curriculum.

PHED 217. Methods of Teaching Gymnastics and the Martial Arts.**(0-2-1); I, II.**

This course is designed to prepare students to develop safe and appropriate learning activities, content delivery, and assessment skills as these pertain to stunts, tumbling, and one martial art form so they are prepared to include these activities in a school's physical education curriculum.

PHED 218. Methods of Teaching Dance.**(0-2-1); I, II.**

This course is designed to prepare students to develop safe and appropriate learning activities, content delivery, and assessment skills as these pertain to a variety of dance forms so they are prepared to include these activities in a school's physical education curriculum.

PHED 220. Athletic Training I.**(3-0-3); I.**

Prerequisites: BIOL 234 and HLTH 151. An introduction to athletic training, including basic injury prevention, management, and rehabilitation principles.

PHED 221. Therapeutic Modalities.**(1-2-2); I.**

Prerequisites: HLTH 151 and PHED 220. Study and use of therapeutic modalities for athletic injury, treatment, and rehabilitation.

PHED 301. Evaluation in Exercise Science.**(3-0-3); II.**

Methods, techniques, and procedures used in evaluation of students in physical education and recreation.

PHED 306. Functional Anatomy/Biomechanics.**(3-0-3); I, II.**

Study of structural and mechanical factors in human motion.

PHED 311. Movement Exploration.**(2-2-3); I, II, III.**

Child-centered program with the demonstration of methods whereby a child may learn to move experimentally, expressively, and efficiently.

PHED 315. Motor Development and Motor Learning.**(3-0-3); I.**

Understanding the principles of motor development and learning to use these when teaching students at various developmental stages, to promote optimal learning.

PHED 326. Exercise Program Leadership.**(2-2-3); II.**

Emphasis on leadership skills, motivational techniques, choreography, administrative functions dealing with equipment purchase, organization and use, and experiences in aerobic exercise and personal training formats.

PHED 330. Scientific Bases of Coaching.
(3-0-3); I.

Prerequisite: BIOL 234 or consent of department chair. A study of the physiological, biomechanical, and nutritional dimensions of the coaching of sports.

PHED 332. Principles of Strength and Conditioning.
(3-0-3); I.

A study of the physiological, biomechanical, and administrative aspects of designing and supervising strength and conditioning programs for various sports.

PHED 336. Foundations of Sport Psychology.
(3-0-3); I, III.

Prerequisite: PSY 154 or consent of department chair. Focus on theories and practices which when understood and used can enhance the coach-athlete relationship and improve sport performance.

PHED 340. Athletic Training II.
(3-0-3); II.

Prerequisites: BIOL 234 and PHED 220. Corequisites: PHED 221 and 341. An advanced course involving all aspects of the athletic training/sports medicine field.

PHED 341. Athletic Injury Assessment.
(1-2-2); II.

Prerequisites: PHED 220 and 340. Evaluation of athletic injuries.

PHED 350. Coaching of Sport.
(1-2-2); I, II, on demand.

May be repeated as separate sections. Students will demonstrate knowledge of sport and develop and implement sport specific experiences to improve their ability to coach effectively: a) baseball, b) basketball, c) cross country, track, and field, d) football, e) golf, f) soccer, g) softball, h) swimming, i) tennis, j) volleyball, or k) wrestling.

PHED 420. Administration of School Athletic Programs.
(3-0-3); I, II.

Administrative principles and procedures applicable to school athletic program.

PHED 423. Exercise Management: Special Populations.
(3-0-3), I.

Prerequisite: PHED 432. This course will provide the students with experience in exercise management for persons with chronic disease and/or disability and to understand the integrated model of care to coordinate exercise with other aspects of health care.

PHED 424. Introduction to Therapeutic Exercise
(3-0-3), II.

Prerequisite: PHED 306. Study and use of exercise and various techniques and modalities to rehabilitate and improve function in a variety of populations including athletes and those with orthopedic limitations.

PHED 430. The Psychosocial Dimensions of Sport and Physical Activity.
(3-0-3); II.

Prerequisites: PSY 154 and SOC 101. Understandings regarding the psychological and sociological factors influencing performance in physical activities.

PHED 432. Physiology of Exercise.
(3-0-3); I, II.

Study of response of the body to muscular activity; work and efficiency, cardiorespiratory adjustment, training, and fitness. Laboratory experiences are an integral part of course.

PHED 441. Exercise Testing and Prescription
(3-2-4); I.

Prerequisite: PHED 432 or BIO 234. Knowledge and skills in the area of fitness evaluation, exercise prescription and delivery of exercise programs to normal/special populations.

PHED 450. Planning and Managing Exercise Programs.
(3-0-3); II.

Emphasis upon knowledge, methods in planning, designing, managing and improving exercise programs. Provides a sound scientific basis and a practical foundation for students interested in the exercise field and for professionals in the fitness field.

PHED 453A. Corporate Practicum.
(0-9-3); I, II, III.

Prerequisites: completion of PHED 432 and PHED 450. This course will provide students with practical experiences in a corporate fitness/wellness and performance setting.

PHED 453B. Clinical Practicum.
(0-9-3); I, II, III.

Prerequisites: completion of PHED 432 and prerequisite or corequisite PHED 441. This course will provide students with practical experience in a clinical based setting that includes cardiac rehabilitation.

PHED 453C. Clinical Internship in Kinesiotherapy.
(0-9-3); I, II, III.

Prerequisite: completion of PHED 432 and prerequisite or corequisite PHED 424. Application of knowledge in kinesiotherapy in clinical settings, including experience in neurology, orthopedics, pediatrics, psychiatric and geriatric departments.

PHED 476. Special Problems in Physical Education.
(1 to 3 hrs.); I, II.

Prerequisite: senior standing and department chair or advisor permission. Designed to meet special needs of individual students. Intensive study of approval specific problems from an area of physical education.

PHED 475. Adapted Physical Education.
(2-2-3); I.

Characteristics of exceptional students with disabilities and means whereby these students can be aided by physical education. On-site adapted physical education clinic is an integral part of the course.

PHED 477. Coaching Internship.
(0-6-3); I, II, III.

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.); I, II, III.

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); I, II.

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.
(3-0-3); I, II.

Exercise Science. 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.

Physics Courses

PHYS 109. A History of the Universe.
(3-0-3); I, II.

A conceptual approach to the ideas of modern astrophysics and cosmology for nonscientists. The ideas of classical physics. Einstein's theory of relativity, quantum mechanics, fundamental particles and forces, matter and antimatter, modern cosmology, and the Big Bang will be explored. *This course satisfies the area studies-natural and mathematical sciences for general education.*

PHYS 110. Concepts in Astronomy.
(3-0-3); I, II.

An introduction to the study of astronomical phenomena: motions of the sky, planetary science, the sun as a star, solar astrophysics, stars and stellar evolution, and cosmology-the structure and evolution of the universe. *This course satisfies the area studies-natural and mathematical sciences for general education.*

PHYS 199. Selected Topics.
(1 to 6 hrs.); on demand.

PHYS 201. Elementary Physics I.
(3-0-3); I, II, III.

Prerequisite: one of the following: CHEM 111, MATH 141, 174, 175, "C" or better in MATH 152, or ACT Math subscore of 22 or above. Kinematics, laws of motion, work and energy, impulse and momentum. Gravitation, rotation and equilibrium. Elasticity, fluids and simple harmonic motion. Heat, heat transfer, thermodynamics, waves and sound. *This course satisfies the area studies-natural and mathematical sciences for general education.*

PHYS 201A. Elementary Physics I Laboratory.
(0-2-1); I, II, III.

Corequisite: PHYS 201. Laboratory for PHYS 201.

PHYS 202. Elementary Physics II.
(3-0-3); I, II, III.

Prerequisite: PHYS 201 or ITEC 141. Electricity and magnetism, light and optics, atomic and nuclear physics.

PHYS 202A. Elementary Physics II Laboratory.
(0-2-1); I, II, III.

Corequisite: PHYS 202. Laboratory for PHYS 202.

PHYS 211. Circuits.
(3-2-4); on demand.

Prerequisite: MATH 275. Corequisite: PHYS 232. Linear circuits consisting of passive and active circuit elements; sinusoidal-forcing functions and phasors; steady-state response.

PHYS 220. The Science of Music.
(3-0-3); I, II.

Prerequisite: MATH 123 or above, or ACT MATH subscore of 18 or higher, or consent of instructor. Not applicable credit toward a physics major or minor, or the area of concentration in physics. Properties of waves and sound; the hearing process; musical scales; production of music by wind, string, and electronic instruments; electronic recording, reproduction, and amplification; architectural acoustics. *This course satisfies the area studies-natural and mathematical sciences for general education.*

PHYS 221. Statics.
(3-0-3); II.

Prerequisites: MATH 275 and PHYS 231. Vector algebra, moments of force, equivalent force systems, equilibrium, trusses, frames, beams, friction, centroids, and moments of inertia.

PHYS 231. Engineering Physics I.
(4-0-4); I.

Corequisite: MATH 275. Introduction to physics for scientists and engineers. Motion, statics, kinetics, and dynamics of linear and rotational motion. Work, energy, and power. Gravitational fields, waves and fluids. Thermal properties of matter and heat transfer. *This course satisfies the area studies-natural and mathematical sciences for general education.*

PHYS 231A. Engineering Physics I Laboratory.
(0-2-1); I.

Corequisite: PHYS 231. Laboratory for PHYS 231.

PHYS 232. Engineering Physics II.
(4-0-4); II.

Prerequisite: PHYS 231. Electromagnetism, optics, atomic and nuclear physics.

PHYS 232A. Engineering Physics II Laboratory.
(0-2-1); II.

Corequisite: PHYS 232. Laboratory for PHYS 232.

PHYS 239. Cooperative Education.
(1 to 8 hrs.); I, II, III.

Prerequisite: consent of department chair. Participation in supervised work experience in a professional environment.

PHYS 299. Selected Topics.
(1 to 6 hrs.); on demand.

PHYS 324. Radio Astronomy.
(3-0-3).

Equates with ASTR 324 or SSE 324 Prerequisite: PHYS 110 or 201 or equivalent. 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.

PHYS 332. Electricity and Magnetism.
(4-0-4); II, alternate years.

Prerequisite: PHYS 232. Classical electricity and magnetism, Maxwell's equations, Lorentz force equation; electrodynamics, electrostatics, and magnetostatics; circuit theory, electromagnetic waves, and radiating systems.

PHYS 339. Cooperative Education.
(1 to 8 hrs.); I, II, III.

Prerequisite: consent of department chair. Participation in supervised work experience in a professional environment.

PHYS 340. Experimental Physics.
(1-4-3); II, alternate years.

Prerequisite: PHYS 232. Selected experiments from classical and modern physics. Computer analysis and simulation.

PHYS 350. Nuclear Science.
(3-2-4); II.

Prerequisite: PHYS 202. An interdisciplinary course in nuclear science and technology. Topics include nuclear and particle physics, radioactive decay processes, radiation interaction with matter, biological effects of radiation, human exposure to radiation, dose calculations, nuclear medicine, industrial and nuclear power applications, and radiation related science and society issues.

PHYS 353. Concepts of Modern Physics.
(4-0-4); I.

Prerequisite: PHYS 232. Special relativity, quantum mechanics, atomic and molecular structure, solid state and nuclear physics.

PHYS 361. Fundamentals of Electronics.
(2-2-3); I.

Prerequisite: PHYS 202/202A, 232/232A or ITEC 141. A survey of electronics: components, basic circuits, transducers, op-amps, digital circuits, microprocessors, and interfacing.

PHYS 381. Computer Solutions to Engineering and Science Problems.
(3-0-3); on demand.

Prerequisites: PHYS 232 and MATH 260. Applications of computer programming to problems in engineering and physics. Problems will be selected from statics, dynamics, mechanics of materials, thermodynamics, and electricity and magnetism, with an extended problem selected from the student's major area of interest.

PHYS 391. Dynamics.
(3-0-3); I, alternate years.

Prerequisite: PHYS 221 or 231. A study of motion of bodies. Kinematics and dynamics of particles and rigid bodies; work and

energy; impulse and momentum. Cross listed with MATH 391.

PHYS 399. Selected Topics.

(1-6 hrs.); on demand.

PHYS 410. Solid State Physics.
(3-0-3); on demand.

Prerequisite: PHYS 353. Lattice dynamics, electrons in metals, semiconductors, and dielectric and magnetic properties of solids.

PHYS 411. Thermodynamics.
(3-0-3); II.

Prerequisite: PHYS 231. First and second laws of thermodynamics, power and refrigeration cycles, statistical thermodynamics, relations among properties, and equations of state.

PHYS 412. Light and Physical Optics.
(3-0-3); on demand.

Prerequisite: PHYS 232. Dualistic nature of light; interference, refraction, reflection, diffraction, polarization, laser action, and spectra.

PHYS 431. Space Plasma Physics.
(3-0-3); on demand.

Prerequisite: PHYS 232. Corequisite: MATH 276 or 363. An introduction to plasma physics and its applications to space and astrophysical systems, with an emphasis on the Earth's environment in space. Topics will include the motion of charged particles in electromagnetic fields, the description of plasmas in the framework of one- and two-fluid approach, and its description in the framework of kinetic theory. Plasma equilibria, waves, and instabilities will also be discussed. *Cross listed with SSE 431.*

PHYS 439. Cooperative Education
(1 to 8 hrs.); I, II, III.

Prerequisite: consent of department chair. Participation in supervised work experience in a professional environment.

PHYS 452. Nuclear Physics.
(3-0-3); on demand.

Prerequisite: PHYS 232. Binding energies, nuclear forces, transmutation of nuclei, natural and artificial radioactivity.

PHYS 476. Special Problems.
(1 to 6 hrs.); I, II, III.

Prerequisite: consent of instructor. Topic to be approved prior to registration.

PHYS 481. Mathematics for Engineers and Scientists.
(3-0-3); on demand.

Prerequisite: MATH 276. Fourier series, ordinary and partial differential equations, special functions, and integral transforms. Cross listed with MATH 481.

PHYS 493. Quantum Mechanics.
(3-0-3); on demand.

Prerequisite: PHYS 353 or consent of instructor. The wave function; Hermitian operators and angular momentum; Schrodinger's equation, barriers, wells, harmonic oscillators, and the hydrogen atom.

PHYS 499. Selected Topics.
(1 to 6 hrs.); on demand.

Psychology Courses

PSY 154. Introduction to Psychology. **(3-0-3); I, II, III.**

Course includes the application of psychological theories and principles in such major areas of psychology, including abnormal, biological, clinical, cognitive, developmental, personality, learning, sensation and perception, and social; in addition to the understanding of methods used in psychological research. *This course satisfies the area studies-social and behavioral sciences for general education.*

PSY 156. Lifespan Developmental Psychology. **(3-0-3); I, II.**

Prerequisite: PSY 154. Covers developmental theories, principles, and characteristics of individuals across the major developmental periods: prenatal, infancy and childhood, adolescence, and adulthood. *This course satisfies the area studies-social and behavioral sciences for general education.*

PSY 157. Psychology of Adjustment. **(3-0-3); I, II.**

Prerequisite: PSY 154. Overview of processes and adaptation and personal adjustment in family, group, and work settings. Personality theories of Erikson, White, and others applied to process of developing for the individual a sense of competence and means of resolution of crises during life cycle.

PSY 199. Workshop. **(1 to 3 hrs.); on demand.**

Workshop for specifically designated task orientation in psychology. May be repeated in additional subject areas. Maximum of six semester hours may be earned under this course number.

PSY 276. Independent Study. **(1 to 3 hrs.); I, II, III.**

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); I.**

Prerequisites: PSY 154 and MATH 123 or higher. An introduction to psychological research methods including experimental design, data analysis and presentation, report writing and proposal development (APA style), and statistical software applications (SAS). Laboratory experiences are an integral part of this course.

PSY 282. Experimental Design and Analysis II. **(2-2-3); II.**

Prerequisite: PSY 281. Continuation of PSY 281 with special emphasis on the design and analysis of more complex experimental designs using inferential statistics and computer software applications, and original psychological experimentation by the student. Laboratory experiences are an integral part of this course.

PSY 339. Cooperative Education. **(1 to 8 hrs.); on demand.**

Restriction: consent required. Participation in supervised work

experience in a professional environment.

PSY 353. Industrial Psychology. **(3-0-3); on demand.**

Prerequisite: PSY 154. Applied experimental and engineering psychology. Surveys of basic engineering data with emphasis on experimental procedure, receptive and motor capacities, and their application to equipment design and other problems.

PSY 354. Introduction to Social Psychology. **(3-0-3); I, II.**

Prerequisite: PSY 154. Scientific study of individual's relationship with social environment. Emphasis on attitudes, personality, prejudice, discrimination, dominance, role theory, social learning, social and interpersonal perception, and social movement.

PSY 356. Cognitive Development of the Infant and Child.

(3-0-3); I.

Prerequisite: PSY 154. Extensive examination of the cognitive and social cognitive development of the infant and child. Both the major theories of cognitive developmental psychology and the developmental processes of perception, memory, problem solving and other cognitive skills will be examined.

PSY 358. Psychological Testing. **(3-0-3); on demand.**

Prerequisite: PSY 154. General introduction to psychological testing. Topics include interest inventories, measurement and evaluation of personality, measurement of proficiency, performance, attitudes, temperament, aptitude, capacity, and intelligence through use of group assessment instruments used in psychological research, guidance, education, social research, business, and industry.

PSY 359. Applied Behavior Analysis. **(2-2-3); on demand.**

Prerequisite: PSY 154. Operant learning principles that govern human behavior applied to modification of behavior in clinical setting. Course is designed to give experience in dealing with behavioral problems in classroom and clinical settings. Laboratory experiences are an integral part of course.

PSY 380. Cognitive Psychology **(3-0-3); II.**

Prerequisite: PSY 154. Scientific study of mental processes such as perception, attention, memory, language, and decision-making. Emphasis is on contemporary issues such as types of memory, the relationship between the brain and cognition, and computer models of information processing.

PSY 384. Sensation & Perception. **(2-2-3); I.**

Prerequisite: PSY 154. Examination of the role of perception as an information extraction process. Includes constancies, space perception, illusions, and influences of learning and experience on development of perception. Laboratory experiences are an integral part of this course.

PSY 389. Honors Seminar in Psychology. **(3-0-3); on demand.**

Prerequisites: HON 101 and HON 102. Study and discussion of current topics, issues, and problems in a particular area of the overall discipline. Topics will vary from semester to semester.

PSY 390. Psychology of Personality.

(3-0-3); I, II.

Prerequisite: PSY 154. Introduction to major approaches, methods, and findings in field of personality, including overview of basic theories, strategies, issues, and conclusions; attention to assessment and personality change.

PSY 399. Workshop.

(1 to 3 hrs.); on demand.

Prerequisite: PSY 154. Workshop for specifically designated task orientation in psychology. May be repeated in additional subject areas. Maximum of six semester hours may be earned under this course number.

PSY 421. Physiological Psychology.

(3-0-3); I, II.

Prerequisite: PSY 154. Physiological mechanisms of normal human and animal behavior. Anatomy and physiology relevant to student of sensory and motor functions, emotion, motivation, and learning.

PSY 422. Comparative Psychology.

(3-0-3); on demand.

Prerequisite: PSY 154. Theory and application of field and laboratory techniques used in understanding behavior of animals. Areas include: instinct, learning, motivation, sensory discrimination, heredity, and perception.

PSY 450. Abnormal Psychology.

(3-0-3); II, III.

Prerequisite: PSY 154. Psychology, behavior, and treatment of individuals with emotional, perceptual handicaps, and behavioral disorders; general methods used in therapy, and research in this area.

PSY 452. Disorders of Childhood.

(3-0-3); on demand.

Prerequisites: PSY 154 and 156 or EDF 211 or HS 253. Survey of childhood disorders, therapies, research, and practical issues involved in working with children, adolescents, and families in a clinical setting.

PSY 456. Introduction to Clinical Psychology.

(3-0-3); I, II.

Prerequisite: PSY 154. Survey of basic theoretical issues and research in areas of assessments and psychotherapy. Consideration of ethical, legal, and other professional problems in clinical psychology. Emphasis on clinical aspects of school psychologist's functions in working with school age children.

PSY 465. Drugs and Behavior.

(3-0-3); on demand.

Prerequisite: PSY 154. An introduction to the biological and psychological principles involved in the study of psychoactive drugs. Includes discussion of drug action, drug classification, and theories of chemical dependency.

PSY 469. Counseling Psychology.

(3-0-3); I.

Prerequisite: PSY 154. A survey and study of the major approaches and orientations to therapeutic intervention in mental health services. Will include coverage of supportive/crisis intervention, insight/relationship oriented therapies, and group and family therapies. Students will receive exposure to theoretical literature and practical application of the various interventions.

PSY 470. Research Problems.

(1 to 3 hrs.); I, II, III.

Restrictions: consent required. Independent research study of professional problem. Student to discuss with faculty mentor before consent can be granted. Conferences with instructor by arrangement.

PSY 471. Addiction Therapies.

(3-0-3); on demand.

Prerequisites: PSY 154, 421, and 465. An introduction to the treatment of psychoactive substance use disorders and psychoactive substance-induced organic mental disorders. Includes discussion of the phases, stages, and progression of these disorders, treatment options and methods/process, maintenance procedures, and treatment outcome research findings.

PSY 472. Practicum.

(3 to 6 hrs.); I, II, III.

Restrictions: consent required. Practical learning experiences in school, clinical, or organizational settings under qualified supervision by a licensed/certified psychologist. Minimum of 160 hours over a minimum of eight weeks required for each three hours of credit.

PSY 475 Selected Topics.

(2-2-3); I, II, III.

Restrictions: consent required. Student to discuss with faculty mentor before consent can be granted. Conferences with instructor by arrangement. Various methods courses in instrumentation and data reduction, innovation and research design, directed study of special problems in psychology, various application courses, and others. 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); II.

Prerequisites: PSY 156 and 282. Intensive examination of research in contemporary developmental psychology. Emphasis on reading and evaluating current journal articles and designing research projects.

PSY 486 Motivation.

(2-2-3); I.

Prerequisite: PSY 154. Consideration of basis of human and animal motivation in relation to other psychological processes.

PSY 489. Psychology of Learning.

(3-0-3); I, II.

Prerequisite: PSY 154. Fundamental principles of learning, including acquisition, retention, forgetting, problem solving, and symbol formation; experimental studies; application of principles to practical problems in habit formation, development of skills, remembering, and logical thinking.

PSY 499C. Systems and Theories.

(3-0-3); I, II.

Prerequisites: PSY 154, PSY 282, and senior standing. Intensive study of most influential historical systems of psychology including structuralism, functionalism, associationism, behaviorism, Gestalt psychology, and psychoanalysis, and a treatment of contemporary developments. *This course satisfies the integrative component for general education.*

Radiologic Sciences Courses

RSCI 110. Introduction to Radiologic Sciences.

(1-0-1); I, II.

This course is designated to introduce selected concepts and theories upon which the profession of radiologic sciences is based. This course is open to non-radiologic science majors and is a requirement for admission into the Radiologic Sciences Program. One hour of didactic experience per week.

RSCI 200. Patient Care.

(2-2-3); I.

Corequisites: RSCI 206 and 210. Restriction: admission to associate degree radiologic science program. 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); I.

Corequisites: RSCI 200 and 210. Restriction: admission to associate degree radiologic science program. A study of radiographic anatomy, positioning, and image evaluation. Emphasis is on the radiographer's role and function in the performance of such imaging procedures as chest, bony thorax, abdomen, upper and lower extremity, and selected contrast procedures. Four hours of didactic and two hours of laboratory experience per week.

RSCI 210. Radiographic Equipment and Imaging I.

(2-2-3); I.

Corequisites: RSCI 200 and 206. Restriction: admission to associate degree radiologic science program. 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); II.

Prerequisites: RSCI 200, 206, and 210. Corequisite: RSCI 330. Restriction: admission to associate degree radiologic science program. Clinical experience in an affiliated health care agency's radiology department, designated to introduce the student to the radiographer's role and function in the practice of radiography. The student will be applying concepts and skills learned in previous RSCI courses. Emphasis is on performance of imaging procedures such as chest, bony thorax, abdomen, upper and lower extremity, and selected contrast procedures. Forty hours per week in a health care agency's radiology department.

RSCI 300. Film Critique and Evaluation.

(2-0-2); I.

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); III.

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); I.

Prerequisite: RSCI 310. Corequisite: RSCI 300. Restriction: admission to associate degree radiologic science program. Clinical experience in an affiliated health care 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 health care agency's radiology department.

RSCI 330. Imaging Pathology.

(2-0-2); II.

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) II.

Prerequisites: RSCI 300 and 320. Corequisites: RSCI 340, 346 and 350. Restriction: admission to associate degree radiologic science program. A study of the effects of radiation on the cells, tissues, organs, and the entire human body at all stages of life span. The emphasis is on radiation protection procedures, and methods of monitoring radiation exposure. The role and function of the radiologic science technologist is discussed in regards to legal responsibility for radiation protection of the patients, other health care personnel, and the public. Two hours of didactic experience per week.

RSCI 340. Radiographic Equipment and Imaging II.

(2-2-3); II.

Prerequisites: RSCI 300 and 320. Corequisites: RSCI 335, 346 and 350. Restriction: admission to associate degree radiologic science program. An advanced study of radiographic film processing and image formation with an emphasis on the role and function of the

radiographer in such areas as quality assurance, fluoroscopic imaging, digital imaging and tomography. Two hours of didactic and two hours of laboratory experience per week.

**RSCI 346. Radiation Physics and Electronics.
(2-0-2); II.**

Prerequisites: RSCI 300 and 320. *Corequisites:* RSCI 335, 340 and 350. *Restriction:* admission to associate degree radiologic science program. The study of radiation physics and electronics with emphasis on concepts and principles as related to the role and function of the radiographer. Two hours of didactic experience per week.

**RSCI 350. Seminar in Radiography.
(2-0-2); II.**

Prerequisites: RSCI 300 and 320. *Corequisites:* RSCI 335, 340, and 346. *Restriction:* admission to associate degree radiologic science program. A course designed to assess the student's knowledge and application of the radiography practice. Based on assessment results, the faculty will facilitate review and learning experiences to assist the student in meeting identified learning needs. Two hours of didactic per week.

**RSCI 499C. Senior Seminar in Radiologic Sciences.
(3-0-3); II.**

Restriction: admission to the baccalaureate imaging sciences degree. Students interact as both participants and presenters in a seminar environment where diagnostic imaging, health policy issues, and legal and ethical issues of health care are explored. Emphasis is on assessment of radiologic sciences competencies, oral and written skills, and preparation for a career. *This course satisfies the general education integrative component.* Three hours of didactic experience per week.

Real Estate Courses

**REAL 105. Principles of Real Estate.
(3-0-3); I, II.**

A general introduction to real estate as a business and profession. Acquaints the student with a wide range of subjects necessary to the practice of real estate, including license law, ethics, listing and purchase agreements, brokerage, deeds, financing, appraisal, mortgages, and property management.

**REAL 200. Real and Personal Property Auctions.
(3-0-3); on demand.**

Prerequisite: REAL 105. Introduction to the current theory and practice of the marketing of real estate and personal property through the auction process. State laws, regulations, and ethical standards and practices which govern the profession will be covered in detail.

**REAL 303. Real Estate Market Analysis.
(3-0-3); on demand.**

Prerequisite: REAL 320. Designed to develop skills in analysis of real estate markets and to implement the results of this analysis in real estate sales and marketing management. Students should become proficient in the use of quantitative tools and interpretation of data output in real estate fields.

**REAL 309. Real Estate Land Planning and Development.
(3-0-3); on demand.**

Prerequisite: REAL 105. A comprehensive course on the specialized field of land planning and development, emphasizing the field of home construction. Neighborhood analysis, house design, mechanical systems, and blueprint reading are stressed. Provides important background for developers, appraisers, brokers, and property managers.

**REAL 310. Real Estate Law.
(3-0-3); I.**

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); I.**

Prerequisite: REAL 105. Designed to help real estate professionals with listing, prospecting, showing, negotiating, and closing. Furthermore, qualifying them, organizing, and promotional package design will be discussed. Marketing skill development is emphasized.

**REAL 330. Real Estate Property Management.
(3-0-3); on demand.**

Prerequisite: REAL 105. Introduction to basic organization, administrative operation, and management of residential and commercial projects of various sizes. The financial considerations, staffing, training, and evaluation of personnel, sales methods, and promotional techniques in property management.

**REAL 331. Real Estate Finance & Investment.
(3-0-3); II.**

Prerequisite: REAL 105. Introduction to the mechanisms of real estate finance, sources of funds, principles of mortgage risk analysis, governmental agency roles, and cash flows. Theories and practices of real estate investments.

**REAL 339. Cooperative Education III.
(1 to 8 hrs.); on demand.**

Work experience with an in-depth exposure representative of the student's academic level and experience analogous to a junior level status. Maximum of three hours of cooperative education credit (REAL 339/439) available for option credit.

**REAL 399. Selected Workshop Topics.
(1 to 4 hrs.); on demand.**

Workshops on various real estate topics will be presented periodically to supplement the basic course offerings in real estate. Credit toward degree programs must be approved by the student's advisor.

**REAL 400. Real Estate Brokerage.
(3-0-3); on demand.**

Prerequisite: REAL 105. An examination of the establishment and operation of a real estate broker's office; concentrating on the unique problems of staff recruitment and training, sales activities, marketing practices and policies, budget establishment, analysis and control, data handling, personnel policy, and professional ethics in such an agency.

REAL 439. Cooperative Education IV.**(1 to 8 hrs.); on demand.**

Work experience with an in-depth exposure representative of the student's academic level and experience analogous to a senior level course. Maximum of three hours of cooperative education credit (REAL 339/439) available for option credit.

REAL 476. Special Problems in Real Estate.**(1 to 3 hrs.); on demand.**

Prerequisites: senior standing and consent of department chair. Self-directed independent study on a specific problem, based on written proposal and justification submitted by student prior to registration. Each request will be considered on its own merit in relation to the special needs, interest, and abilities of the student.

Regional Analysis and Public Policy Courses

RAPP 201. Society, Nature, & Development.**(3-0-3); I, II.**

Prerequisite: BIOL 155 or MATH 152 or SOC 101 (Computer Enhanced), or equivalent. This course introduces the concepts, theories, and practices used to understand communities and regions. These concepts, theories, and practices are commonly used in government, the private sector, nonprofit organizations, and academia. Three major areas of community and regional analysis are encompassed by the course: society and culture, nature and the environment, and planning and development. Also incorporated is material on race, ethnicity, gender, and class. An interdisciplinary approach is emphasized to provide students in environmental sciences, agriculture, economics, management, law, medicine, sociology, social work, geography, and government with a foundation for understanding the social, political, and environmental contexts of situations in which they work. *This course satisfies area studies-social and behavioral sciences for general education.*

RAPP 202. Basic Computer Techniques in Regional Analysis.**(2-2-3); I, II.**

Prerequisite: SOC 101 (Computer Enhanced) or MATH 152 or MATH ACT of 20 or higher or consent of the instructor. This course fosters skill development in community and regional research through introducing computer-based research techniques that are widely used by practitioners. Research techniques and tools are introduced that address planning a study, library investigations, collecting, processing, and analyzing data, and disseminating 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. Cross listed with GEO 202. *This course satisfies required core and computer competence for general education.*

RAPP 300. Seminar in Regional Issues I.**(3-0-3); I.**

Prerequisite: RAPP 202. This multidisciplinary seminar teams faculty, students, resource people and citizens in discussion, research, analysis and action plans related to specific topics and

current issues in regional analysis and includes a practical focus on regional economic development and public policy. Selected topics include: housing, transportation, education, water quality, land use, air quality, wood, employment, health and health care, crime/violence, poverty and others.

RAPP 350. Practicing Regional Analysis I.**(2-12-3); on demand.**

Prerequisite: RAPP 300. Practical experience in agency, organization, or field setting related to the student's academic program. Students will work in settings over the full semester or summer and complete a research paper, organizational analysis, position or policy paper that integrates the intellectual world with the real world.

RAPP 376. Directed Research.**(3-0-3); I, II, III.**

Prerequisite: six hours of Regional Analysis and Public Policy courses or permission of the instructor. Focused research under the direction of an IRAPP faculty member.

RAPP 450. Practicing Regional Analysis II.**(2-12-3); on demand.**

Prerequisite: RAPP 350. Practical experience in agency, organization, or field setting related to students' academic program. Students will work in settings and conduct research or execute projects that will be further developed as part of the requirements in RAPP 490.

RAPP 490. Seminar in Regional Issues II.**(3-0-3); II.**

Prerequisites: RAPP 350 and senior standing. This seminar will focus on selected current issues in regional analysis and will include a practical focus on their effect on regional economic development and regional policy. Persons from this region (citizens, policymakers, and activists) will be invited to bring a firsthand view of these issues.

Religion Courses

NOTE: Credit in philosophy is not given for any of the courses in religion.

REL 221. World Religions I.**(3-0-3); on demand.**

Prerequisite: PHIL 200 is recommended. Origin, development, assumptions, values, beliefs, practices, great leaders, and principal events of Judaism, Christianity, Islam, and Zoroastrianism. Cross listed with IST 221.

REL 222. World Religions II.**(3-0-3); on demand.**

Prerequisite: PHIL 200 is recommended. Origin, development, assumptions, values, beliefs, practices, great leaders, and principal events of Hinduism, Buddhism, Confucianism, Taoism, Jainism, Sikhism, and Shintoism. Crosslisted with IST 222.

REL 321. Early and Medieval Christian Thought.**(3-0-3); on demand.**

Prerequisite: PHIL 200 is recommended. Ideas concerning the nature of God, Jesus, the church, man, sin, salvation, the good life, and other issues presented by Jesus, Paul, John, and the early and

medieval church fathers or leaders to the beginning of the Reformation.

REL 322. Modern Christian Thought (1500 to 1900). (3-0-3); on demand.

Prerequisites: REL 321 and/or PHIL 200 is recommended. Ideas concerning the nature of God, Jesus, the church, man, sin, salvation, the good life, and other issues presented to theologians and religious leaders from the beginning of the Reformation to the 20th century.

REL 323. Twentieth Century Christian Thought. (3-0-3); on demand.

Prerequisite: REL 322 or PHIL 200 or consent of instructor. Ideas concerning the nature of God, Jesus, the church, man, sin, salvation, the good life, and other ideas presented by major 20th century theologians such as Barth, Bultmann, Tillich, Niebuhr, Wieman, Hartshorne, A.T. Robertson, Karl Rahner, Karl Adam, Thomas Altizer, and Dietrich Bonhoeffer.

REL 476. Special Problems. (1 to 3 hrs.); on demand.

Prerequisite: 12 hours in religious studies or consent of department chair. The student selects an approved topic in religion on which to do a directed study.

Respiratory Care Courses

RCP 110. Cardiopulmonary Anatomy & Physiology. (3 hrs.).

The anatomy and physiology of the respiratory and the circulatory systems are explored in detail. Emphasis is placed on the interaction of systems in gas exchange and acid-base balance. The structure and function of the chest cage, mechanics of breathing and control of respiration are also included.

RCP 120. Theory and Principles of Respiratory Care. (4 hrs.).

Prerequisites: BIO 137 and MT 110, MT 145, MT 150, or equivalent with a grade of "C" or better. Principles and techniques of therapeutic procedures used in respiratory care are covered. Included are: the safe handling and administration of medical gases; use of humidity and aerosol therapy; providing lung inflation and bronchial hygiene therapy; and airway care. Presents indications, contraindications, and physiologic effect of each therapy with emphasis on safety and appropriateness of care.

RCP 125. Cardiopulmonary Evaluation. (4 hrs.).

Cardiopulmonary assessment is addressed. Topics include invasive and noninvasive blood gas analysis and interpretation, pulmonary function studies, basic laboratory data interpretation, electrocardiography, and assessment of neck and chest imaging.

RCP 130. Pharmacology. (3 hrs.).

A detailed study of the pharmacological agents used in the practice of respiratory care. Common agents of the various drug classifications used in the treatment of patients with cardiovascular or pulmonary impairment are covered. Calculations commonly used in preparing and administering

drugs are presented emphasizing the need for accuracy.

RCP 150. Clinical Practice I. (2 hrs.).

Students will observe and assist with chest physical assessment, medical gas administration, humidity and aerosol therapy and bronchial hygiene in the assigned setting.

RCP 175. Clinical Practice II. (2 hrs.).

Students will participate in the health care team while practicing techniques of respiratory care including airway management and bronchial hygiene in the assigned setting.

RCP 180. Ventilatory Support. (3 hrs.).

The technological and physiological aspects of mechanical ventilation including the theory of operation, classification, and management of the patient ventilatory system are offered.

RCP 190. Advanced Ventilatory Support. (2 hrs.).

Advanced concepts in ventilatory support including monitoring and management of the patient ventilator system are addressed.

RCP 200. Clinical Practice III. (3 hrs.).

Students will practice adult mechanical ventilation procedures and airway management in the critical care setting while continuing to perform other respiratory care skills.

RCP 204. Emergency & Special Procedures I. (3 hrs.).

Prerequisite: RCP 130 and BIO 139 with a "C" or better. Prepare students to participate in advanced emergency life support and special procedures.

RCP 210. Cardiopulmonary Pathophysiology. (2 hrs.).

The etiology, diagnosis, clinical manifestations and management of cardiopulmonary disorders as related to respiratory care are addressed.

RCP 212. Neonatal/Pediatric Respiratory Care. (3 hrs.).

Special needs of neonatal and pediatric patients are addressed. Fetal cardiopulmonary development and changes at birth are covered. Equipment, procedures and methods used in the care and evaluation of neonatal and pediatric patients are also covered. Cardiopulmonary conditions and diseases particular to neonates are discussed.

RCP 214. Advanced Diagnostic Procedures. (3 hrs.).

Prerequisite: BIO 139 with a grade of "C" or better. prepares students to assist physician in advanced diagnostic and therapeutic procedures.

RCP 225. Clinical Practice IV. (3 hrs.).

Students will observe and practice advanced cardiopulmonary evaluation techniques while improving efficiency in the ventilatory management of adult patients. Students may also

practice pediatric and neonatal mechanical ventilation techniques in the assigned setting.

RCP 228. Preventive & Long-Term Respiratory Care. (2 hr.).

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.

Russian Courses

RUS 101. Beginning Russian I. (3-0-3); on demand.

An introduction to Russian grammar beginning with the learning of the Cyrillic alphabet and progressing through a brief introduction of conjugation of verb forms and declension of adjectives and nouns.

RUS 102. Beginning Russian II. (3-0-3); on demand.

Prerequisite: RUS 101 or one year of high school Russian. A continuation of RUS 101. An analysis of Russian grammar with emphasis on writing and speaking.

RUS 201. Intermediate Russian I. (3-0-3); on demand.

Prerequisite: RUS 102. A continuation of Russian grammar with emphasis on vocabulary building and language structure. Russian lecture and elementary translation exercises are introduced in this course.

RUS 202. Intermediate Russian II. (3-0-3); on demand.

Prerequisite: RUS 201. A continuation of RUS 201 with additional emphasis on Russian literature, translation, conversation, and writing.

RUS 301. Readings in Russian Literature. (3-0-3); on demand.

Prerequisite: RUS 202. Directed study in Russian literature. The short story, poetry, prose, and essays. Review of Russian grammar as necessary. Oral practice.

RUS 302. Advanced Readings in Russian Literature. (3-0-3); on demand.

Prerequisite: RUS 301. Readings in Russian from Lermontov, Turgenev, Tolstoy, Gogol, Dostoyevski, and others. Assigned

readings on Russian culture and history. Review of Russian grammar as necessary.

Science Courses

SCI 103. Introduction to Physical Sciences. (3-0-3); I, II, III.

An interdisciplinary approach to the study of the physical sciences. Incorporates measurement, energy, states of matter, and the nature and process of science as they relate to the disciplines of physics, chemistry, astronomy, and the earth sciences. *This course satisfies the area studies-natural and mathematical sciences for general education.*

SCI 104. Modern Issues and Problems in the Physical Sciences. (3-0-3); I, II, III.

An interdisciplinary approach to study of the physical sciences. Emphasizes decision-making based on the interpretation of data and scientific arguments. Incorporates the study of scientific principles and concepts needed to understand current issues and problems related to modern science. *This course satisfies the area studies-natural and mathematical sciences for general education.*

SCI 109. Physical Science for the Elementary Teacher. (2-2-3); I, II.

An introduction to the study of physical science: measurement, force and motion, structure of matter, astronomy and earth science. Not acceptable for majors or minors in other physical sciences. *This course satisfies the area studies-natural and mathematical sciences for general education.*

SCI 110. Introduction to Scientific Computing. (3-0-3); II.

Prerequisite: ACT Math subscore of 18, 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, and electronic communication. *This course satisfies the computer competence requirement for general education.*

SCI 111. Inquiry Physical Science for Elementary Teachers. (1-4-3); I, II.

Preservice elementary teachers will learn the essential science concepts established by the Kentucky Core content for Science, which includes topics in areas of properties of matter, force and motion, heat, light and optics, electricity and magnetism, and sound. Students will learn these science concepts through a process of direct observation of physical phenomena, making sense of those observations through inference and reason and in collaboration with fellow students and instructors. Not acceptable for majors or minors in the physical sciences. This course satisfies the general education area studies - natural and mathematical sciences.

SCI 112. Inquiry Earth and Space Science for Elementary Teachers. (1-4-3); I, II.

Preservice elementary teachers will learn the essential science

concepts established by the Kentucky Core Content for Science, which includes topics in areas of geology (rocks, minerals, soils, volcanoes, earthquakes, structure of the earth, etc.), weather (sun as the source of energy, temperature, pressure, seasonal weather patterns and weather prediction, etc.), and astronomy (sun-earth-moon system, solar systems, stars, etc.). Students will learn these science concepts through a process of direct observation of physical phenomena, making sense of those observations through inference and reason and in collaboration with fellow students and instructors. Not acceptable for majors or minors in the Earth and space sciences. This course satisfies the required core computer competency for general education.

SCI 199. Selected Topics.
(1 to 6 hrs.); on demand.

SCI 299. Selected Topics.
(1 to 6 hrs.); on demand.

SCI 402. Integrated Biology, Mathematics, and Physical Science Teaching Methods.
(2-2-3); I.

Prerequisites: admission to TEP and completion of at least 20 hours in Physical Science. Corequisite: SCI 403. Methods course for students who desire to become teachers of middle school science and secondary school biology, physical science, or mathematics. The course provides integrated and content specific clinical experiences designed to prepare students for student teaching their subsequent roles as classroom teachers. Cross listed with BIOL 402 and MATH 402.

SCI 403. Integrated Biology, Mathematics, and Science Field Experiences in Teaching.
(1-4-3); I.

Prerequisites: admission to TEP and completion of at least 20 hours in Physical Science. Corequisite: SCI 402. Course provides structured field experiences for students who desire to become teachers of secondary school biology, mathematics, or physical science. This course provides guided field experiences to acclimate the student into the culture of teaching. Cross listed with BIOL 403 and MATH 403.

SCI 476. Special Problems.
(1 to 6 hrs.); I, II, III.

Prerequisite: consent of instructor. Topic to be approved prior to registration. Credit available in the sciences and mathematics.

SCI 490. Science for the Elementary Teacher.
(2-2-3); I, II.

Prerequisites: BIOL 110, SCI 111, SCI 112, Math 232. Corequisite: EDEE 321 and EDUC 482. Restriction: admission to TEP. This course focuses on the development of competencies in materials and methods for teaching science to elementary children. Emphasis is placed on writing curriculum, learning the elementary science theory base, questioning strategies, best practices, science process skills, cooperative learning, technology, and assessment. Fifteen hours field experiences are an integral part of this course.

SCI 491. Science for the Middle School Teacher.
(2-2-3); I, II.

Prerequisite: student should have completed the minimum general education in science and mathematics and be admitted to TEP. A study

of pedagogy, science content, and techniques applicable to the teaching of science to middle school or junior high children.

SCI 497C. Senior Seminar in Physical Science Education.
(2-0-2); I, II.

Prerequisites: senior standing and admission to the professional semester in education; to be taken during the last semester of on-campus work. Pre or corequisite: SCI 591 or 592. A final experience in which students will develop a set of classroom and laboratory activities that are usable as they stand in the secondary science classroom as well as learning about equipment, safety and disposal issues pertinent to teaching secondary science. This will facilitate the entry of the student into an actual teaching position. *This course, when combined with EDSE 499C, satisfies the integrative component for general education.*

SCI 498. Senior Thesis I.
(0-4-2); I.

Prerequisites: senior or junior standing and consent of instructor. 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 SCI 499C. *This course, combined with SCI 499C, satisfies the integrative component for general education.*

SCI 499C. Senior Thesis II.
(0-2-1); II.

Prerequisite: SCI 498. Completion of the directed research project begun in SCI 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, combined with SCI 498, satisfies the integrative component for general education.*

Social Work Courses

SWK 210. Orientation to Social Work.
(3-1-4); I, II, III.

Prerequisite: completion of 24 hours of general education requirements. This course provides an introduction to contemporary fields of social work practice in both primary and secondary settings. The principal focus of the course is familiarization of students to the breadth and scope of professional social work intervention into contemporary societal problems.

SWK 230. Social Welfare History and Ethics.
(3-0-3); I, II.

Prerequisite: SWK 210. The dominant values of American society that influence both social welfare policy and social work practice are explored through a study of the historical evolution of the institution of social welfare from the Colonial period to the present in this country. Equates with WST 230.

SWK 300. The Criminogenic Family.
(3-0-3); I, II.

The course focuses on family risk factors for later delinquency and

criminal behavior as well as preventative intervention and treatment. This course examines a variety of 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); I.

A comparative approach of family violence in the United States and Canada are the primary focus of this course but may also include other countries. Family violence is divided into four topics: Partner/Spousal Abuse, Violence Against Children and Youth by Family Members, Family Violence Against Older Adults, and Cultural Issues. Content covered within these areas include: historical overview, definitions, theoretical frameworks, prevalence, incidence, research, responses, and legislation. Equates with IST 302 and WST 303.

SWK 306. Juvenile Delinquency.

(3-0-3); I.

Prerequisites: CRIM 210 and three additional hours of criminology or consent of instructor. This course examines the extent, ecological distribution, and theories of delinquency in contemporary American society, including a critical examination of trends and methods of treatment of delinquency. Cross listed with CRIM 306 and SOC 306.

SWK 310. Field Experience in Social Work.

(1-2-3); I, II, III.

Prerequisites: junior or senior standing and major or minor in social work; SWK 210 and 333 or 360. This course includes observation and work experience in a social work agency under the supervision of a professional.

SWK 315. Child Welfare Services.

(3-0-3); I, II.

Students learn local, state, and national policies and programs designed to provide for the care, protection, and support of children.

SWK 320. Human Behavior in the Social Environment-Conception to Young Adulthood.

(3-0-3); I, II.

Prerequisites: BIOL 105, PSY 154, SOC 101, SWK 230. Corequisite: SWK 324. Students study the development of human behavior in the context of social systems. Primary emphasis is on an exploration of needs and tasks of individuals, groups, families, organizations, and communities during various life-stages of growth and development. Environmental concerns affecting women, minorities and other special populations are examined.

SWK 321. Human Behavior in the Social Environment-Middle Adulthood to Death

(3-0-3). I, II.

Prerequisites: BIOL 105 or 155, PSY 154, SOC 101, SWK 210, 230, 320, 324. Corequisite: SWK 451. Students study the development of human behavior in the context of social systems. Primary

emphasis is placed on an exploration of needs and tasks of individuals, groups, families, organizations, and communities during various life-stages of growth and development. Environmental concerns affecting women, minorities and other special populations are examined.

SWK 324. Social Work Research.

(3-0-3); I, II, III.

This course provides an examination into the premises and practices of social science research. When addressing quantitative and qualitative approaches, students explore the issues of research designs, data collection, and data analysis. In the end, students are able to determine ways in which empirical studies can enhance their subsequent careers in the field of human services.

SWK 325. Social Work Generalist Perspective.

(3-0-3); I, II.

Prerequisite: SWK 210. This course introduces students to knowledge, values and skills, for generalist social work practice. It prepares students to enhance the well-being of people and ameliorate environment conditions that affect them adversely. The focus is on the planned change or Generalist Intervention Model within a strengths perspective.

SWK 326. Generalist Practicum.

(1-2-3) I, II.

Pre-requisite SWK 325: Generalist Social Work Practice. Co-requisites: SWK 321 Human Behavior and SWK 451 Data Analysis. This course provides students with an opportunity to apply the knowledge, skills and values gained in SWK 325: Generalist Social Work Practice through a practicum experience (120 hours). Students will apply the Generalist Intervention Model in an agency setting. They also will learn more specifics about the different areas of social work practice. Students will continue to practice attending skills and ethical social work behavior in a social service agency.

SWK 330. Applied Medical Sociology.

(3-0-3); II.

Prerequisite: three hours social work general education. This course examines the social, cultural, and psychological factors which influence health behaviors; provides an overview of health care delivery systems and policies; and an analysis of the role of social workers and other health professionals. Equates with SOC 330.

SWK 333. Beginning Skills for Human Service Professionals.

(3-0-3); I, II, III.

This course provides students with knowledge and beginning helping skills that can be applied to assist individuals who are having social/emotional problems.

SWK 334. Sociology of Gender Violence: Prospectives on Women and Intimate Partner Violence.

(3-0-3); II.

Prerequisite: SOC 101, SOC 203 or WST 273. This course offers social science and experiential exposure to the controversies, theories, patterns, policies, and treatment unique to women's experiences with date, acquaintance, and spousal violence. Focus also is given to marginalized groups, including women of low income, women of color, and women in same-sex relationships. Equates with WST 333, SOC 333 and CRIM 333.

SWK 335. The Family.**(3-0-3); I.**

This course provides students with information about family interpersonal and social structural dynamics in the 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.

SWK 340. Community Mental Health.**(3-0-3); on demand.**

This course provides a microscopic perspective of the institutions and programs that have evolved in response to understanding a class of persons traditionally dependent upon medicine and social programs. Emphasis is placed upon review of the values, knowledge, and skills characteristic of the entry-level social worker in the community mental health agency. Cross listed with WST 340.

SWK 345. Law and Social Work.**(3-0-3); on demand.**

This course focuses on legal and legislative processes involving licensing and certification of the profession; rights of clients and special populations; access to legal and social services; testifying before judicial and legislative bodies; and other legal issues and concerns facing social work practitioners.

SWK 358. Child Abuse and Neglect.**(3-0-3); I.**

Prerequisite: formal program screen-in. This course is designed to provide a comprehensive introduction to child abuse and neglect from a social work perspective. Students learn the extent of the problem, effects on children, treatment issues, and social worker's role in a multidisciplinary team approach.

SWK 360. Crisis Intervention.**(3-0-3); I, II.**

This course provides an overview of strategies for addressing critical situations requiring immediate intervention. Subjects include threatened suicide, rape trauma, domestic violence, violent episodes of mental illness, and physical assaults.

SWK 370. Substance Abuse Counseling.**(3-0-3); on demand.**

Causes of alcoholism and other substance abuse are addressed as well as an overview of policy and practice issues for providing effective treatment of those afflicted. The course includes a comparison of existing treatment techniques and programs commonly used.

SWK 380. Social Work Practice in Health Care.**(3-0-3); I, II.**

This course examines the practice of social work in health care settings. The roles and tasks of social workers in hospital, long-term care, hospice, and home health care settings are discussed and analyzed. Special emphasis will be placed on rural issues that impact practice delivery in these settings.

SWK 381. Race, Class, Gender and Crime.**(3-0-3); I, II.**

This course focuses on the intersection of race, class and gender

membership with regard to treatment within criminal justice system by police, judges, juries and actual sentencing decisions including the death penalty. The course also provides insights about the unique types of crime most likely to be perpetrated by specific demographic groups. Students are also exposed to criminological theories that explain criminal justice system disparity, discrimination, and differences in actual offending patterns. Equates with CRIM 380 and WST 380.

SWK 399. Selected Topics.**(1 to 3 hrs.); on demand.**

Unique topics and learning experiences that supplement regular course offerings. May be repeated in additional subject areas.

SWK 400. Special Problems.**(1 to 3 hrs.); I, II, III.**

Prerequisite: consent of instructor and social work coordinator.

Students arrange with department to study a particular topic in the social work field.

SWK 416. Working with Offenders.**(3-0-3); II.**

Students learn the basic structure of the counseling process with offenders, including techniques and practice skills. Equates with CRIM 416.

SWK 420. Social Work Administration and Management.**(3-0-3); on demand.**

This course examines the history, nature, organizational structure, and philosophy of the administration of public programs of income maintenance and other welfare services, consideration of the role of voluntary agencies.

SWK 424. Social Work Micro Practice.**(3-0-3); I, II.**

Prerequisites: SWK 325, 451 and formal program screen-in.

Corequisites: SWK 426 and 430. In this course, students develop skills related to interviewing, data collection, assessment, goal development, interventive strategy formulation, contracting, interventive counseling, and monitoring/evaluation design as they relate to the application of the social work method to micro-level individual client systems.

SWK 426. Social Work Mezzo Skills.**(3-0-3); I, II.**

Prerequisites: SWK 325, 451, and formal program screen-in.

Corequisites: SWK 424 and 430. Students continue the development of skills associated with the application of the social work method to mezzo-level therapeutic groups, task-centered groups, marital and family client systems.

SWK 430. Social Policy and Planning.**(3-0-3); I, II.**

Prerequisites: GOVT 242, SWK 325, 451, and formal program screen-in. *Corequisites: SWK 424 and 426.* Students apply a framework of analysis to a variety of social welfare policies. This course provides an exposure to social-economical-political-legal issues affecting social welfare policy formulation, selection of delivery systems, and program funding.

SWK 435. Group Dynamics.**(3-0-3); I.**

This course is designed to give the student an understanding of group methods and the theories underlying the use of groups in the helping process. Special emphasis is given to the processes that affect the development and functioning of all types of groups.

SWK 441. Gerontology.**(3-0-3); II.**

This course offers an analysis of aging designed to provide the student with a knowledge of the social factors involved in the aging process as well as the effects of social, political, and economic conditions on the welfare of the elderly. Equates with SOC 441.

SWK 445. Death and Dying.**(3-0-3); I.**

Students analyze death and dying as social processes and problems; strategies for working with dying persons. Cross listed with SOC 445.

SWK 451. Social Science Data Analysis.**(3-0-3); I, II.**

Prerequisites: completion of all general education requirements, SWK 320, 324 and formal program screen-in. This course deals with the logic of data preparation and computer assisted analysis.

Appropriate methods of evaluating and applying standard social science data analysis techniques are discussed and experience in utilizing these methods is provided. In addition, the course covers the basic skills required to evaluate and write research reports. Cross listed with SOC 451.

SWK 458. Child Abuse and Neglect Practice Skills.**(3-0-3); II.**

Prerequisites: SWK 315, 358. This course is designed to teach social work practice skills specific to child abuse and domestic violence. Students will learn interviewing and assessment skills, case planning and decision making, guidelines for court involvement, as well as cultural considerations in child rearing practices and communication/gender issues.

SWK 497. Practicum in Social Work.**(0-8-8); I, II.**

Prerequisites: SWK 325 and 451, and formal program screen-in. Corequisites: SWK 498 and 499C. Students integrate theory and method to actual case situations assigned within a 400 hour professionally supervised field experience within a selected human service organization. *This course along with SWK 498 and 499C satisfies the integrative component for general education.*

SWK 498. Social Work Macro Practice.**(1-2-3); I, II.**

Prerequisites: SWK 424, 426, 430, and formal program screen-in. Corequisites: SWK 497 and 499C. Students continue learning the skills associated with the application of the social work method to macro-level organizational, neighborhood and community client systems. *This course, along with SWK 497 and 499C, satisfies the integrative component for general education.*

SWK 499C. Senior Seminar.**(1-0-1); I, II.**

Prerequisites: SWK 424, 426, 430 and formal program screen-in; capstone semester. Corequisites: SWK 497 and 498. This course prepares students 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, along with SWK 497 and 498, satisfies the integrative component for general education.*

Sociology Courses

SOC 101. General Sociology.**(3-0-3); I, II, III.**

This course explores the nature and dynamics of the human society. Basic concepts include: culture, groups, personality, social institutions, social processes, and major social forces. *This course satisfies the area studies-social and behavioral sciences for general education.*

SOC 203. Contemporary Social Problems.**(3-0-3); I, II, III.**

This course provides students with a systematic and objective interpretation of contemporary social problems such as crime, delinquency, poverty, race relations, and family problems, with emphasis on societal conditions under which deviance emerges and the alleviation of such deviant behavior. *This course satisfies the area studies-social and behavioral sciences for general education.*

SOC 210. The Sociology of Deviance.**(3-0-3); I.**

Prerequisite: SOC 101. This course is designed to introduce the student to the sociological perspective with respect to the definition, courses, and social consequences of deviance. Equates with CRIM 210.

SOC 273. Introduction to Women's Studies.**(3-0-3); I, II.**

Prerequisite: completion of the nine-hour general education requirement in English and literature. A survey course designed to develop students' awareness of women's literature, poetry, contributions to science, and history, as well as an introduction to feminist theory. Women scholars of all nations and races will be highlighted.

SOC 300. Social Stratification.**(3-0-3); I, II, III.**

Prerequisite: SOC 101. This course provides a foundation for understanding social inequality and the structured nature of privilege and disadvantages in society on the basis of class. Theoretical perspectives will review systematic stratification processes informed by class, race, and gender and their intersection. Equates with WST 397.

SOC 302. Population Dynamics.**(3-0-3); II.**

Prerequisite: three hours sociology general education. This course examines the U.S. population, social and economic characteristics, migration, mortality, and fertility trends, influence of social factors on population processes, basic techniques of population analysis, survey of population theories, data on international migration.

SOC 304. Social Change.**(3-0-3); on demand.**

Prerequisite: three hours sociology general education. This course examines change theories from early to contemporary scholars. Antecedents and effects of change; function, structure, and ramifications of change; normality of change in modernization; social evolution contrasted with social revolution.

SOC 305. Cultural Anthropology.**(3-0-3); I, II.**

Prerequisite: BIOL 105, 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. *This course satisfies the area studies-social and behavioral sciences for general education.* Equates with WST 305 and IST 305.

SOC 306. Juvenile Delinquency.**(3-0-3); I, II.**

Prerequisite: three hours sociology general education. This course examines the extent, ecological distribution, and theories of delinquency in contemporary American society, including a critical examination of trends and methods of treatment of delinquency. Equates with CRIM 306 and SWK 306.

SOC 312. Sociology of Sports.**(3-0-3); on demand.**

Prerequisite: three hours sociology general education. Students explore the role of sports and games in the shaping and maintaining of values in the American culture. An examination of sport as expressed in aggression displacement, human welfare, patriotism, religion, group cohesion, sex, competition, and leisure.

SOC 315. White Collar Crime.**(3-0-3); I.**

This course provides students with a variety of theoretical explanations and examples of corporate and organizational crime as well as crime committed by individuals in the workplace. Equates with CRIM 315.

SOC 316. Global Crime and Terrorism.**(3-0-3); I.**

Students are introduced to international crime and terrorism in the 19th, 20th and 21st centuries through study of government-organized Armenian Genocide, the Holocaust and the Nuremberg Tribunal, and the initiation of human rights laws following the end of World War II. Students are introduced to the study and structure of international terrorism that has emanated from the Neo-Salafi and Wahhabi ideology of Radical Muslims beginning in the 20th century after the state of Israel was formed. Other types of organized crime that are discussed will include the following: corruption, drug trafficking, weapons trafficking, and human trafficking. The new International Criminal Court is introduced to students as well as international civil cases involving human rights violations. Equates with CRIM 316.

SOC 317. Police Culture.**(3-0-3); I.**

This course provides detailed information to students about the paramilitary structure of the law enforcement agencies. Students learn about the history of policing, the code of silence, police

brutality, corruption, and the history of police commissions. Students gain an understanding of the bureaucratic, organizational and political pressures that exist within and outside these organizations. Students develop a better understanding of the Bill of Rights and how that affects police work as well as Supreme Court cases and decisions that have impacted law enforcement practices. This course is Equates with CRIM 317.

SOC 323. Urban Sociology.**(3-0-3); on demand.**

Prerequisite: three hours sociology general education. This course focuses on the rise of modern cities; theoretical explanations of urbanization; and the analysis of modern urban problems.

SOC 330. Applied Medical Sociology.**(3-0-3); II.**

Prerequisite: three hours sociology general education. This course examines the social, cultural, and psychological factors which influence health behaviors; an overview of health care delivery systems and policies; and an analysis of the role of social workers and other health professionals. Equates with SWK 330.

SOC 333. Sociology of Gender Violence: Prospectives on Women and Intimate Partner Violence.**(3-0-3); II.**

Prerequisite: SOC 101, SOC 203 or WST 273. This course offers social science and experiential exposure to the controversies, theories, patterns, policies, and treatment unique to women's experiences with date, acquaintance, and spousal violence. Focus also is given to marginalized groups, including women of low income, women of color, and women in same-sex relationships. Equates with WST 333, SWK 334, and CRIM 333.

SOC 335. The Family.**(3-0-3); I.**

This course provides students with information about family interpersonal and social structural dynamics in the multiculturally diverse U.S. society of the 21st century. The course increases students' awareness about the ways in which other social institutions such as the economy, religion, and education can either negatively or positively influence family structure and function. Equates with SWK 335 or WST 335.

SOC 350. The Human Experience of Sex and Gender.**(3-0-3); I, II.**

Prerequisite: three hours sociology general education. This course focuses on meanings attached to sex and gender, theoretical explanations of those meanings, the institutions which influence perceptions and behaviors, and the impact of social definitions and practices on individuals, male and female. Equates with WST 350.

SOC 354. The Individual and Society.**(3-0-3); I, II, III.**

This course explores the influence of group processes on individual behavior. Topics covered include personality formation and change; small group behavior and leadership patterns. *This course satisfies the area studies-social and behavioral sciences for general education.*

SOC 363. Cross-Cultural Perspectives on the Sex Industry.

(3-0-3); II.

Prerequisite SOC 350 or WST 273. This course will explore current theoretical debates and empirical studies on the global sex industry. Broad topics this course will cover include the feminist sex wars, stripping, pornography, prostitution and sexual trafficking. Equates with WST/CRIM 363.

SOC 370. Rural Sociology.

(3-0-3); I.

This course focuses on the cultural and social organizations of rural and urban societies with emphasis on the impact of economic changes and population movements.

SOC 374. American Minority Relations.

(3-0-3); I, III.

Prerequisite: three hours sociology general education. This course examines the various processes of social and cultural contact between peoples; theories dealing with the sources of prejudice and discrimination; basic processes of intergroup relations; the reactions of minorities to their disadvantaged status; and means by which prejudice and discrimination may be combated. Equates with WST 374.

SOC 376. Industrial Sociology.

(3-0-3); on demand.

Students explore moderns industrialization as social behavior. Social conditions in the rise of industrialism and effects on the worker; collective bargaining and industrial conflict; the industrial community, social classes, and the industrial order.

SOC 388. Sociology of Punishment.

(3-0-3); II.

Prerequisite: CRIM/SOC 210. This course provides the student with a background knowledge of the development of ideas and actions taken against those people who have been the objects of society's punishment. Equates with CRIM 388.

SOC 399. Selected Topics.

(1 to 3 hrs.); on demand.

Prerequisite: three hours sociology general education. Unique topics and learning experiences that supplement regular course offering. May be repeated in additional subject areas.

SOC 401. Criminology.

(3-0-3); on demand.

Prerequisite: CRIM/SOC 210 and three additional hours of CRIM. This course provides a thorough examination of criminological theories. Students are provided with explanations of the causes of crime, as well as the methods of effective treatment and prevention of crime. Equates with CRIM 401.

SOC 405. Sociological Theory.

(3-0-3); I, II, III.

Prerequisites: three hours sociology general education. This course provides an introduction to basic theoretical approaches to the study of society and a survey of contributions to the field by major theorists.

SOC 416. Family Dynamics.

(3-0-3); II.

This course provides an intensive analysis of the family in its social context. Emphasis is placed upon social interaction within the family, socio-economic and socio-cultural factors which bear influence upon it, and the relationship of the family to the total social system.

SOC 426. The Community.

(3-0-3); I.

This course examines the general character of community relations in society, the structure and function of the community as a social system, the processes of balancing community needs and resources, and planned and unplanned social change.

SOC 441. Gerontology.

(3-0-3); II.

This course offers an analysis of aging designed to provide the student with a knowledge of the social factors involved in the aging process as well as the effects of social, political, and economic conditions on the welfare of the elderly. Equates with SWK 441.

SOC 445. Death and Dying.

(3-0-3); I.

Students analyze death and dying as social processes and problems; strategies for working with dying persons. Equates with SWK 445.

SOC 439. Cooperative Education.

(1 to 8 hrs.); I, II, III.

Prerequisite: department chair approval is required. This course requires participation in supervised work experience in a professional environment.

SOC 450. Research Methodology.

(3-0-3); I, II, III.

Prerequisites: three hours sociology general education and six additional hours of CRIM/SOC or consent of instructor. This course focuses on the fundamental assumptions underlying sociological research; some practical experience in research design, data collection, techniques, and data analysis. Equates with CRIM 450.

SOC 451. Social Science Data Analysis.

(3-0-3); I, II.

Prerequisite: SOC 450 or consent of instructor. This course deals with the logic of data preparation and computer assisted analysis. Appropriate methods of evaluating and applying standard social science data analysis techniques are discussed and experience in utilizing these methods is provided. In addition, the course covers the basic skills required to evaluate and write research reports. Equates with SWK 451.

SOC 455. Qualitative Research for the Social Sciences.

(3-0-3); on demand.

Prerequisite: SOC 450. This course is designed to introduce students to the methods and issues of qualitative social science research. Topics cover include the theory-method link, qualitative research design, qualitative techniques of field research (observation, in-depth interviewing, and document study), case studies and content analysis, and ethical issues.

SOC 459. Appalachian Culture.

(3-0-3); I, II.

In this course, student study the Appalachian culture in juxtaposition to concept of cultural dynamics. Analysis of the relationship between culture, society and personality in Appalachia.

SOC 460. Senior Seminar.
(3-0-3); II.

This course is required for all sociology majors (not required for those majoring in sociology with an emphasis in criminology).

SOC 461. Sociology of the Law.
(3-0-3); on demand.

This course provides a clear understanding of the manner in which laws are formed to protect certain groups and marginalize others who are often perceived as threatening. Deconstruct specific laws by analyzing the formation of criminal law from its incipient stages of development in American society. Equates with CRIM 461.

SOC 465. Environmental Sociology.
(3-0-3); II.

This course introduces students 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 CRIM 465.

SOC 476. Special Problems.
(1 to 3 hrs.); I, II, III.

Prerequisites: three hours sociology general education and nine additional hours of CRIM/SOC or consent of instructor. Students arrange with the department to study some particular aspect of the field of sociology.

SOC 499C. Senior Seminar.
(3-0-3); I.

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.*

Space Science and Engineering Courses

SSE 110. Introduction to Spaceflight.
(3-0-3); I.

Prerequisite: "C" or better in MATH 093 or minimum ACT math subscore of 20. History of spaceflight, rocket propulsion, rocket subsystems (engines, cryogenics, hypergolics, alternative propulsion, TVC, power, RCS, staging, telecommunications), ground operations, launch operations, and orbital mechanics will be investigated.

SSE 120. Introduction to Satellites and Space Systems.
(3-0-3); II.

Prerequisite: "C" or better in MATH 093 or minimum ACT Math subscore of 20. Introduction to satellites and space systems including satellite subsystems (telecommunications systems, power systems, embedded systems, propulsion systems, and payloads), orbital mechanics, the space environment, satellite applications, spacecraft design considerations, and future technologies of spacecraft and satellites

SSE 324. Radio Astronomy.
(3-0-3); on demand.

Equates with ASTR 324 or PHYS 324. Prerequisite: PHYS 110 or 201 or equivalent. 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.

SSE 341. Solid-State Electronic Devices.
(3-0-3); II.

Equates with ITEC 341. Prerequisites: ITEC 141 and PHYS 232. This course introduces the fundamental concepts and operational principles of semiconductor devices. The content will include semiconductor crystal, carriers in semiconductors, energy band, Fermi-Dirac distribution, PN junction, metal-semiconductor junction, MOS structure, CMOS, field-effect transistors, bipolar junction transistors, and high speed transistors.

SSE 380. Materials Science for Space Applications.
(3-0-3); II.

Prerequisites: MATH 175 and PHYS 231. Materials fundamentals of atoms and molecules, atomic bonding, crystal structures and defects, atomic diffusion, thermal behavior, radiative and thermal degradation, solidification and phase diagrams are introduced. Various types of materials and coatings that function properly in the extreme conditions of the space environment, such as ionizing radiation, corrosion, erosion and extreme temperatures are studied. Materials studied include iron, aluminum, titanium, nickel and refractory alloys, polymers, ceramics and composites. The coatings cover radiation-, corrosion-, erosion-resistant and thermal coatings.

SSE 399. Selected Topics
(1 to 4 hours); on demand.

In-depth guided study of topics that either go beyond regular course work or that are not regularly offered in the curriculum. *Prerequisites: vary, depending on topic.*

SSE 431. Space Plasma Physics.
(3-0-3); on demand.

Equates with PHYS 431. 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.

SSE 442. RF/Microwave Systems and Antennas,
(2-2-3); I.

Prerequisites: ITEC 242 & ITEC 344. RF/Microwave systems and antennas design, analysis, fabrication, test and characterization. Transmission lines in general, introduction to waveguides, planar transmission lines, concept of impedance matching for optimum power transfer, measurement methods for transmission lines, introduction of S-parameters. Antennas in general, printed antennas, reflector antennas, fabrication techniques for printed antennas, impedance and radiation measurements for antennas. Microwave components used in systems such as filters, isolators,

directional couplers and power splitters will also be covered.

**SSE 476. Directed Research
(1 to 6 hours); I, II, III.**

Prerequisite: petition required. Participation in a research project under faculty guidance.

Spanish Courses

**SPA 101. Spanish Language and Culture I.
(3-0-3); I, II.**

Study of listening, speaking, reading, and writing basic Spanish with emphasis on the appreciation of the culture of Spain and other Hispanic cultures. *This course satisfies the area studies-humanities for general education.*

**SPA 102. Spanish Language and Culture II.
(3-0-3); I, II.**

Prerequisite: SPA 101. Continued study of listening, speaking, reading, and writing basic Spanish with emphasis on the appreciation of the culture of Latin America and other Hispanic cultures. *This course satisfies the area studies-humanities for general education.*

**SPA 201. Intermediate Spanish I.
(3-0-3); I, II.**

Prerequisite: SPA 102. Reading of moderately difficult Spanish texts; thorough review of minimum essentials of Spanish grammar; conversational practice.

**SPA 202. Intermediate Spanish II.
(3-0-3); II.**

Prerequisite: SPA 201. A continuation of SPA 201. Reading of more difficult texts.

**SPA 208. Spanish Phonetics and Pronunciation.
(3-0-3); I or II.**

Prerequisite: SPA 101 or 102. A contrastive study of the phonetic systems of English and Spanish, with emphasis on corrective exercises in Spanish pronunciation. Includes practice with tapes and transcriptions from the international phonetics alphabet.

**SPA 210. Spanish for Business Communication I.
(3-0-3); I, II.**

Prerequisite: SPA 102. Introduction to the world of Hispanic business and commerce and to cultural aspects of problems related to the conduct of international business. Emphasis on business terminology and vocabulary, business etiquette, and bilingual business concepts.

**SPA 211. Spanish for Business Communication II.
(3-0-3); I, II.**

Prerequisite: SPA 210. Emphasis on translation of business documents, and oral practice with business communication and interviews. Discussion of business news, advertisements, etc., and study of business documents. Appropriate practice in each area through writing and revising letters, documents and exercises.

**SPA 300. Grammar and Composition.
(3-0-3); I.**

Prerequisite: SPA 202. Review of difficult concepts of Spanish grammar. Study and analysis of writing styles. Emphasis on

written composition.

**SPA 301. Survey of Peninsular Spanish Literature
from 1700.
(3-0-3); on demand.**

Prerequisite: SPA 202. A survey of Spanish peninsular literature from 1700 to the present with readings from the most significant works in each literary period. Lectures, oral discussions, reports.

**SPA 302. Survey of Spanish American Literature from
Colonial Times to 1880.
(3-0-3); on demand.**

Prerequisite: SPA 202. A survey of Spanish American literature from colonial times to 1880 with readings from the most significant works in each literary period. Lectures, oral discussions, reports.

**SPA 304. Spanish Culture and Civilization.
(3-0-3); on demand.**

Prerequisite: SPA 202. Study of the architecture, history, literature, music, customs, current events, and ways of life in Spain. Cross listed with IST 340.

**SPA 305. Conversation.
(3-0-3); on demand.**

Prerequisite: SPA 202. Conversation on daily subjects of current interest pertaining to the Hispanic world; acquisition of new vocabulary through reading of current material and usage in oral work.

**SPA 306. Latin American Culture and Civilization.
(3-0-3); on demand.**

Prerequisite: SPA 202. Study of the architecture, art, geography, history, literature, music, customs, current events, and ways of life on the Latin American world. Cross listed with IST 341.

**SPA 309. Explorations in Hispanic Cinema Analysis.
(3-0-3); on demand.**

Prerequisite: SPA 202. Viewing, exploration, and analysis of Hispanic films. Study of film trends and issues. Viewer's guide to film discussion and review. May be taken more than once for credit.

**SPA 399. Special Courses.
(1 to 3 hrs.); on demand.**

These courses are usually specialized offerings in Spanish for undergraduate students. The purpose of these courses is to enhance the existing Spanish program.

**SPA 401. Masterpieces of Spanish Literature.
(3-0-3); on demand.**

Prerequisite: SPA 300. Reading, analysis, and discussion of literary masterpieces in Spanish. Emphasis on the Middle Ages and the Golden Age.

**SPA 402. Masterpieces of Spanish American
Literature.
(3-0-3); on demand.**

Prerequisite: SPA 300. Reading, analysis, and discussion of literary masterpieces in Spanish. Emphasis on modernism and contemporary literature.

**SPA 403. Spanish Stylistics.
(3-0-3); on demand.**

Prerequisite: SPA 300. Reading and analysis of different writing styles. Study of Spanish rhetorical devices. Translations and compositions in Spanish.

SPA 405. Linguistics and Language Teaching.
(6 hrs); on demand.

Prerequisite: must be admitted to the Teacher Education Program. The application of current linguistic theories to the methodology of teaching French and Spanish; microteaching practice and field experiences in the four skills, grammar, and culture. This course includes 30 clock hours of field experience (grades P-12). Equates with FRN 405.

SPA 432. Contemporary Spanish and Spanish American Literature.
(3-0-3); on demand.

Prerequisite: SPA 300. A survey of significant characteristics of 20th century Hispanic literature, including the novel, the short story, the drama, the essay, and poetry.

SPA 440. Seminar in Hispanic Literature.
(3-0-3); on demand.

Prerequisite: SPA 300. Group instruction and practice in research methods peculiar to Hispanic literature.

SPA 476. Directed Studies.
(1 to 3 hrs.); on demand.

This course is a directed study for the undergraduate Spanish major. Each request for the course will be considered on its own merits in relation to the special needs of the student.

SPA 499C. Senior Seminar in Spanish.
(3-0-3); on demand.

Prerequisites: senior standing, 15 hours of upper level Spanish courses. An integrative capstone course in Spanish. A review of key components of Spanish grammar, culture, literature and of issues related to proficiency in Spanish (speaking, listening, reading, and writing) and to career opportunities for Spanish majors. *This course satisfies the integrative component for general education.*

Sport Management Courses

SPMT 100. Introduction to Sport Management.
(3-0-3); I, II.

The course is designed to assist students in understanding the aims, objectives, principles, policies, procedures and requirements for a successful career as a sport administrator.

SPMT 102. Diversity in Sport and Physical Activity.
(3-0-3); II.

This course has been developed to assist students in understanding the historical, philosophical, theoretical, and practical exploration and analysis of diversity and multicultural issues present in American society, and how they relate to sport and physical activity. Emphasis is placed on persons with exceptionality, ethnicity, culture, gender, youth at risk, sexual orientation, and aging.

SPMT 200. Management of Sport and Physical Activity Programs.
(3-0-3); I.

Prerequisite: SPMT 100. This course has been developed to assist

students in understanding the management principles and procedures applicable to sport and physical activity programs. Emphasis will be on management of personnel, facilities, finances and the related legal issues applying to sport and physical activity.

SPMT 204. Sport Finance.
(3-0-3); II.

Prerequisite: SPMT 100. This course has been developed to assist students in understanding the basic concepts, theories and organization of financial management as applied to sport.

SPMT 206. Ethics in Sport and Physical Activity.
(3-0-3); II.

The study of moral issues related to sport in intrinsic and extrinsic dimensions, and the development of a personal philosophy regarding sport responsibility in a sport management setting.

SPMT 304. Sport Economics.
(3-0-3); I.

Prerequisite: SPMT 204. The study of how economic theory applies to amateur and professional sport. Topics include the cost and market structures of professional sport, the economics of stadiums and arenas, and the economic impact of sport teams on a local economy.

SPMT 307. Sport Marketing.
(3-0-3); II.

The course is designed to assist students in understanding the aims, objectives, principles, policies, procedures, and requirements for a successful career in sport marketing.

SPMT 309. Risk Management in Sport and Physical Activity.
(3-0-3); II.

This course has been developed to assist students in understanding the complexities of risk management, a distinct companion to sport law. Students will be exposed to policies, procedures, safety audits, risk reviews, and emergency action plans to combat the flood of lawsuits that confront the physical activity, recreation, and sport industries.

SPMT 310. Governance in Sport.
(3-0-3); II.

The course is designed to assist students in understanding the aims, objectives, principles, policies, procedures, and requirements for successful careers as a sport administrators.

SPMT 380. Sport Media Relations.
(3-0-3); I.

This course has been developed to introduce the student to the components necessary to manage a successful sport media relations program as well as perform all the functions of a sport information director. The preparation of materials for distribution to media outlets, such as media guides, game programs and special event publications as well as the organization of statistical information for publications will be discussed. The management of press conferences, press boxes and sport personnel interviews and the impact of technology on these events will also be covered.

SPMT 402. Planning, Designing, and Managing Sport and Physical Activity Facilities.
(3-0-3); I.

The course is designed to assist students in understanding the aims, objectives, principles, policies, procedures, and requirements for successful facility/event management. A "B" or better is required in this course for admission into the program.

**SPMT 450. Field Experience Preparation,
(2-0-2); II.**

This course is designed to prepare the student for the field experience component of the program.

**SPMT 471. Sport Management Internship.
(15-0-15); I, II, III.**

Prerequisites: SPMT 450, completion of all sport management coursework, and overall GPA of 2.0 or higher. This course will provide students with practical experiences in sport administration that might include high school, collegiate, or professional settings, not-for-profit agencies or the private sector.

**SPMT 480. Legal Aspects of Sport & Physical Activity.
(3-0-3); I.**

Prerequisite: SPMT 309. The study of legal terms and concepts and their applications to sport and physical activity. Topics to be covered include negligence, risk management, intentional torts, contract law, constitutional law, and sport and legislation.

**SPMT 481. Employee Service Management in Sport
and Physical Activity Settings.
(3-0-3); I.**

The study of employee services in sport and physical activity settings which provides practical solutions to work/life issues enabling the organization or agency to recruit and retain a quality workforce. Programming opportunities that will be identified will assist in improving relations between employees and management, increase overall productivity, boost morale, and reduce absenteeism and turnover in sport and physical activity organizations.

**SPMT 499C. Senior Capstone.
(3-0-3); II.**

This course is a culminating experience in which students will review and use the knowledge, skills, and abilities acquired during their undergraduate program to prepare to take the professional exams required to secure desirable employment.

Theatre Courses

**THEA 100. Fundamentals of the Theatre.
(3-0-3); I.**

An introduction to the theatre as an art form, its historic and organizational structure. For theatre majors and minors.

**THEA 105. Modern Dance Technique.
(3-0-3); I, II.**

A study and application of basic modern dance technique.

**THEA 107. Introduction to Dance Performance Art.
(3-0-3); I.**

A foundation course in understanding dance as a performance art that fosters creativity, education and nonverbal communication.

**THEA 110. Introduction to the Theatre.
(3-0-3); I, II.**

An introduction to the theatre as an art form, its historic and organizational structure. *This course satisfies the area studies-humanities for general education.*

**THEA 177. Theatre Production and Performance
Practicum.
(0-4-1); I, II.**

Practical experience and opportunities in theatre production and performance.

**THEA 200. Introduction to Dramatic Literature.
(3-0-3); II.**

Representative dramatic literature from Greek antiquity to the present.

**THEA 205. Intermediate Modern Dance.
(3-0-3); I, II.**

Prerequisite: THEA 105. A continued study and application of Modern Dance Technique.

**THEA 207. Dance Improvisation.
(3-0-3); II.**

A study of improvisational tools used for creating and exploring dance.

**THEA 208. Beginning Ballet.
(1-4-3); on demand.**

A study and application of basic ballet techniques.

**THEA 210. Technical Production.
(1-4-3); II.**

A study of the technical elements in theatrical production; set construction, lighting, and sound.

**THEA 225. Introduction to Theatre Production
Design.
(3-0-3); I.**

A study of design and technical fundamentals of theatre including scenery, lighting, and costumes. The fundamentals include concept and design development, research, and communication skills.

**THEA 277. Theatre Production and Performance
Practicum.
(0-4-1); I, II.**

Practical experience and opportunities in theatre production and performance.

**THEA 284. Acting Techniques.
(3-0-3); I, II.**

A study of acting from both the aesthetic and the practical viewpoints; exercises in pantomime and vocal techniques.

**THEA 305. Advanced Modern Dance Technique.
(3-0-3); I, II.**

An advanced study and application of Modern Dance Technique.

**THEA 307. Dance Composition.
(3-0-3); I.**

Prerequisite: THEA 107-Introduction to Dance as Performance Art or THEA 207-Dance Improvisation. An exploration of movement resources used for constructing dance, developing choreographic skills and interpreting movement.

THEA 308. Intermediate Ballet.

(1-4-3); on demand.

Prerequisite: THEA 208 or consent of department chair. A further study of ballet techniques and profiles of famous dancers.

THEA 309. Tap Dancing.

(1-4-3); on demand.

A study and application of tap dance techniques.

THEA 310. Stage Movement.

(2-0-2); on demand.

The study and practice of stage fighting and movement in various historical periods.

THEA 311. Theatre Practicum I.

(1 to 3 hrs.); on demand.

To provide independent guided study for the development of specialization in specific areas of the theatre. May be repeated.

THEA 312. Theatre Practicum II.

(1 to 3 hrs.); on demand.

May be repeated.

THEA 313. Theatre Practicum III.

(1 to 3 hrs.); on demand.

May be repeated.

THEA 315. Stage Makeup.

(2-2-3); on demand.

Study and application of makeup and techniques for the stage.

THEA 316. Stage Properties.

(2-2-3); on demand.

The study and practice of stage properties, their construction, acquiring, and repair; the study of furniture history.

THEA 317. Scene Painting.

(2-2-3); on demand.

The study and practice of paints and painting techniques as they apply to the scenic artist.

THEA 318. Hip-Hop and Urban Dance.

(3-0-3); I.

A historic overview and application of Hip-Hop and Urban Dance.

THEA 319. Jazz Dance.

(3-0-3); II.

A study and application of Jazz Dance technique.

THEA 321. Stage Lighting.

(2-2-3); I, odd years.

Prerequisites: THEA 210 and 225. The mechanical and artistic approach to stage lighting; study of electrical theory and instrument utilization.

THEA 322. Scene Design.

(2-2-3); II.

Prerequisites: THEA 210 and 225. The study of design theories with the creation and development of scene design projects and rendering techniques.

THEA 324. Dance History.

(3-0-3); II.

A study of the origins, profiles and evolution of dance in America.

THEA 325. Costume History.

(3-0-3); on demand.

A study of fashion and clothing trends throughout history.

THEA 326. Costume Design.

(3-0-3); I, even years.

Prerequisite: THEA 225. A study of fashion and clothing trends throughout history.

THEA 327. Creative Sewing for the Theatre I.

(1-4-3); I.

A course in creating original patterns for stage costumes and construction techniques.

THEA 328. Creative Sewing for the Theatre II.

(1-4-3); II.

A course in creating original patterns for stage costumes.

THEA 354. Theatre History.

(3-0-3); I, even years.

Prerequisite: THEA 100 or THEA 110 or consent of department chair. A study of the origins and development of theatre.

THEA 355. Theatre History II.

(3-0-3); II, odd years.

Prerequisite: THEA 100 or THEA 110 or consent of department chair. A study of the origins and development of theatre in the 19th and 20th centuries.

THEA 375. Creative Dramatics.

(3-0-3); II.

An analysis and application of principles of creative dramatics as applied to classroom curricular activities.

THEA 377. Theatre Production and Performance Practicum.

(0-4-1); I, II.

Practical experience and opportunities in theatre production and performance.

THEA 380. Play Directing.

(3-0-3); II.

Prerequisites: THEA 100, THEA 225, and THEA 284. Theories and principles of directing; director's interpretation; casting; planning acting and making the prompt-book.

THEA 408. Advanced Ballet.

(1-4-3); on demand.

Prerequisite: THEA 308 or consent of instructor or department chair. Advanced study of ballet techniques and profiles of historical dances.

THEA 412. Playwriting.

(3-0-3); on demand.

Prerequisites: THEA 100, 200, or consent of the department chair. Analysis of the structure of plays and the writing of original scripts.

THEA 413. Advanced Play Direction.

(3-0-3); on demand.

Prerequisite: THEA 380. To develop greater proficiency in

techniques of directing as related to specific productions and staging problems.

THEA 430. Summer Theatre III.
(4-0-4); III.

Prerequisite: acceptance into summer theater company. Advanced assignments in set and costume design or advanced acting and directing. May be repeated.

THEA 452. Early Dramatic Literature.
(3-0-3); on demand.

A detailed study of representative plays from the Greeks to mid-19th century.

THEA 453. Modern Dramatic Literature.
(3-0-3); on demand.

A detailed study of the drama from the growth of realism to the present day.

THEA 455 Dramatic Criticism.
(3-0-3); on demand.

Prerequisites: THEA 100, 200, or consent of the department chair. Dramatic theory and criticism as developed through Aristotle, Horace, the middle ages, the Renaissance, and the 20th century.

THEA 462. Advanced Acting.
(3-0-3); on demand.

Prerequisite: THEA 284 or consent of the department chair. Advanced study of acting, including analysis and development of characters in acting situations.

THEA 463. Advanced Costuming.
(2-2-3); on demand.

Prerequisite: THEA 326 or consent of the department chair. Designing costumes for theatrical productions, making patterns, and the fabrication of garments for the stage.

THEA 464. Advanced Stage Design.
(2-2-3); on demand.

Prerequisite: THEA 322 or consent of the department chair. To develop greater proficiency in the skills of scenic design as applied to specific problems and theatrical productions.

THEA 465 Advanced Stage Lighting.
(2-2-3); on demand.

Prerequisite: THEA 321 or consent of the department chair. To develop proficiency in the skills of lighting productions; to research topics and special problems pertaining to stage lighting.

THEA 470. Children's Theatre.
(3-0-3); on demand.

Prerequisite: THEA 100 or THEA 110 or consent of the department chair. A concentrated study of the problems involved in the organization and production of plays for and with children.

THEA 477. Theatre Production and Performance Practicum.
(0-4-1); I, II.

Practical experience and opportunities in theatre production and performance.

THEA 484. Styles of Acting.
(3-0-3); on demand.

Prerequisite: THEA 284. A study of techniques for creating characters from various dramatic styles and historical periods through research and performance.

THEA 499C. Senior Seminar Theatre.
(3-0-3); II.

Prerequisites: senior standing and completion of a minimum of 18 hours toward a major in theatre or consent of the department chair. This course is designed for students majoring in theatre. It entails individualized and group instruction, assessment and career preparation focused on disciplinary competencies and general life skills with an emphasis on the integration of knowledge and skills acquired in the program. *This course satisfies the integrative component for general education.*

Veterinary Technology Courses

VET 108. Veterinary Clinical Anatomy.
(2-2-3); I.

Restriction: 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 110. Animal Care Techniques I.
(2-4-2); I, first nine weeks. *Restriction: admission to Veterinary Technology Program.* Basic animal care and management of the canine and feline species encountered in veterinary practice. The laboratory will include essential tasks related to the handling, restraint, treatment, and routine care of animals.

VET 111. Animal Care Techniques II.
(2-4-2); I, second nine weeks. *Prerequisite: "C" or better in VET 110.* Basic animal care and management of the equine and avian species encountered in veterinary practice. The laboratory will include tasks related to the handling, restraint, treatment, and routine care of animals.

VET 211. Animal Care Techniques III.
(2-4-2); II, first nine weeks. *Prerequisite: "C" or better in VET 111.* Basic animal care and management of common laboratory animal species. The laboratory will include essential tasks related to the handling, restraint, treatment, and routine care of laboratory animals.

VET 212. Veterinary Surgical Nursing.
(2-4-2); II, second nine weeks. *Prerequisite: "C" or better in VET 211.* Basic veterinary surgical nursing techniques, personnel, instrumentation, equipment, and facilities with emphasis on identification, preparation, and maintenance.

VET 216. Veterinary Clinical Pathology I.
(3-2-2); II, first nine weeks. *Prerequisites: "C" or better in VET 108 and 111.* An introduction to basic clinical pathology concepts and techniques common to veterinary practice. Includes comparative hematology, laboratory safety, equipment maintenance, quality control, and record keeping.

VET 217. Veterinary Clinical Pathology II.
(3-2-2); II, second nine weeks.

Prerequisite: "C" or better in VET 216. An introduction to basic clinical pathology concepts and techniques common to veterinary practice. Includes introductory parasitology, laboratory safety, equipment maintenance, quality control, and record keeping.

VET 233. Veterinary Physiology and Pharmacology I. (3-2-2); II, first nine weeks.

Prerequisites: MATH 131 or higher, and "C" or better in VET 108 and 111. An integrated study of the physiology and pharmacology of vital organ systems of animals with emphasis on providing essential life-support through monitoring, evaluation, and intervention. Laboratory will include pharmacological calculations and electrocardiogram procedures.

VET 234. Veterinary Physiology and Pharmacology II. (3-2-2); II, second nine weeks.

Prerequisite: "C" or better in VET 233. An integrated study of the physiology and pharmacology of the nervous system of animals with special emphasis on anesthetics. Laboratory will include pharmacological calculations and anesthetic procedures.

VET 255. Large Animal Clinics I. (6-12-6); I.

Prerequisites: "C" or better in VET 212, 217, 234. *Corequisite:* VET 256. A study of clinical procedures, techniques, and preventive medicine principles related to assisting the practicing veterinarian with clinical cases, hospital management, and client education related to food animal and equine practice. Some evening and weekend duties are required.

VET 256. Small Animal Clinics I. (6-12-6); I.

Prerequisites: "C" or better in VET 212, 217, and 234. *Corequisite:* VET 255. A study of clinical procedures, techniques, and preventive medicine principles related to assisting the practicing veterinarian with clinical cases, hospital management, and client education related to companion animal practice. Some evening and weekend duties are required.

VET 355. Large Animal Clinics II. (6-12-6); II.

Prerequisite: "C" or better in VET 255. A continuation of VET 255. A study of clinical procedures, techniques, and preventive medicine principles related to assisting the practicing veterinarian with clinical cases, hospital management, and client education related to food animal and equine practice. Some evening and weekend duties are required.

VET 356. Small Animal Clinics II. (6-12-6); II.

Prerequisite: "C" or better in VET 256. A continuation of VET 256. A study of clinical procedures, techniques, and preventive medicine principles related to assisting the practicing veterinarian with clinical cases, hospital management, and client education related to companion animal practice. Some evening and weekend duties are required.

VET 363. Veterinary Preceptorship. (0-40-1); I, II, III.

Prerequisites: "C" or better in VET 355 and 356. An external practicum in which the student makes the transition from school

to the workplace. Emphasis is placed upon proper utilization of the knowledge and techniques learned in the academic program and on continued learning. A weekly journal of activities and case reports are required. Consists of a minimum of four weeks at 40 hours per week at an approved veterinary facility.

VET 370. Veterinary Infectious Diseases. (3-0-3); II.

Prerequisite: VET 356 or BIOL 210 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.

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 120. Approaches to Literature. (3-0-3); I, II, III.

Prerequisites: An ACT score of 18 in English and in reading or a grade of "C" or better in ENG 099 and EDEL 097. Introduction to literary appreciation for nonmajors, with emphasis on ways of reading and understanding literary texts. Topics for individual sections of the course will be designated in the course schedule for each semester. Equates with ENG 120. *This course satisfies area studies-humanities for general education.*

WST 210. Introduction to Political Theory. (3-0-3); I, II.

An introductory course in political philosophy with an emphasis on familiarity with concepts of human nature, society, democracy, and revolution. *This course satisfies the area studies-humanities for general education.* Equates with GOVT 180.

WST 230. Social Welfare History and Ethics. (3-0-3); I, II.

Prerequisite: SWK 210 or consent of instructor. Dominant values of American society that influence both social welfare policy and social work practice will be explored through a study of the historical evolution of the institution of social welfare from the Colonial period to the present in this country. Equates with SWK 230.

WST 273. Introduction to Women's Studies. (3-0-3); I, II.

Prerequisite: ENG 100 or equivalent. An interdisciplinary course designed to introduce students to educational, historical, aesthetic, sociological, and political conceptions of gender as defined and experienced by women. *This course satisfies the area studies-social and behavioral sciences for general education.*

WST 302. The Criminogenic Family. (3-0-3); I, II.

The course will focus on family risk factors for later delinquency and criminal behavior as well as preventative intervention and treatment. This course will examine a variety of family issues

including child maltreatment, domestic violence, family alcoholism, drug addiction, family chaos, inadequate or neglectful parenting, corporal punishment, which are known risk factors for later criminal behavior. Students will gain a general understanding of the macro-level processes that have detrimental effects on family functioning and family structure. Equates with CRIM 300 and SWK 300.

WST 303. Comparative Family Violence: An International Perspective.

(3-0-3); I.

A comparative approach of family violence in the United States and Canada will be the primary focus of this course but may also include other countries. Family violence is divided into four topics: Partner/Spousal Abuse, Violence Against Children and Youth by Family Members, Family Violence Against Older Adults, and Cultural Issues. Content covered within these areas include: historical overview, definitions, theoretical frameworks, prevalence, incidence, research, responses, and legislation. Equates with SWK 301.

WST 305. Cultural Anthropology.

(3-0-3); I, II.

Prerequisite: BIOL 105, SOC 101 None. 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. *This course satisfies the area studies-social and behavioral sciences for general education.* Equates with SOC 305.

WST 313. Women in American History.

(3-0-3); II.

Prerequisite: HIS 250. Experiences and perceptions of women throughout American history. Significant roles and issues are emphasized. Equates with HIS 312.

WST 317. Feminist Political Thought.

(3-0-3); I. alternate years.

Prerequisites: GOVT 180 and 289. History and development of feminist political thought. Perspectives include those of Fuller, Millet, Collins, MacKinnon, and Irigaray. Equates with GOVT 317.

WST 320. Women Writers and Feminist Perspectives.

(3-0-3); on demand.

Women writers of the 19th and 20th centuries, their feminine vision and voice. Focus on primary works; attention given to feminist criticism in both theory and practice. Equates with ENG 320.

WST 322. Gender and Education.

(3-0-3); I.

This course explores gender issues that affect male and female students from preschool to postsecondary education. Equates with EDF 322.

WST 333. Sociology of Gender Violence: Perspectives on Women and Intimate Partner Violence.

(3-0-3); II.

Prerequisites: SOC 101, SOC 203 or WST 273. This course offers social science and experiential exposure to the controversies, theories, patterns, policies, and treatment unique to women's experiences with date, acquaintance, and spousal violence. Focus

also is given to marginalized groups, including women of low income, women of color, and women in same-sex relationships. Equates with SOC 333, CRIM 333, and SWK 334.

WST 335. The Family.

(3-0-3); I.

This course provides students with information about family interpersonal and social structural dynamics in the 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.

WST 340. Community Mental Health.

(3-0-3); on demand.

This course provides a microscopic perspective of the institutions and programs that have evolved in response to understanding a class of persons traditionally dependent upon medicine and social programs. Emphasis will be placed upon review of the values, knowledge, and skills characteristic of the entry-level social worker in the community mental health agency. Equates with SWK 340.

WST 350. The Human Experience of Sex and Gender.

(3-0-3); I, II.

Prerequisite: three hours sociology general education. Focus of course will be on meanings attached to sex and gender, theoretical explanations of those meanings, the institutions which influence perceptions and behaviors, and the impact of social definitions and practices on individuals, male and female. Equates with SOC 350.

WST 351. Philosophy of Love and Sex.

(3-0-3); on demand.

An exploration of the central philosophical questions concerning love and sex, with reference to classical and contemporary sources: What is love? Why do we love people? Are there different kinds of love? What is sex? What makes sex bad or good, right or wrong? What is the relationship between sex and love, if any? Equates with PHIL 351.

WST 354. The Individual and Society.

(3-0-3); I, II, III.

The influence of group processes on individual behavior. Topics covered include personality formation and change; small group behavior and leadership patterns. *This course satisfies the area studies-social and behavioral sciences for general education.* Equates with SOC 354.

WST 355. Women and Politics.

(3-0-3); II. alternate years.

Prerequisites: GOVT 141 and 289. Corequisite: VET 356. Participation of women in American government. Gender differences in political attitudes and voting; impact of electoral laws on election of women; and impact of women on creation and implementation of policy. Equates with GOVT 355.

WST 363. Cross-Cultural Perspectives on the Sex Industry.

(3-0-3); II.

Prerequisite SOC 350 or WST 273. This course will explore current

theoretical debates and empirical studies on the global sex industry. Broad topics this course will cover include the feminist sex wars, stripping, pornography, prostitution and sexual trafficking. Equates with SOC/CRIM 363.

WST 374. American Minority Relations.
(3-0-3); I, III.

Prerequisite: three hours sociology general education. 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); on demand.

Prerequisite: HIS 250. Survey of the Moslem world beginning with the Eighth century and culminating in the present Middle Eastern situation. Equates with HIS 374 and IST 374.

WST 377. 20th Century Asian Wars.
(3-0-3); on demand.

Prerequisite: HIS 250. 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 HIS 377.

WST 380. Race, Class, Gender and Crime.
(3-0-3); I, II.

This course focuses on the intersection of race, class and gender membership with regard to treatment within criminal justice system by police, judges, juries and actual sentencing decisions including the death penalty. The course also provides insights about the unique types of crime most likely to be perpetrated by specific demographic groups. Students 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 391. Advanced Expository Writing.
(3-0-3); on demand.

Prerequisite: ENG 200 or equivalent. Practice in the writing of expository prose, and long essays based on research. Equates with ENG 391.

WST 394. Gay and Lesbian Literature.
(3-0-3); on demand.

Equates with ENG 398. 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.

WST 397. Social Stratification.
(3-0-3); I, II, III.

Prerequisite: SOC 101. This course provides a foundation for understanding social inequality and the structured nature of privilege and disadvantages in society on the basis of class. Theoretical perspectives will review systematic stratification processes informed by class, race, and gender and their intersection. Equates with SOC 300.

WST 426. The Community.
(3-0-3); I.

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 Broadcasting.
(3-0-3); on demand.

Prerequisite: senior standing. Treatment of current issues within the electronic media industry. Equates with CMEM 452.

WST 457. Parenting.
(3-0-3); alternate years.

Prerequisite: HS 253 or consent of instructor. An examination of the parental roles in regard to current challenges, problems, and issues. Early intervention and family center relationships emphasized. Equates with HS 457.

WST 474. Women's Health Care.
(3-0-3); I, II.

Prerequisites: CIS 101, CMSP 108, ENG 100, 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. *This course satisfies the area studies-practical living for general education.* Equates with NAHS 303.

WST 476. Special Problems in Women's Studies.
(3-0-3); on demand.

Prerequisite: consent of instructor and Women's Studies director. This course is an independent study in Women's Studies for the undergraduate Women's Studies Minor. Each request for the course will be considered on its own merits in relation to the special needs of the student.

WST 490. Integrative Capstone in Women's Studies.
(3-0-3); II.

Prerequisite: consent of instructor and Women's Studies Director. This course is designed to integrate knowledge and understanding of Women's Studies issues through a mastery of research strategies and creative expressions as applied to the students' professional goals.

Administrative Directory

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General Education Goals

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.

Students will be expected to demonstrate the ability to:

- A. **Communicate accurately and effectively.**
Students must be proficient in both written and spoken English.
- B. **Locate, select, organize, and present information efficiently.**
Students must be able to retrieve and organize information from various disciplines and to use appropriate computer technologies.
- C. **Think and reason analytically.**
Students must be able to use methods of scientific inquiry, understand and apply mathematical concepts, and reason logically by evaluating, analyzing, and synthesizing information.
- D. **Make informed and ethical value decisions.**
Students must make responsible decisions after considering the moral, aesthetic, and practical implications of their actions.

E. **Function responsibly in the natural, social, and technological environment.**

Students must recognize and understand both the dynamics and social implications of political, environmental, and scientific processes.

F. **Recognize and respond to aesthetic values in creative human expression.**

Students should develop an appreciation for the arts and the humanities.

G. **Develop life skills.**

Students should develop knowledge, skills, and behaviors which promote well-being.

H. **Recognize and value the multicultural nature of American society and respect the rights of all citizens.**

Students must consider how others think and live in order to develop understanding of and respect for the cultural diversity within American society.

I. **Analyze global issues in the context of cultural diversity.**

Students must understand the diversity as well as the commonality of world inhabitants and understand the need to act responsibly as world citizens.

Students' Rights in Access to Records

This information is provided to notify all students of Morehead State University of the rights and restrictions regarding inspection and release of student records contained in the Family Educational Rights and Privacy Act of 1974 (Public Law 93-380) as amended.

Definitions

1. Eligible student" means a student who has attained 18 years of age or is attending an institution of postsecondary education.
2. Institution of postsecondary education" means an institution which provides education to students beyond the secondary school level.
3. Secondary school level" means the educational level (not beyond grade 12), at which secondary education is provided, as determined under state law.

I. Students' Rights to Inspection of Records and Review Thereof

1. Any student or former student of Morehead State University has the right to inspect and review any and all "official records, files, and data directly related to" the student. The terms "official records, files, and data" are defined as including, but not limited to:
 - a. Identifying data
 - b. Academic work completed
 - c. Level of achievement (grades, standardized achievement test scores)
 - d. Attendance data

- e. Scores on standardized intelligence, aptitude, and psychological tests
 - f. Interest inventory results
 - g. Family background information
 - h. Teacher or counselor ratings and observations
 - i. Verified reports of serious or recurrent behavior problems
 - j. Cumulative record folder
2. The institution is not required to make available to students confidential letters of recommendation placed in their files before Jan. 1, 1975.
 3. Students do not have the right of access to records maintained by the University's law enforcement officials.
 4. Students do not have direct access to medical, psychiatric, or similar records which are used solely in connection with treatment purposes. Students are allowed the right to have a doctor or other qualified professional of their choice inspect their medical records.
 5. Procedures have been established by the University for granting the required access to the records within a reasonable time, not to exceed 45 days from the date of the request.
 6. The University shall provide students an opportunity for a hearing to challenge the content of their records to ensure that the records are not inaccurate, misleading, or otherwise in violation of the privacy or other rights of the student.
 - a. Informal Proceedings: Morehead State University may attempt to settle a dispute with the parent of a student or the eligible student regarding the content of the student's education records through informal meetings and discussions with the parent or eligible student.
 - b. Formal Proceedings: Upon the request of either party (the educational institution, the parent, or eligible student), the right to a hearing is required. If a student, parent, or educational institution requests a hearing, the vice president for student life shall make the necessary arrangements. The hearing will be established according to the procedures delineated by the University.

II. Restrictions on the Release of Student Records

1. Morehead State University will not release records without written consent of the students except to:
 - a. Other local educational officials, including teachers of local educational agencies who have legitimate educational interest.
 - b. Officials of other schools or school systems in which the student intends to enroll, upon the condition that the student be notified of the transfer and receive a copy of the record desired, and have an opportunity to challenge the contents of the records.
 - c. Authorized representatives of the Comptroller General of the United States, the Secretary of Education or an administrative head of an education agency, in connection with an auditor evaluation of federally supported programs; or
 - d. Parents of dependent students.
2. Morehead State University will not furnish personal school records to anyone other than the described above unless:
 - a. Written consent of the student is secured, specifying the records to be released, the reasons for the release, identifying

the recipient of the records, and furnishing copies of the materials to be released to the student; or

- b. The information is furnished in compliance with a judicial order or pursuant to a subpoena, upon condition that the student is notified of all such orders or subpoenas in advance of compliance therewith.

III. Provisions for Students Requesting Access to Records

The student or former student must file a certified and official request in writing to the registrar of the University for each review.

IV. Provisions for Authorized Personnel Requesting Access to Records

1. Authorized personnel must provide positive identification and indicate reasons for each request for examination.
2. Authorized personnel who have legitimate educational interests may review students' records, showing cause.
3. Other persons must have specific approval in writing from the student for release of information. This approval must specify the limits (if any) of the request.

Who, What, Where?

For a detailed listing of whom to contact for university programs and services please, visit the following Web site:
<http://www.moreheadstate.edu/whowhatwhere/>

Campus Map

For the campus map, click the following link:
<http://www.moreheadstate.edu/campusmap/>

University Academic Calendar

Fall 2009 Academic Calendar

August

10	Monday	Last day to pay in full or complete the online Statement of Intent
11	Tuesday	Class schedules dropped for students who have not paid in full or completed online Statement of Intent. Late fee in effect
12	Wednesday	Campus-wide Convocation; division, college, and department meetings
13	Thursday	Class scheduling in academic departments
14	Friday	Class scheduling in academic departments. Residence Halls open for freshmen to move in
17	Monday	All on-campus and off-campus classes begin
24	Monday	Last day to: <ul style="list-style-type: none">• Register for credit• Add a class or change sections• Change from audit to credit• Change from credit to audit• Change to pass-fail option
25	Tuesday	Last day for 100 percent credit of creditable fees (partial or full withdrawal)
31	Monday	Final drop of class schedules of students who have not paid in full or completed online Statement of Intent. Last day for 75 percent credit of creditable fees (partial or full withdrawal)

September

7	Monday	Labor Day (no day or night classes or office hours)
8	Tuesday	Last day for 50 percent credit of creditable fees (partial or full withdrawal)
14	Monday	Last day to drop a first half-semester class with an automatic grade of "W"
15	Tuesday	Last day for 25 percent credit of creditable fees (partial or full withdrawal)

October

7	Wednesday	First half-semester classes end
8	Thursday	
9	Friday	Fall Break for students (not faculty or staff)
12	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
13	Tuesday	Non-payment fee in effect for all student accounts not paid in full
30	Friday	Last day to drop a full-term class or withdraw from school with an automatic grade of "W"

November

9	Monday	
13	Friday	Advance Registration for Spring 2010
16	Monday	Last day to drop a second half-semester class with an automatic grade of "W"
25	Wednesday	Thanksgiving Break
27	Friday	
30	Monday	Classes Resume

December

7	Monday	Final Examinations
8	Tuesday	Final Examinations
9	Wednesday	Departmental Activities 8:00 a.m. to 12:30 p.m. Final Exams begin 12:40 p.m.
10	Thursday	Final Examinations
11	Friday	Final Examinations
12	Saturday	Commencement
14	Monday	Grades due in Registrar's Office

Spring Semester 2010 Academic Calendar

January

4	Monday	Last day for payment in full or completion of online Statement of Intent
5	Tuesday	Late fee in effect Class schedules dropped for students who have not paid in full or completed online Statement of Intent
6	Wednesday	Campus-wide Convocation; division, college and department meetings
7	Thursday	
8	Friday	Class scheduling in academic departments
11	Monday	All on-campus and off-campus classes begin
18	Monday	Martin Luther King, Jr. Day (no classes or office hours)
19	Tuesday	Last day to: Register for credit Add a class or change sections Change from audit to credit Change from credit to audit Change to pass-fail option
20	Wednesday	Last day for 100 percent credit of creditable fees (partial or full withdrawal) Final drop of class schedules for students who have not paid in full or completed online Statement of Intent
26	Tuesday	Last day for 75 percent credit of creditable fees (partial or full withdrawal)

February

2	Tuesday	Last day for 50 percent credit of creditable fees (partial or full withdrawal)
8	Monday	Last day to withdraw from a first half-semester class with an automatic grade of "W"
9	Tuesday	Last day for 25 percent credit of creditable fees (partial or full withdrawal)

March

5	Friday	First half-semester classes end
8	Monday	Mid-term grade reports due in Registrar's Office by noon Second half-semester classes begin Last day to add a second half-semester class
15	Monday	Nonpayment fee in effect for student accounts not paid in full
19	Friday	Spring Break
30	Tuesday	Last day to drop a full-term course or withdraw from school with automatic grade of "W"

April

2	Friday	Last day to drop a second half-semester class with a grade of "W"
5	Monday	Advance Registration for Summer and Fall 2010
9	Friday	

May

3	Monday	Final Examinations
4	Tuesday	Final Examinations
5	Wednesday	Departmental meetings 8:30 a.m. through 12:30 p.m. Final Exams begin at 12:40 p.m.
6	Thursday	Final Examinations
7	Friday	Final Examinations
8	Saturday	Commencement
11	Tuesday	Grades due in Registrar's Office by 9:00 a.m.

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