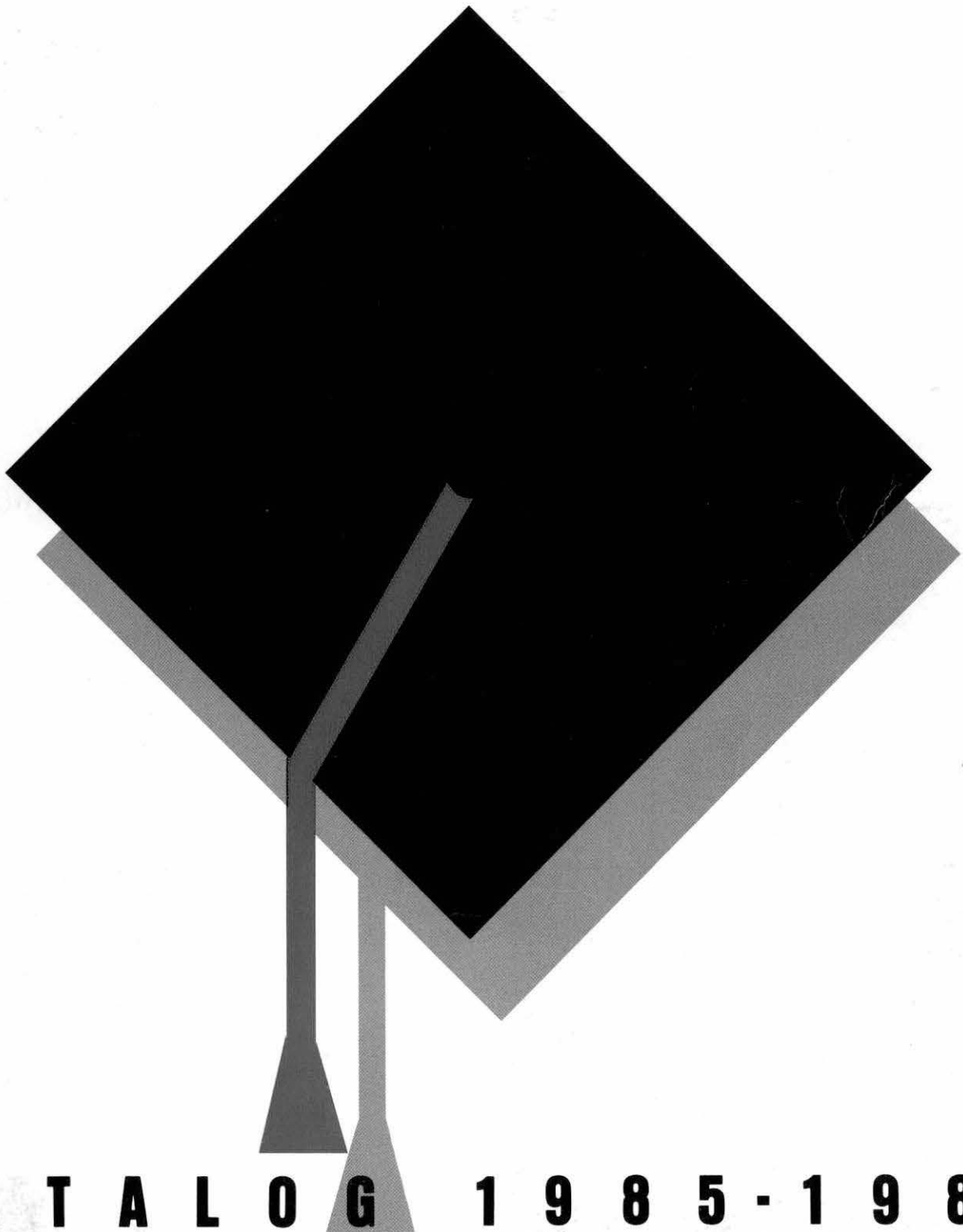


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MSU ARCHIVES





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Morehead State University Undergraduate Catalog 1985-86

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# Morehead State University Undergraduate Catalog 1985-86

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<b>Memberships</b>	American Association of Colleges for Teacher Education American Association of State Colleges and Universities American Council on Education Conference of Southern Graduate Schools National Commission on Accreditation National League for Nursing Southern Regional Education Board The Council of Graduate Schools in the United States Council for the Advancement and Support of Education
<b>Accreditation</b>	American Dietetics Association American Veterinary Medical Association Council on Social Work Education—Baccalaureate Level Joint Review Committee on Education in Radiologic Technology National Association of Schools of Music National Council for the Accreditation of Teacher Education National League for Nursing Southern Association of Colleges and Schools
<b>Volume Date</b>	50 August 1985
<b>Toll-free Numbers</b>	1-800-262-7474 in Kentucky 1-800-354-2090 in Southern Ohio and other states bordering Kentucky
<b>Changes</b>	Morehead State University reserves the right to change its academic regulations, policies, fees, and curricula without notice by action of the Kentucky Council on Higher Education and/or the Morehead State University Board of Regents.
<b>Equal Opportunity</b>	Morehead State University is committed to providing equal educational opportunity to all persons regardless of race, color, age, sex, religion, national origin, or educationally-unrelated handicaps. The university does not discriminate on the basis of sex in its educational programs, activities, employment policies, or admission of students to any program of study as required by Title IX of the 1972 Education Amendments. Inquiries should be addressed to Ronald W. Moss, Affirmative Action Officer, Morehead State University, 101 Howell-McDowell Ad. Bldg., Morehead, KY 40351.
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## Academic Calendar

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1985		Fall Semester
August	19-20	Registration.
August	21	Classes begin.
September	2	Labor Day holiday (no classes or office hours).
September	3	Last day to register for credit.
November	27	Thanksgiving holiday begins at 11:20 a.m.
December	2	Classes resume at 8 a.m.
December	9-13	Final examinations.
December	14	Fall semester closes at noon.

1986		Spring Semester
January	13-14	Registration.
January	15	Classes begin.
January	20	Martin Luther King's Birthday (no classes or office hours).
February	17	Washington's Birthday holiday (no classes or office hours).
March	10-14	Spring vacation (no classes or office hours).
March	17	Classes resume at 8 a.m.
March	28	Good Friday holiday (no classes or office hours).
May	12-16	Final examinations.
May	17	Spring semester closes at noon.

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## Foreword

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Morehead State University's 500-acre Eastern Kentucky campus is bordered to the north by the gently rolling foothills of the Daniel Boone National Forest. To the south, the campus is bordered by the shopping district of Morehead, a thriving city of about 10,000 which lies midway between Lexington and Ashland on Interstate 64. The university's educational facilities include more than 50 major structures in a variety of contemporary and traditional architectural styles, a 320-acre experimental farm, a nine-hole golf course, and a 50-acre outdoor learning center at Cave Run Lake.

With a coeducational enrollment of approximately 6,300 and a teaching faculty of 300, the university offers 96 undergraduate degree programs, two certificate programs, and ten pre-professional programs of study. It draws students from throughout the United States and several foreign countries to participate in its diverse academic and extracurricular life. The faculty, staff, and administration are committed to carrying out the following purposes of the university:

- The university should be a community of students, teachers, administrators, and staff where all pursue intellectual, creative, and technical development.

- The university should foster an environment in which knowledge may be discovered, integrated, and disseminated for concerns of social significance or for the excitement of research or free inquiry.

- The university should provide opportunity for students to recognize their potentialities and to acquire the discipline necessary for self-realization.

- The university should be a place where the interaction of students and teachers committed to excellence creates an atmosphere in which both will be stimulated to accept the challenges of the universe.

- The university should promote the development of those qualities of leadership necessary to meet the diverse needs of the state, nation, and world.

- The university should develop programs to fulfill its specific mission of serving the economic, education, social, and cultural needs of Northern and Eastern Kentucky.

- The university should respond to the demands of the present by utilizing the achievements and values of the past and by exploring the possibilities of the future.

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## How to Use This Catalog

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

The information in this catalog is current as of the time of publication. If you are pursuing a degree and remain continuously enrolled in the university (excluding summers), you may complete a program under 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; 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 and department and school offices make every effort to provide current information to students, but it is your responsibility to know the policies, regulations, and degree or certificate requirements that affect you. For further information, check with the Office of the Vice President for Academic Affairs, MSU, 201 Ginger Hall, Morehead, KY 40351, telephone (606) 783-2002.

## Admissions, Fees, Financial Aid, and Housing

**Admissions**

Requests for applications or questions concerning admission should be directed to the Office of Admissions, Morehead State University, Morehead, KY 40351, telephone (606) 783-2000, or toll free 1-800-262-7474 (for long distance calls in Kentucky) or 1-800-354-2090 (for long distance calls from out of state). You are encouraged to visit the campus before registering to discuss your intended program of study. Visits may be scheduled weekdays between 8 a.m. and 4:30 p.m. and at other times by appointment by contacting the Office of Admissions.

Completion of admission requirements allows you to enroll in any program except those in nursing, radiologic technology, and veterinary technology. For additional information for entering these programs, contact the dean of the College of Applied Sciences and Technology, MSU, 246 Reed Hall, Morehead, KY 40351.

Requirements for admission for high school graduates, GED recipients, transfer students, returning students, international students, special students, and auditors are explained below.

**Admission as a Freshman**

**High School Graduates.** If you are a graduate of an accredited high school, you will be admitted if you meet the admission index. An admission index will be used to compute a numerical score to determine the eligibility for acceptance. The numerical score will be determined by computing the cumulative grade-point average (g.p.a. must be on a 4.0 scale) times 100, and the American College Test (ACT) composite times 10.

In order to apply for admission you should submit to the Office of Admission: (1) the Undergraduate Admission Application, (2) the \$10 application fee, (3) official (ACT) results, (4) the School Information Form completed by your guidance counselor or principal, and (5) a final high school transcript after high school graduation.

**GED Recipients.** If you are a General Education Development (GED) recipient, you will be considered for admission on the same basis as a high school graduate.

In order to apply for admission you should submit to the Office of Admission: (1) the Undergraduate Admissions Application, (2) the \$10 application fee, (3) the GED scores, (4) the High School Equivalency Certificate, and (5) official ACT results.

**Admission as a Transfer Student**

You are eligible for admission if your grade-point average (g.p.a.) is 2.0 or better on a 4.0 scale and you are in good standing at all previously attended institutions. If your g.p.a. is less than a 2.0 on a 4.0 scale, you may be considered for admission on probationary status. If you are transferring from an institution without regional accreditation, you may be considered for admission.

To be admitted to the university as a transfer student from other colleges and universities, you should submit to the Office of Admissions (1) the Undergraduate Admission Application, (2) the \$10 application fee, (3) official transcripts of colleges or universities previously attended, and (4) the Transfer Recommendation Form (available from Office of Admissions, MSU) from all institutions previously attended.

If you have fewer than 12 hours, you must submit your official ACT scores to the university.

**Transfer of Credits.** Credits you have earned from regionally accredited colleges or universities will be accepted for transfer. If you are transferring from a non-accredited institution, your earned credits will be evaluated for transfer after you have completed one semester in residence at the university.

**Admission as a Returning Student**

If you discontinue your enrollment at MSU for one semester (excluding summer terms), you must submit: (1) the Admissions Application and (2) the \$10 application fee to be readmitted to the university.

If you have attended another institution since you last attended MSU, you must submit: (1) the Undergraduate Admission Application, (2) the \$10 application fee, (3) an official transcript from any institution attended, and (4) the MSU Transfer Recommendation Form from the institution from which you are transferring.

**Admission as an International Student**

To be admitted as an international student, you must submit to the Office of Admissions (1) the Undergraduate Admission Application, (2) the \$10 application fee, (3) the International Student Application, (4) official records of previous educational experiences, and (5) official scores on the Test of English as a Foreign Language (TOEFL) or the Michigan Examination. A minimum score of 500 is required on the TOEFL and a minimum score of 82 is required for the Michigan Examination. You should apply at least two months before the semester or term in which you plan to enroll.

If you are transferring to the university from an accredited institution of higher education in the United States, you must submit: (1) the Undergraduate Admission Application, (2) the \$10 application fee, (3) an official transcript from the institution from which you are transferring, (4) the Transfer Recommendation Form from the institution from which you are transferring, (5) the International Student Application, and (6) the official results of the TOEFL or Michigan examinations.

All international students are required to take the American College Test (ACT) during their first semester of enrollment at MSU.

**Transfer of Credits.** Credits earned from international institutions may be applied toward a degree program at MSU. Credits will only be considered after they have been evaluated by the International Education Research Foundations, Inc., Credentials Evaluation Service, P.O. Box 24040, Los Angeles, CA 90024. It is the student's responsibility to contact the agency and pay all service fees.

**Admission as a Special Student**

If you wish to register for a particular course for credit but you are not interested in working toward a degree, you may enter the university as a special student. You should submit to the Office of Admissions (1) the Undergraduate Admission Application, and (2) the \$10 application fee.

If you enroll as a special student and later wish to pursue a degree, you may do so by completing the appropriate admission procedure. All work satisfactorily completed as a special student may be used to fulfill degree requirements.



## Admission as an Auditor

If you wish to audit a class, you need only submit to the Office of Admissions (1) the Undergraduate Admission Application and written indication of your intent to audit, and (2) the \$10 application fee. Although credit cannot be given for courses audited, such courses are recorded on your transcript. Tuition and fees are the same for auditing a course as they are for taking courses for credit.

## Admission Deadlines

The required admission documents should be received by the Office of Admissions by the following deadline dates:

For the fall semester	June 1
For the summer semester	April 1
For the spring semester	October 15

## University Enrichment Program

A student who does not gain admission based upon the admission index may apply to participate in the University Enrichment Program (UEP). Successful completion of the UEP entitles the student to admission to the freshmen class.

## Serviceman's Opportunity College

Morehead State University has been designated as a serviceman's opportunity college. For more information, contact the Office of Admissions.

## Fee Assessment for Non-Kentucky Residents

Tuition for non-Kentucky residents is established through a different rate structure than that for Kentucky residents (all other fees or costs are the same for non-Kentucky residents as for Kentucky residents). Changes in circumstances may arise which may affect the residency and thus fee-assessment for students.

Any student or prospective student having questions related to their residency for fee assessment purposes should contact the Office of Admissions to secure additional information or to obtain the necessary forms used in making a determination.

## Fees\*

Every effort is made to hold cost to a minimum. You pay only the registration and housing fees and a few minor incidental fees when you register at the beginning of each semester. Books and supplies can be purchased at reasonable prices at the University Store. Books may be sold back to the store at the end of the semester. Meals are purchased either on a pay-as-you-go basis or in advance through a meal plan. More specific information on fees follows the list of terms you may encounter as you read this section.

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

*Part-time* refers to enrollment for less 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 Public Higher Education.

*Tuition* is the fee charged for class enrollment.

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

## Tuition\*

As a full-time student you are entitled to free admission to on campus athletic events, the Arts in Morehead Series, and the University Lecture Series, and to receive *The Trail Blazer*, the student newspaper. If you are enrolled full time

for both the fall and spring semesters you receive the *Raconteur*, the student yearbook. These services are available to you as a part-time student if you pay the activity and service fee.

	Full-Time** Per Semester	Part-Time and Summer Term
Resident		
Undergraduate	\$472.00	\$40.00 per hour
Graduate	\$516.00	\$58.00 per hour
Non-Resident†		
Undergraduate	\$1357.00	\$114.00 per hour
Graduate	\$1489.00	\$166.00 per hour
Health Fee	\$15.00	
		\$4.00/summer term \$3.00/Visit/part-time student

\*All fees are subject to change without notice by action of the Kentucky Council on Higher Education and/or the MSU Board of Regents.

\*\*Includes student activity and service fee.

†See fee assessment for non-Kentucky residents in Admissions section.

## Student Health Service Fee

This fee is required of all full-time students (undergraduate and graduate) for the fall and spring semesters. Students who pay this fee are entitled to the basic services of the Caudill Health Clinic.

## Housing

**Residence Halls.** Room rent for each term is due in full at the beginning of the term. Rates include telephone service for residents of Thompson Hall. In addition, television cable and refrigerators are provided in the other residence halls.

Deposit (refundable)—\$50.00

Women's Halls	Weekly	Per Semester	Per Summer Term
Thompson Hall	\$28.00	\$383.00	
Waterfield Hall	\$29.00	\$415.00	
East Mignon Hall	\$32.00	\$425.00	\$128.00
Mignon Hall			
Nunn Hall			
West Mignon Hall			
Men's Halls			
Alumni Tower	\$32.00	\$425.00	\$128.00
Cooper Hall			
Downing Hall			
(athletic scholarship recipients)			
Regents Hall			
Wilson Hall			
Co-educational Halls			
Mignon Tower	\$32.00	\$425.00	\$128.00
Cartmell Hall	\$32.00	\$425.00	\$128.00

**Married Student Housing.** Deposit (refundable)—\$100.00

One bedroom (air-conditioned) per mo. . . . .	\$175.00
One bedroom per mo. . . . .	165.00
Studio (efficiency) apartment, per mo. . . . .	150.00
*Trailer, per mo. . . . .	165.00
Trailer pad, per mo. . . . .	50.00

\*\$15 extra for air conditioners, per month



## Course Fees

**History**  
HIS 544 ..... \$40.00

**Music**  
Private lessons for fall, spring,  
and summer terms:

Per Semester

Per half-hour lesson per week ..... \$30.00

Under certain conditions, beginning students in applied music may be assigned to an undergraduate student assistant for instruction; in this event, the fees are one-half the amounts indicated.

Recital fee, junior and senior (2 hrs.) ..... \$30.00

Recital fee, senior (3 hrs.) and graduate (2 hrs.) ..... \$60.00

Composition recital ..... \$60.00

## Other Fees

Late registration ..... \$25.00

Application fee (effective spring 1986) ..... 10.00

Change of schedule fee ..... 5.00

Reinstatement fee ..... 25.00

Deferred payment application fee ..... 25.00

Thesis continuation fee

(699) ..... 10.00

Master's thesis (binding fee)

per copy ..... 6.00

I.D. replacement fee ..... 5.00

Transcript ..... 2.00

Service Charge on returned checks ..... 10.00

Student parking per year

(not refundable) ..... 15.00

TV rental

Per semester ..... 20.00

Per summer term ..... 7.00

Physical Education (optional)

Men: uniform, towel and lock ..... 5.00

Women: towel and lock ..... 5.00

(includes refundable deposit of \$2.00)

Nursing Program testing fee

NUR 201 ..... 6.00

NUR 202 ..... 6.00

NUR 300 ..... 3.00

NUR 301 ..... 22.00

Military Science activity fee (fall and spring) ..... 4.00

## Refunds

Students withdrawing from school during any semester or term must arrange for their withdrawal with the vice president for academic affairs. No refunds will be made unless the withdrawal is made through the proper channels.

### Fall/Spring Semester

First 5 days of classes ..... 75% of refundable fees\*

Next 10 days of classes ..... 50% of refundable fees

Next 5 days of classes ..... 25% of refundable fees

No refunds are given after the first 20 days of classes.

### Summer Term

First 2 days of classes ..... 75% of refundable fees

Next 4 days of classes ..... 50% of refundable fees

Next 2 days of classes ..... 25% of refundable fees

No refunds are given after the first 8 days of classes.

\*Refundable fees: tuition, housing, meal plan, course fees.

## Financing Your College Education at MSU

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

These are terms you might encounter when you apply for financial aid.

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

*Grants* are gift aid. Generally no repayment is required. Eligibility is based on calculated financial need.

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

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

*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.

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 or 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 upon the availability of funds, to all eligible students regardless of sex, race, color, or ethnic origin. About 60 percent of the students attending MSU receive financial aid.

The type and amount of financial aid is generally based upon demonstrated financial need, academic achievement, test scores, and other personal talents and interests. Financial need is determined through analysis of the Financial Aid Form (FAF), available in the Office of Financial Aid and Veteran Affairs, MSU, 305 Howell-McDowell Ad. Bldg., Morehead, KY 40351, telephone (606) 783-2011, or the office of any high school guidance counselor. The FAF is analyzed to determine the expected contribution of the student and parents or guardian toward educational expenses.

Apply for financial aid by April 1 for the academic year or fall semester only, November 1 for the spring semester only, and April 1 for the summer terms. Applying before the deadline increases chances of receiving the aid you request. If you are a transfer student applying for financial aid, you must have a Financial Aid Transcript completed by the financial aid office at all schools you attended previously.

Most financial aid is distributed in the form of a check, one-half of the year's award at fall semester registration and the other half at spring semester registration.

For detailed information on financial aid, request the booklet *Student Financial Aid Consumer Information* from the Office of Financial Aid and Veteran Affairs.

## Selective Service Registration Requirement

Beginning July 1, 1983, students are required to produce evidence of registration with Selective Service to be eligible for Title IV student financial aid (Pell Grant, Supplemental Educational Opportunity Grant, College Work-Study, National Direct Student Loan, Guaranteed Student/Plus Loan, and State Student Incentive Grant Programs). Contact the Office of Financial Aid and Veteran Affairs for more information.

## Maintaining Satisfactory Progress

The Higher Education Act of 1965, as amended by Congress in 1980, mandates institutions of higher education to establish minimum standards of "satisfactory progress" for students receiving financial aid. The following satisfactory progress standards are applicable to all federal, state, and institutional financial aid programs administered by MSU.

### Satisfactory Progress Defined

In order to initially receive or to continue to receive financial aid, a student must demonstrate satisfactory progress as defined below:

Undergraduate students will be considered to be making satisfactory progress for financial aid purposes as long as all the following requirements are met:

1. The student must successfully complete a minimum of 75 percent of the credit hours attempted during the last semester of enrollment. Successful completion for this purpose is defined as receiving a grade of "D" or better.

2. The University Academic Appeals Committee has determined that the student has met the minimum academic requirements to remain enrolled. The University Academic Appeals Committee utilizes the academic standards set forth in the university catalog as a basis for determining a student's eligibility to continue enrollment.

3. The student has attempted no more than 170 undergraduate hours at Morehead State University.

Graduate students will be considered to be making satisfactory progress for financial aid purposes as long as all of the following requirements are met:

- a. The student must successfully complete a minimum of 75 percent of the credit hours attempted during the last semester of enrollment. Successful completion for this purpose is defined as receiving a "C" or better.

- b. The student must maintain a minimum 3.0 cumulative grade average.

- c. The student has attempted no more than 45 graduate hours at Morehead State University. (Exception: Those students pursuing a degree in clinical psychology will be permitted to attempt no more than 80 graduate hours at MSU.)

### 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 close of each semester. (Exception: For the Guaranteed Student Loan and the PLUS Loan programs, evaluation will be completed prior to the certification of the loan application.)

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, R, U, or N.

3. For undergraduate students, grades of E, F, I, R, U, and N will not qualify as successful completion of hours attempted. For graduate students, grades of D, E, F, I, R, U, and N 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, P, or W are received are not figured in the calculation of a student's grade average and therefore are not calculated as hours attempted or completed in determining satisfactory academic progress.

5. If otherwise eligible, students will be given financial aid during a term in which they may be repeating a course.

6. Transfer credits from other post-secondary institutions will not be used to determine satisfactory progress.

7. 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 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 Financial Aid if they believe mitigating 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 Financial Aid. Students will be notified in writing of the action taken on their appeal.

### 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 and completes the term satisfying the satisfactory progress definition.

Financial aid eligibility will be reinstated immediately for all students whose appeals are upheld.

### Scholarships and Awards

To be considered for a scholarship you must be admitted to MSU as an incoming freshman or transfer student and submit a completed scholarship application to the Office of Admissions. Scholarship applications can be obtained through the Office of Admissions or through area high school guidance offices. The priority filing deadline is March 1. The following is a description of the scholarships awarded through the Office of Admissions.

*Distinguished Scholar Award.* Awards the value of tuition and fees, room, board, and books to entering freshman National Merit Semifinalists.

*Presidential Scholarship.* \$2,000 renewable award. Minimum criteria for consideration: 3.75 g.p.a., 25 composite ACT score.

*Regents Scholarship.* \$1,000 renewable award. Minimum criteria for consideration: 3.5 g.p.a., 20 composite ACT score. A limited number of these awards are available for currently enrolled upperclassmen with a minimum 3.3 g.p.a. who submit a completed application and one faculty recommendation.

*Leadership Grant.* \$500 renewable award. Minimum criteria for consideration: demonstrated leadership and achievement capabilities in school and community activities.

*Minority Student Grant.* \$500 renewable award. Minimum criteria for consideration: demonstrated achievement in academic and/or extracurricular activities.

*Transfer Student Grant.* \$500 renewable award. Minimum criteria for consideration: completion of at least 12 hours of college work and a cumulative 3.3 college g.p.a.

*Morehead State University Grant.* \$1,000 renewable award. Eligibility: residents of Adams, Brown, Clermont, Hamilton, Highland, Lawrence, or Scioto counties in Ohio; or children of MSU alumni who reside outside of Kentucky; or other out-of-state students that are U.S. citizens. Minimum criteria for consideration: 2.75 cumulative g.p.a. (2.5 cumulative for transfer students) or 20 composite ACT score.

All recipients of these awards must agree to continuous full-time enrollment (fall and spring semesters) and continuous residence in university housing (fall and spring semesters). Recipients from Rowan and contiguous counties living with their parents and commuting to campus may request a waiver of the requirement to live in university housing.



The Morehead State University Grant, awarded to out-of-state students, can be stacked with any other scholarship awarded directly by the president of MSU and the Office of Admissions, with the exception of the Distinguished Scholar Award. The value of these awards is to be applied toward the cost of attendance at MSU.

**Honors Program Scholarship.** \$600 per year toward residence hall room rent for the academic year. Obtain scholarship applications from the Director, Academic Honors Program, Morehead State University, UPO Box 697, Morehead, KY 40351. This award is renewable.

**Army ROTC Scholarship.** Awarded for periods from one to four years; pays for tuition, textbooks, laboratory fees, and other specified educational expenses and a tax-free subsistence allowance of \$100 per school month. Contact the Professor of Military Science, MSU, UPO Box 1361, Morehead, KY 40351.

**E.O. Robinson Mountain Fund Nursing Student Scholarship.** For needy students from Eastern Kentucky; maximum annual award is \$500. Contact the Office of Financial Aid.

**Northeast Kentucky Hospital Foundation Nursing Student Scholarship.** For needy students from Northeastern Kentucky who demonstrate acceptable academic achievement. Contact the Office of Financial Aid.

**Athletic Scholarships.** Based on athletic potential, these scholarships are limited in number by regulation or institutional policy. Contact the coach of the sport in which you wish to compete or the Director of Athletics, MSU, UPO Box 698, Morehead, KY 40351, telephone (606) 783-2088.

**Departmental Scholarships.** The university offers a number of departmental scholarships in areas such as music, debate, speech, theatre, and radio and television. You may wish to contact the department in which you have an interest to explore specific scholarship opportunities.

**Outside Funded Scholarships.** Granted by agencies outside the university, these are administered through the Office of Financial Aid and Veteran Affairs in accordance with instructions of the donor. If you are to receive such an award, you should ask the donor agency to mail the award and complete instructions for its disposition to the Office of Financial Aid and Veteran Affairs, MSU, Morehead, KY 40351. The telephone number is (606) 783-2011.

## Financial Aid

**Grants.** Repayment is normally not required for the Pell Grant, Supplemental Educational Opportunity Grant (SEOG), or Kentucky Higher Education Assistance Authority Grant (KHEAA). To be considered for these grants you must complete the KFAF or FAF and the MSU Student Financial Aid Personal Data Sheet. Request forms from MSU's Office of Financial Aid and Veteran Affairs or any high school guidance counselor.

**Pell Grant.** A federally-funded program; eligibility and amount are determined by a standard financial needs analysis formula.

**SEOG.** A federally-subsidized award based on need. Awards may range from \$200 to \$2,000 per academic year.

**KHEAA Grant.** A state program based on need. Grants range from \$300 to \$400 per academic year.

**Work-Study Programs.** The work-study programs provide salaried work in a variety of offices and departments at the university; participants are paid every two weeks.

**College Work-Study Program (CWSP).** 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 or talents.

**Loans.** Loans must be repaid, and are available in differing amounts and under varying conditions. Types are National Direct Student Loan (NDSL), Guaranteed Federally Insured Student Loan (GSL), Plus Loan Programs (PLUS), Nursing Student Loan (NSL), and the Emergency Loan Fund.

**NDSL.** A federally subsidized program based upon financial need and funds available. Eligible students may borrow (at 5 percent interest) up to \$3,000 for the first two years of study, with a maximum of \$6,000 for undergraduate work.

**GSL.** Allows students to borrow money directly from participating private lending institutions (bank, credit union, savings and loan association, or other participating lender). Maximum undergraduate loan is \$2,500 a year, to be repaid at the current rate of 9 percent (an origination fee of 5 percent of the face value is deducted from the loan by the lender).

**PLUS.** Allows independent undergraduate students and parents (natural father, mother, legal guardian, or adoptive parent) of dependent undergraduate students to borrow money from a private lending institution for student educational expenses. Independent undergraduate students may borrow up to \$2,500 per year, less GSL funds borrowed for the year. Parents may borrow up to \$3,000 per academic year, per student. The current rate of interest is 12 percent, and the first payment is due within 60 days of disbursement at the rate of at least \$600 a year on a maximum 10-year repayment schedule.

**NSL.** For eligible students enrolled full time in MSU's nursing program. Total of the award depends on financial need and amount of funds available: up to \$2,500 a year, depending on need.

**Emergency Loan Fund.** Sponsored by MSU and the Student Association, this fund assists students in emergency situations. Students may borrow up to \$20 on a short-term, no-interest basis, depending on funds available. Apply in person to the Office of Financial Aid and Veteran Affairs.

**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 the Office of Financial Aid and Veteran Affairs or the Veterans Administration Office, 600 Federal Place, Louisville, KY 40202, phone (toll-free) 1-800-292-4562.

**Tuition Waiver for Dependents of Kentucky Veterans.** Eligibility determined by Dept. for Military Affairs, Kentucky Center for Veterans Affairs, 600 Federal Place, Room 136J, Louisville, KY 40202. For information call the MSU Office of Financial Aid and Veteran Affairs.

**Vocational Rehabilitation.** For eligible individuals with physical or emotional disabilities; eligibility determined by the Vocational Rehabilitation Service in the student's community. If you are already enrolled at the university, contact the Vocational Rehabilitation Office in Mays Hall, phone (606) 783-1527.

## Housing

Housing is provided in 14 residence halls and 308 married housing units. All residence halls and married student apartments are within less than a 10-minute walk of on-campus classrooms. Additional off-campus mobile homes for married

students are available within a short drive of campus.

Costs range from \$383 to \$425 per semester for a residence hall room and from \$150 to \$175 monthly for married student accommodations. See section on Fees.

Full-time freshmen are required to live in university housing unless they are commuters living with their parent(s), guardian or spouse. When you complete the Residence Hall Application you may indicate the residence hall you wish to live in and who you would like to have for a roommate. If that person agrees to be your roommate, we will try to assign

you to the same room. You may request a change of room or roommate after the semester begins.

To apply for university housing, complete the Residence Hall or Married Student Housing Application and return it to the Office of Student Housing with a deposit of \$50 for a residence hall room or \$100 for a married housing apartment or trailer.

For applications or more information on housing, contact the Office of Student Housing, Morehead State University, 306 Howell-McDowell Ad. Bldg., Morehead, KY 40351, telephone (606) 783-2060.

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## Academic Programs and Requirements for Graduation

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### Academic Programs

Table 1 indicates which subjects are degree (baccalaureate, associate) programs, areas, majors or minors, and whether teacher certification is available. Also listed are pre-professional (transfer) programs and one-year (certificate) programs. You can find specific options or emphases within certain degree programs by referring to the catalog page number of the general subject area.

The following terms will assist you as you read through this section:

**Area** (area of concentration) is a field of specialization requiring not less than 48 semester hours of credit and can be completed in lieu of a major-minor combination.

**Associate degree** requires not less than 64 semester hours and can be completed in two years or less.

**Bachelor's or baccalaureate degree** requires not less than 128 semester hours and can be completed in four years or less.

**Certificate** is a document indicating that a student has completed a program of not less than 32 semester hours.

**Major** is a principal field of specialized study in which a student plans to obtain a degree. A major requires not less

than 30 semester hours of designated course work and must be accompanied by a minor or second major.

**Minor** is a secondary field of study of not less than 21 semester hours of designated course work; many minors offer teacher certification.

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

**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  
 AAA—Associate of Applied Arts  
 AAB—Associate of Applied Business  
 AAS—Associate of Applied Science  
 AS—Associate of Science  
 AB—Bachelor of Arts  
 BBA—Bachelor of Business Administration  
 BM—Bachelor of Music  
 BMED—Bachelor of Music Education  
 BS—Bachelor of Science  
 BSW—Bachelor of Social Work  
 BUS—Bachelor of University Studies

Table 1. Programs of Study.

Subject	Degree	Program	Teacher Certification Program	Catalog Page No.
Accounting	BBA	Area, Minor		21
Agriculture Business Technology	AAS	Two-year		23
Agriculture	BS	Area, Major, Minor		21
Art	AB	Area, Major, Minor	Yes	23
Athletic Training		Minor		24
Basic Business	BBA	Area, Minor	Yes	24
Biology	BS	Major, Minor	Yes	25
Broadcast Technology	AAS	Two-year		26
Business Administration		Minor		29, 31, 67
Chemistry	BS	Major, Minor	Yes	26
Clerical Studies	Certificate	One-year		27
Clothing and Textiles	BS	Area		27
Communications	AB	Area		27
Communications (Organization Communications)		Minor		28
Construction Technology	AAS	Two-year		28
Corrections	AAA	Two-year		29
	AB	Area, Minor		28
Data Processing	AAB	Two-year		29
	BBA	Area, Minor		29
Dietetics	BS	Area		30
Drafting and Design Technology	AAS	Two-year		30
Earth Science	BS	Major, Minor	Yes	30
Economics	BBA	Area, Minor		31
Electrical Technology	AAS	Two-year		31
Electronics Technology	AAS	Two-year		32
Elementary Education	AB	Area	Yes	32
Engineering Science	AS	Two-year		33
English	AB	Area, Major, Minor	Yes	33
Environmental Studies	BS	Major, Minor		34
Farm Production Technology	AAS	Two-year		35
Fashion Merchandising		Minor		36
	AAS	Two-year		35
Finance	BBA	Area		36
Foodservice Administration	BS	Major, Minor		36
Foodservice Technology	AAS	Two-year		37
French	AB	Major, Minor	Yes	37
Geography	AB	Major, Minor	Yes	37
Geology	BS	Major, Minor		38
German		Minor	Yes	38
Government	AB	Major, Minor	Yes	39
Graphic Arts Technology	AAS	Two-year		39
Health	AB	Major, Minor	Yes	39
History	AB	Major, Minor	Yes	40
Home Economics (General)	BS	Major, Minor		40
(Vocational Education)	BS	Area	Yes	40
Horsemanship		Minor		41
Industrial Education (Exploratory)	BS	Area, Major	Yes	41
(Preparatory)	BS	Area	Yes	41
Industrial Supervision and Management Technology	AAS	Two-year		42
Industrial Technology	BS	Area, Major		42
Integrated Science		Minor		43
Interior Decoration		Minor		43
	AAS	Two-year		43
Interior Design	BS	Area		44
Journalism	AAA	Two-year		45
	AB	Major, Minor	Yes	44
Latin		Minor		45
Machine Tool Technology	AAS	Two-year		45
Management	BBA	Area		46
Marketing	BBA	Area, Minor		46
Mathematics and Computer Programming	BS	Area		47

Mathematics	BS	Major, Minor	Yes	47
Mathematics (Statistics)		Minor		47
Medical Technology	BS	Area		48
Military Science		Minor		49
Mining and Reclamation Energy Studies	BS	Area, Minor		50
Mining Technology	AAS	Two-year		51
Music Education	BMED	Area	Yes	52
Music	AB	Major, Minor		52
	BM	Area		52
Nursing	AAS	Two-year		53
Office Management	AAB	Two-year		54
Ornamental Horticulture	AAS	Two-year		54
Para-Legal Studies	AB	Major		55
Philosophy	AB	Major, Minor		55
Physical Education	AB	Major	Yes	55
Physics	BS	Major, Minor	Yes	56
Power and Fluids Technology	AAS	Two-year		56
Pre-Chiropractic		Transfer		57
Pre-Dentistry		Transfer		57
Pre-Engineering		Transfer		57
Pre-Forestry		Transfer		58
Pre-Law		Transfer		58
Pre-Medicine		Transfer		58
Pre-Optometry		Transfer		59
Pre-Pharmacy		Transfer		59
Pre-Physical Therapy		Transfer		59
Pre-Veterinary Medicine		Transfer		60
Production Management	BBA	Area		60
Psychology	AB	Major, Minor	Yes	61
Radio-Television	AB	Major, Minor		61
Radio-Television Broadcasting	AAA	Two-year		61
Radiologic Technology	AAS	Two-year		62
Real Estate	AAB	Two-year		64
	BBA	Area, Minor		63
Reclamation Technology		Minor		64
	AAS	Two-year		64
Recreation	AB	Major, Minor		64
Religious Studies	AB	Major, Minor		64
Russian				65
Safety Education		Minor		65
Secondary Science	BS	Area	Yes	65
Secretarial Studies	Certificate	One-year		67
	AAB	Two-year		67
	BBA	Area, Minor	Yes—Area	67
Small Business Management	AAB	Two-year		68
Social Science	AB	Area	Yes	68
Social Work	AAA	Two-year		68
	BSW	Area		68
Sociology	AB	Major, Minor	Yes	69
Spanish		Minor	Yes	69
Special Education	AB	Major, Minor		69
Special Education (Learning and Behavior Disorders)	AB	Area	Yes	69
Special Education (Trainable Mentally Handicapped)	AB	Area	Yes	70
Speech	AB	Major, Minor	Yes	71
Speech and Theatre	AB	Major	Yes	71
Theatre	AB	Major, Minor	Yes—Minor	71
University Studies	AA	Two-year		72
	BUS	Four-year		72
Veterinary Technology	AAS	Two-year		72
Vocational Agriculture Education	BS	Area	Yes	73
Vocational Trade and Industrial Education	AAS	Two-year	Yes	73
Welding Technology	AAS	Two-year		74



## Requirements for Graduation

To earn an undergraduate degree or certificate, you 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 here are the general university requirements for bachelor's degrees, associate degrees, one-year certificates, and second degrees.

### Check Sheets

To help you identify the requirements for graduation in the program you are enrolled in, you must file an approved check sheet or an approved teacher education program check sheet with the Office of Registrar no later than the end of your sophomore year (or freshman year if you are in a two-year associate degree program). *Your application for a degree will not be processed until your official check sheet has been filed appropriately.*

To complete a check sheet, you must first secure an unofficial transcript from the Office of Registrar and present it to your advisor, requesting that official area/major/minor forms be prepared. These forms are approved by the necessary department heads and college deans and then sent to the Office of Registrar, where the official check sheet is completed. A copy of the official check sheet is sent to you and your dean.

Should you subsequently change your area/major/minor program, you must follow the same procedure to prepare a new check sheet.

### Bachelor's Degree Requirements

You will receive your bachelor's 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. See the academic programs section of this catalog for the specific requirements of your area of concentration or major and minor programs.

2. Earn a minimum cumulative grade-point average 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 not less than 48 semester hours or a major of not less than 30 semester hours and a minor of not less than 21 semester hours. (While these are minimum requirements, you 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.

5. Bachelor of Science degree candidates must complete a minimum of 60 semester hours in science or science-related fields.

6. Complete 42 semester hours of general education courses. (Teacher certification requires 45 semester hours of general education courses, including PSY 154, HLTH 150, one physical education activity course and SPCH 110 or 370. See teacher education 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.

### Communications and Humanities

15 hours

A total of 9 hours in composition and literature

3 hours—Composition 101 or 103

3 hours—Composition 102 or 192

3 hours—Literature 202, 211, or 212

(Advanced placed students scheduled by Department of English, Foreign Languages and Philosophy)

A total of 3 hours in oral communications

Speech 110 or 370

A total of 3 hours from one of the following fields:

Fine Arts 160

Foreign languages

Art 263, 264

Music 161, 162, 261, 361, 362

Theatre 100, 110

### Natural and Mathematical Sciences

12 hours

A total of 12 hours with at least 3 hours from each of the following areas:

Mathematics 123 or higher

Biological Science 105 or higher

Chemistry, Geoscience, Physics, or Science 100 or higher

3 hours from the three listings above or Data Processing 201 or Philosophy 200, 303, or 306.

### Social and Behavioral Sciences

12 hours

A total of 12 hours with at least 3 hours from each of the following clusters:

I. History 131, 132, 141, 142

Economics 101, 201, 202

II. Sociology 101, 170, 203, 305, 354

Psychology 154

III. Government 141, 242, 310

Geography 100, 211, 241, 300

### Health

3 hours

A total of 3 hours from either of the following:

Health 150 and one physical education activity class or

Health 203

The following courses may not be used to satisfy general education requirements: Pre 100; Workshops 199 through 599; Cooperative Study 139, 239, 339, 439 and 539; Practicums; Internships; Special Problems; Field Experiences; Selected Topics; Independent Studies; and Research Projects.

### Bachelor's Degree with Teacher Certification

GENERAL EDUCATION REQUIREMENTS ..... 45

ENGLISH ..... 9

ENG 101 or 103

ENG 102 or 192

ENG 202, 211, or 212

HUMANITIES AND COMMUNICATIONS ..... 6

SPCH 110 or 370

Total of 3 hours from:

FNA 160

Foreign Language

ART 263 or 264

MUSH 161, 162, 261, 361, or 362

THEA 100 or 110

SOCIAL SCIENCE AND ECONOMICS ..... 15

At least 3 hours from each area:

1. HIST 131, 132, 141, or 142

ECON 101 or 201

2. SOC 101 or 305

PSY 154 (required for teacher certification)

3. GOVT 141, 242, or 310

GEO 100, 211, or 300

**SCIENCE AND MATHEMATICS** ..... 12

At least 3 hours from each area:

1. MATH 123 or higher
2. BIOL 105 or higher
3. SCI 103 or higher, including CHEM, GEOS, PHYS
4. PHIL 200 or 303 or science or math elective

**HEALTH AND PHYSICAL EDUCATION** ..... 3

HLTH 150 (2) and PE activity (1)

## Bachelor of University Studies Degree Requirements

You do not have to complete a major, minor, or area of concentration for the Bachelor of University Studies degree. You may take a wide variety of subjects or concentrate all studies beyond the general education requirements in a single discipline. For more information, see your advisor or the dean, College of Arts and Sciences.

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 grade-point average 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 42 semester hours of general education courses. See the general education course requirements for Bachelor's Degree Requirements.

## 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 grade-point average 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 15 semester hours of general education courses as follows:

Composition I ..... 3 semester hours

Composition II or

Technical Composition ..... 3 semester hours

An additional 9 semester hours from at least three of the following 10 categories:

- I. SPCH 110 or 370
- II. ENG 202, 211, or 212
- III. MATH 123 or higher
- IV. BIOL 105 or higher, CHEM, PHYS, GEOS or SCI 100 or higher
- V. A. PHIL 200, 303, or 306
- B. MATH 123 or higher
- C. BIOL 105 or higher, CHEM, PHYS, GEOS or SCI 100 or higher
- D. DATA 201
- VI. A. SOC 101, 170, 203, 305, or 354
- B. PSY 154
- VII. A. HIS 131, 132, 141, or 142
- B. ECON 101, 201, or 202

## VIII. A. GOVT 141, 242, or 310

B. GEO 100, 211, 241, or 300

## IX. A. HLTH 150 and one PHED activity course

B. HLTH 203

## X. A. FNA 160

B. ART 263 or 264

C. MUSH 161, 162, 261, 361, or 362

D. THEA 100 or 110

E. Foreign Language

The following courses may not be used to satisfy general education requirements: Pre 100; Workshops 199 through 599; Cooperative Study 139, 239, 439 and 539; Practicums; Internships; Special Problems; Field Experiences; Selected Topics, Independent Studies; and Research Projects.

## Associate of University Studies Degree Requirements

Except for the general education requirements, no prescribed program for 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 dean, College of Arts and Sciences.

## One-Year Certificate Requirements

You will receive your certificate after you:

1. Complete a minimum of 32 semester hours of prescribed and elective college credit. See the academic programs section of this catalog for the specific requirements of your one-year certificate program.
2. Earn a minimum cumulative grade-point average of 2.0 on all work completed 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 six semester hours of general education courses as follows:

Composition I ..... 3 semester hours

An additional 3 semester hours from

any area listed under I.—X. of the Associate

Degree Requirements. .... 3 semester hours

The following courses may not be used to satisfy general education requirements: Pre 100; Workshops 199 through 599; Coop. Study 139, 239, 339, 439 and 539; Practicums; Internships; Special Problems; Field Experiences; Selected Topics; Independent Studies; and Research Projects.

## 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 grade-point average for all course work presented to complete the program, in all course work completed at Morehead State University, and in all course work 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 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 2.0 grade-point average for all course work presented to complete the program, in all course work completed at Morehead State University, and all course work in the new prescribed associate program.

## Applying for Graduation

An Application for Degree Form (available in the Office of Registrar) should be submitted to the Office of Registrar at least one semester before degree requirements are completed. A list of degree candidates is posted outside the Office of Registrar at least two weeks prior to the end of each term.

**Commencement.** Commencement is observed three times during the academic year. Ceremonies are held at the end of the fall and spring terms, and at the end of the second summer term.

# Academic Regulations and Procedures

## Registration

To register, you must be admitted to the university and have a personalized registration packet. Registration packets are automatically available at the registration location for new students who have been accepted and for students currently enrolled.

### Early Registration and Orientation

As a new freshman or transfer student enrolling for the fall semester, you are encouraged to participate in the summer early registration and orientation program. The two-day activity provides an overview of the educational opportunities and facilities of the university. You will also meet with an academic advisor and register for the classes you will be taking during the fall.

Orientation programs are also 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. The specific dates and times of these activities are mailed to you upon your acceptance to MSU by the Office of Admissions.

### Pre-registration

If you are currently enrolled or have been accepted for enrollment, you may pre-register for courses for the following semester or summer term. Complete instructions are published in the term's schedule of classes. Fees are not payable until the regular registration period at the beginning of each term.

### Late Registration

You are encouraged to register according to the timetable in the published class schedule. Late registrants are assessed a \$25 late registration fee and often encounter scheduling difficulties. After the scheduled enrollment period, students registering for the first time must report to the Office of Admissions, Breckinridge Hall. Returning students begin the registration process in the Office of Registrar, 205 Howell-McDowell.

### 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 recorded with the registrar on a drop/add form and must be approved by your advisor and the dean of the college in which the class is offered. Deadlines for making schedule changes are published in the current class schedule.

### Course Load

To be classified as full time you must enroll for at least 12 semester hours. Audited courses do not contribute toward a full-time load. If you wish to schedule 19 or more hours, including audited courses, you must have the approval of your academic advisor and the dean of your college. Six semester hours is the maximum credit you can take during any summer term.

### Undergraduates Enrolling for Graduate Credit

If you are in the final semester of undergraduate study and have a grade-point average (g.p.a.) of at least 2.5, you may enroll concurrently in courses for graduate credit according to the following limitations:

Undergraduate Credit	
Needed for Degree Completion	Graduate Credit Allowed
9	3
6	6
3	9

If the work for a baccalaureate degree is being completed during a summer term, the combined course load may not exceed six hours. Application forms are available in the Office of Graduate and Special Academic Programs, 201 Ginger Hall. Approval must be granted prior to registration.

### 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 less than 100 are developmental courses and may not be used to meet program or general education requirements; credits earned are computed in the total required for graduation. Courses numbered 100-499 are undergraduate courses and may be taken by any classification of student if all prerequisites have been met. Courses numbered 500-599 may be taken for graduate or undergraduate credit. Juniors, seniors, and graduate students may enroll in these courses. Courses numbered 600

and above are graduate level courses and are restricted to graduate students only.

## Courses

### Repeating Courses

As an undergraduate, you may repeat any course regardless of the grade received or the number of times you have attempted the course. Only the grade received on your last attempt is computed in your overall grade-point average (g.p.a.). This practice applies to MSU, and is not necessarily the way other institutions might compute your cumulative g.p.a. if you transfer. Students wishing to repeat courses must file a Repeat of Course Option with the Registrar's Office at the time of enrollment in the course to be repeated.

### Auditing Courses

To audit a course, you must be admitted to the university and go through the regular registration process. Fees for auditing a course are the same as for courses taken for credit. You may change from audit to credit during the time a course can be added for credit. A change from credit to audit may be made until the last day to drop a course. Deadlines for change of registration status are published in the current class schedule. Courses taken for audit do not contribute toward a full-time load.

### Attendance

Prompt and regular attendance in class is expected. Absences for the following reasons are excused, and you will be permitted to make up any work that your instructors consider essential:

1. Illness or health-related problems. In such cases you must present to your instructors an excuse signed by a physician.
2. Representing the university or participating in an authorized field trip. The individual responsible for the activity arranges for the official university excuse.

Instructors are authorized to exercise their discretion in excusing absences for other reasons.

### Withdrawals

If you find it necessary to withdraw from school, you must complete a withdrawal form at the Office of the Vice President for Academic Affairs. It is important for your academic record to reflect your official withdrawal; entitled refunds are not made unless your withdrawal is properly recorded.

## Grades

### Marking System and Scholastic Points

The evaluation of work done by 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 mid-term 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 courses—Semester hours earned; no quality points; not computed in g.p.a.
- N—Failure, pass-fail courses—No semester hours earned; no quality points; computed in g.p.a.
- P—Withdrew from school passing—Not computed in g.p.a.
- F—Withdrew from school failing—Computed in g.p.a. as credits attempted.
- R—Course repeated—Replaces original grade for repeated course; not computed in g.p.a.
- U—Unofficial withdrawal—Computed as credits attempted; computed as zero quality points in g.p.a. calculation.
- W—Withdrew officially—No hours attempted; not computed in g.p.a.
- Y—Audit credit—No hours attempted; not computed in g.p.a.; 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 2.5 cumulative g.p.a. on 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 g.p.a. 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 can use the pass-fail option for one course (for any number of hours of credit), or a combination of courses totalling up to three hours.
5. Hours earned in pass-fail work are added to your total hours passed but do not affect your g.p.a. 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.

### Honors

**Academic Dean's List.** To be eligible, you must have passed at least 12 undergraduate hours and have earned at least a 3.4 g.p.a. 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 64 semester hours at MSU and earn a cumulative grade-point average of 3.40 to 3.59 graduate *Cum Laude*; 3.60 to 3.89 graduate *Magna Cum Laude*; and 3.90 to 4.00 graduate *Summa Cum Laude*. Associate degree recipients who complete a minimum of 32 semester hours at MSU and earn a cumulative grade-point average of 3.60 or better graduate with distinction. Only work completed at MSU is used in computing grade-point average.

## Grade Reports

At the end of each semester and summer term, a final grade report is sent to you at your permanent address. Mid-term grade reports are not mailed, but should be picked up from your advisor. There are no mid-term grade reports for the summer terms.

## Transcripts

Request transcripts, either official or unofficial, in writing to the registrar. Requests received by noon are ready for pickup or mailing by noon the next working day. The registrar cannot mail unofficial transcripts; you should pick them up at the registrar's window. Official transcripts are \$2 each; unofficial are 25 cents. Degree recipients are entitled to one official transcript free of charge.

## Student Records

In accordance with the Family Educational and Privacy Act and Morehead State University policy, non-directory 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 must be in writing to the Registrar, MSU, 205 Howell-McDowell Ad. Bldg.

Questions concerning this law and the university policy may be directed to the Office of Registrar, 201 Howell-McDowell.

## Scholastic Standing

Students are eligible to register if they meet the following minimum cumulative scholastic levels:

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

Students who do not meet the above standards are given a scholastic warning during their next enrollment. Continued enrollment is permitted as long as measurable scholastic progress is achieved each enrollment period. Students given scholastic warnings are not prohibited from participating in extracurricular activities. Students on scholastic warning who fail to make academic progress may be suspended from the university.

A suspended student may:

1. Apply for readmission after the lapse of one semester (excluding summer school); or
2. Appeal by petitioning a hearing before the university Committee on Academic Appeals. Requests for appeals are made in the Office of the Vice President for Academic Affairs, 201 Ginger Hall.

A student readmitted under the above conditions who fails to make academic progress may be dismissed from the university.

## Academic Bankruptcy

Academic bankruptcy allows undergraduates with an unacceptable grade-point average (g.p.a.) to drop one semester's work from consideration for MSU general education degree or program requirements.

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 MSU requirements, but the notation "academic bankruptcy" appears on the transcript beneath the semester's work.

Undergraduate students declared eligible for bankruptcy forfeit credit for only one specified semester of pre-baccalaureate study. Bankruptcy cannot be revoked once it has been granted.

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

These are the requirements for academic bankruptcy:

1. Students must apply for bankruptcy before completing a baccalaureate degree at Morehead State.

2. They must have attempted at least 48 semester hours at MSU.

3. For the term in question, students must have a g.p.a. of at least 1.0 under their cumulative average for all other hours completed at MSU.

**Procedure.** To apply for academic bankruptcy, request an Academic Bankruptcy Form in the Office of Registrar. Complete the form, have it signed by your academic advisor and/or department head, and take it to the registrar for verification of eligibility. The registrar will notify you, your advisor, and/or head of your department in writing whether or not you are eligible.

If you are ruled ineligible and want to appeal, request reconsideration at the Office of the Vice President for Academic Affairs, 201 Ginger Hall.

## Academic Grievance Procedure

Students with an academic complaint or grade challenge should talk first with the instructor involved, before two weeks of the following semester have elapsed. If the student is not enrolled for that semester, he or she should send a written complaint to the instructor and a copy to the instructor's department head. If the complaint is not resolved at that stage, the student has 30 days to file a Student Grievance Form (available in the Office of the Vice President for Academic Affairs).

If the above procedure is impractical or undesirable, the student may complete a Student Grievance Form and return it to the department head involved. The instructor makes a written response to the student's questions, and within one week of receiving the complaint, the department head meets with the student, the advisor (if the student wishes), the instructor, and the respective school dean to review and settle the grievance. Records of the meeting and the recommendation by the department head and dean are forwarded to the vice president for academic affairs and to concerned parties.

If the resulting recommendation is unacceptable to the student, he or she may appeal by petitioning the Student Grievance Committee (or the Graduate Council if a graduate student) within one week of the previous meeting by writing the vice president for academic affairs. Within two weeks of the appeal application, the Student Grievance Committee reviews the matter and previous recommendations, and if necessary requests additional information or the appearance of parties involved. The committee's decision, which is final, is sent to all concerned parties and is enforced by the vice president for academic affairs.

Anyone may appeal to the president of the university if due process or individual rights have been disregarded.



## Academic Support Services

### Academic Advisement Program

The university provides a program of academic advisement to assist you with information about specific programs and university procedures, with career guidance and counseling, and with general academic support throughout your college experience.

#### Advisor Assignment

Although you may not have a permanent advisor assigned when you register, department heads and support advisors are available to assist you. A permanent advisor is assigned to you during the first two weeks of the semester you enroll. If you have selected a program of study, you must see the head of that department for the name and office location of your advisor. If you are a general studies student (undecided), you must go to the Office of the Dean, College of Arts and Sciences. It is your responsibility to make the initial contact with your advisor.

#### Required Advisor Contacts

You will want to maintain a close relationship by frequent visits with your advisor, but you are required to meet your advisor periodically for at least the following purposes:

1. to obtain your advisor's signature on your trial schedule form prior to registration;
2. to pick up mid-term grade reports;
3. to initiate class changes during the drop/add period;
4. to complete a change of program form if you change your major, minor, or area of concentration, or if you are in general studies and you declare a major, minor, or area of concentration; and
5. to complete a check sheet during your sophomore year (freshman year for associate degree). Transfer students above the sophomore level should schedule such a conference at the end of the first semester at MSU.

#### Advisement Services

The advisement services listed below are available in 220 Allie Young Hall. These services are free and open to all MSU students.

1. Personal, academic, and career counseling
2. Support services for handicapped students
3. Learning lab/tutoring services
4. Special classes in study skills and career planning
5. Re-entry program for students on academic warning
6. Admission referral program for transfer and returning students

### Academic Assessment Services

The Testing and Evaluation Center provides individual student testing and evaluation on a daily basis in the areas of achievement, aptitude, vocational interest, and personal social adjustment. In concurrence with established policies, the Testing and Evaluation Center also administers all credit by examination programs.

Established testing programs include the ACT, CLEP, GED, GRE, NTE, GMAT, AP, UP, U.S. Civil Service Exams, correspondence exams, and various departmental proficiency examinations. Literature and brochures describing the different testing programs and their functions are available at the Testing and Evaluation Center, 501 Ginger Hall.

### University Counseling Center

The University Counseling Center (UCC), located on the first floor of Mays Hall, provides many services to the MSU campus community. The UCC applies the principles and skills of counseling and psychotherapy, psychology, and education with the highest degree of professional commitment, competence, and responsibility to assist students with their academic, career, social and personal development goals.

The UCC contributes to the attainment of student goals by providing the following services: personal/social adjustment counseling, marital/relationship enhancement, career assessment and life planning, group counseling and workshops on common personal growth topics, and advising for minority and international student concerns.

These services are free to MSU students. All counseling communication or records are held with strict confidentiality to insure student privacy.

**Personal/Social Adjustment Counseling.** The years invested in college are a time of growing maturity, challenges, new relationships, many changes, and indecision. A few students move through this time in a calm, relaxed manner. There are many others who during this time have periods of trauma, crisis, stress, and confusion. At such times individual or group counseling can assist the student in dealing with the stresses and in clarifying the issues so that productive choices can be made.

**Marital/Relationship Counseling.** Marital and other interpersonal relationships can be readily affected by the many stresses that are often encountered during a student's academic career. The UCC staff have specific training in the areas of marital and relationship counseling and offer training in methods of marital/relationship enrichment and enhancement for distressed and non-distressed couples.

**Career Counseling.** Nationwide research indicates that two-thirds of the students entering college can benefit from career counseling. This service provides students with an opportunity for self-exploration of their academic strengths, interests, abilities, values, and personality. With an increased understanding based on self-awareness, students may examine how their individual outlook fits with the world of work through vocational inventories. Based on information gained from these individual measures of career interests, students are assisted in career life-planning and decision-making regarding the best educational path for their particular career outlook.

**Groups and Workshops.** In addition to group counseling, various workshops and special programs are periodically scheduled to address specific needs of the university community. Topics in the past have included assertion training, stress management, depression, vocational planning, weight loss instruction, and dealing with roommate conflicts.

**Minority Student Advisor.** The minority advisor provides assistance and support to prospective and enrolled Black students at MSU. Coordination of campus activities is conducted throughout the year to insure provision of educational, cultural, and social programs for minority students. Minority student adjustment and retention is promoted by assisting student leadership and advising individuals and organizations on student life/personal development goals. Through these efforts the minority advisor provides cultural enrichment and academic support for minority students.

while increasing cross-cultural understanding for the total campus community.

**International Student Advisor** The international advisor provides assistance and support to international students at MSU. Compliance with Immigration Service requirements is also facilitated by the international student advisor. Support for all international students is provided to foster greater understanding and appreciation of diverse cultural experiences in our cross-cultural educational environment.

The University Counseling Center is open Monday through Friday from 8 a.m. to 4:30 p.m. and one evening a week until 8 p.m. For more information or to schedule an appointment, students are encouraged to visit the office, located on the first floor of Mays Hall, or call 783-2123.

## Placement Services

To help you secure employment, the Office of Placement Services, 207 Allie Young Hall, maintains full-time job placement services for students and alumni. The services include credential files, job vacancy listings, on-campus interviews, data on careers and employers, assistance in writing applications and resumes, and assistance in preparing for employment interviews.

## Alumni Association

The Alumni Association is an organization composed of graduates and friends of the university and is designed to stimulate interest in the university and its welfare. Active membership in the association is available to all graduates of the university who make a contribution to the University Fund. Associate membership is available to parents of students and friends of the university and also is based on a gift to the University Fund. All graduates receive publications of the Alumni Association.

## Camden-Carroll Library

The library is a comfortable building with a five-story library tower, a seating capacity of 1,200 persons, and a collection of more than one-half million volumes. There are 10 service/information desks to assist you in locating and using materials, which are available in open stacks. These are some specialized services and materials offered at Camden-Carroll Library:

### I. Special Collections

1. Kentucky Collection
2. Appalachian Regional Collection
3. Rare Book Room—old and valuable resources

4. University Archives—history of Morehead State University
5. Moonlight Schoolhouse—educational museum
6. James Still Collection
7. Jesse Stuart Collection
8. Government Depository Collection
9. Roger Barbour Collection

### II. Media Services

1. Audio Access Center—audio information resources
2. Microforms Department—materials and equipment for reading and printing
3. Learning Resource Center—audio-visual resources
4. Audio-visual equipment—projectors, record players, tape recorders, Video cassette recorders

### III. Graphic Arts

1. Photocopying—coin-operated machines
2. Transparencies—black and white transparencies produced
3. Typewriters—for student use
4. Lettering—materials for making signs
5. Slides
6. Lamination

### IV. Library Data Services

1. Bibliographic retrieval services and Lockheed DIALOG and BRS, on-line fee for service data bases and Kentucky Economic Information Service
2. Interlibrary loan—teletype and computer terminal connected to other libraries
3. On-line cataloging and verification
4. Computer programs—accessed from the Educational Computing Center in Reed Hall by terminals located on library fourth floor

### V. Exhibits

1. Art—student and faculty shows
2. Music—special choral group performances
3. Crafts—demonstration of various crafts
4. Specialized displays—located in library and University Center

### IV. Library Instruction

1. Library orientation—organized classes on how to use the library
2. Walking tape tour—self-instruction on how to use the library
3. Library workshops—formal classes on library use
4. Use of Books and Materials—formal class of library use, LSIM 101
5. CAI.I—Library use by computer-assisted instruction

## Academic Opportunities

### Cooperative Education

Cooperative Education provides supervised work experience in educational, vocational, governmental, and cultural environments outside the university. You are awarded academic credit and remuneration for each work experience. Semesters of on-campus course work are alternated with semesters of salaried employment in an environment closely associated with your program of study. For additional information, contact your advisor or the head of your department.

### Television Courses

Each fall and spring semester a number of undergraduate courses are offered for credit by television. These courses may be applied toward the general education requirements and/or program of study requirements. Tuition and admission requirements are the same as for on-campus enrollment. For an application contact the Office of Continuing Education, 801 Ginger Hall.

## Army ROTC

The Army ROTC program allows students to earn commissions as second lieutenants in the U.S. Army. The basic course, taken in the freshman and sophomore years, does not require military service after graduation. The advanced course, offered the junior and senior years, is for those who choose to continue in the program and receive commissions after earning a degree. There is a six-week summer camp between the junior and senior years. For information about Army ROTC, contact the professor of military science, (606) 783-2050.

## Correspondence Courses

Correspondence courses allow students to complete college credit outside the formal classroom. Admission to the program does not require, nor does it constitute, formal admission to the university. Anyone, regardless of previous training or educational experience, is eligible to apply. Tuition is the same as for on-campus courses. For an application and complete details contact the Correspondence Study Program, 801 Ginger Hall.

## Honors Program

The 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.

Freshmen and sophomores take a sequence of honors classes which fulfill general education requirements, upper division students participate in at least two honors seminars, and seniors must undertake an independent study project in their major field.

Members of the Honors Program receive special opportunities and recognitions. They may enroll for additional credit hours each semester; have their major field content requirements altered for greater flexibility; attend classes as they choose (except for some participatory classes); receive special library privileges, including a separate study room and free computer search and inter-library loans; participate in cultural enrichment trips to concerts, plays, and museums in surrounding cities; may take up to four free CLEP examinations; may participate in a yearly "seminar week" with students from other state Honors Programs; may help faculty in their research projects; and are recognized during Academic Awards Convocation and Commencement. Participation is noted on the academic transcript.

High school students who have composite ACT examination scores of 24 or above and a strong high school academic record are eligible. College students, including transfer and second semester freshmen who have a cumulative 3.5 grade-point average, are invited to become members. Once admitted to the program, a student must maintain a 3.0 grade-point average. The Honors Program awards 10 scholarships each year to entering freshmen. If you would like more information or admission forms, contact the Honors Program Director, Morehead State University, U.P.O. Box 697, Morehead, Ky. 40351.

## Academic and Honor Organizations

Numerous organizations offer opportunities for academic enrichment outside the classroom. As a member you 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

Accounting Club—UPO 1041  
 Agriculture Club—UPO 1296  
 Alpha Lambda Pi (Paralegal)—UPO 2409  
 Alpha Tau Sigma (veterinary technology)—UPO 1044  
 Art Students League—UPO 1224  
 Brotherhood of University Guitarists—UPO 1404  
 Electronics Technicians Club—UPO 2406  
 Environmental Studies Club—UPO 1047  
 Food Service/Dietetics Organization—UPO 954  
 Future Interior Designers Organization—UPO 1029  
 Geologic Society—UPO 1372  
 International Trombone Association—UPO 1266  
 International Trumpet Guild—UPO 1038  
 Keyboard Club—UPO 1390  
 Medical Technology Society—UPO 1055  
 Mining Society—UPO 2415  
 National Association of Jazz Educators—UPO 1374  
 Percussive Arts Society—UPO 1034  
 Phi Alpha Delta (pre-law)—UPO 1273  
 Phi Beta Lambda (business)—UPO 1039  
 Phi Mu Alpha (music)—UPO 1381  
 Political Science Club—UPO 1385  
 Prae Medicorum (pre-medicine)—UPO 1386  
 Pre-Veterinary Medicine Club—UPO 1031  
 Rho Epsilon (real estate)—UPO 1017  
 Science and Math Club—UPO 2405  
 Second Foundationers—UPO 2408  
 Sigma Alpha Iota (music)—UPO 1392  
 Sigma Tau Epsilon (industrial technology)—UPO 1267  
 Student Association of Social Workers—UPO 1396  
 Student Correctional Association—UPO 1398  
 Student Home Economics Association—UPO 1399  
 Student Music Educators National Conference—UPO 1414  
 Student National Education Association—UPO 1371  
 Student Nurses Association—UPO 1400  
 Tubists Universal Brotherhood Association—UPO 1394

### Honor

Alpha Delta Mu (social work)—UPO 992  
 Alpha Epsilon Rho (broadcasting)—UPO 1043  
 Blue Key (juniors and seniors)—UPO 1243  
 Cardinal Key (juniors and seniors)—UPO 1223  
 Delta Tau Alpha (agriculture)—UPO 1053  
 Gamma Beta Phi Society (scholastic and service)—UPO 1334  
 Kappa Delta Pi (education)—UPO 1035  
 Kappa Omicron Phi (home economics)—UPO 1052  
 Phi Kappa Phi (interdisciplinary)—UPO 816  
 Pi Gamma Mu (social sciences)—UPO 1261  
 Scabbard and Blade—UPO 1050  
 Theta Alpha Phi (theatre)—UPO 1382



Table 2. Who to See

For	Who	Where	Phone
Absences	Your college dean		
Academic bankruptcy	Your advisor		
Academic probation	Your advisor		
Admission	Office of Admissions	BH	2000
Advisor assignment	Dean of your college or your department head		
Change of major	Your advisor		
Change of program	Your advisor		
Change of schedule	Your advisor		
Check sheets	Your advisor		
Cooperative Education	Your department head		
Correspondence courses	Continuing Education	801 GH	2542
Counseling services	University Counseling Center	MH	2123
Credit by examination	Testing and Evaluation Center	501A GH	2526
Drop/add	Your advisor		
Extracurricular activities	Student Development	301 HM	2070
Fees	Business Office	202 HM	2119
Field Career Experiences	Your department head	201 GH	2002
Financial aid	Financial Aid	305 HM	2011
Grades	Your advisor		
Graduation application	Office of Registrar	205 HM	2008
Honors Program	John Kleber	338 RA	2090
Housing	Housing	302 HM	2060
International student advising	University Counseling Services	MH	2123
Learning Lab	Betty Moran	220 AY	2005
Library	Library	CCL	2250
Loans	Financial Aid	305 HM	2011
Minority Student Advisor	Jerry Gore	MH	2123
Placement Service	Placement Office	208 AY	2233
Pre-registration	Your advisor		
Professional Lab. Experiences	John Payne	101 GH	2891
Records, access to	Office of Registrar	205 HM	2008
Registration	Your advisor		
Repeating a course	Your advisor		
Residency reclassification	Office of Admissions	BH	2000
ROTC	Military Science	308 BA	2050
Scholarships	Kyle Barnette	BH	2000
Special Services	Betty Moran	220 AY	2005
Counseling	Staff member	220 AY	2005
Learning Lab	Betty Moran	220 AY	2005
Tutoring	Janet Bignon	220 AY	2005
Student teaching	John Payne	101 GH	2891
Testing	Steve Taylor	501A GH	2526
Textbooks	Bill Sharp	ADUC	2081
Transcripts	Registrar window	205 HM	2008
Transfer of credits	Office of Registrar	205 HM	2008
Tutoring	Janet Bignon	220 AY	2005
TV courses	Continuing Education	801 GH	2542
Veterans affairs	Financial Aid	305 HM	2888
Withdrawals			
From class	Your advisor		
From school	Academic Affairs	201 GH	2002
Writing Lab	Special Services	220 AY	2005

Key to abbreviations: ADUC—Adron Doran University Center; AY—Allie Young Hall; BA—Button Auditorium; BH—Breckinridge Hall; CCL—Camden-Carroll Library; CHC—Caudill Health Clinic; GH—Ginger Hall; HM—Howell-McDowell Administration Bldg.; MH—Mays Hall; RA—Rader Hall.

## Teacher Education Program and Professional Laboratory Experiences

The coordinator of professional laboratory experiences is responsible for (1) administration of the teacher education program and (2) administration and supervision of all professional laboratory experiences associated with the College of Professional Studies.

Teacher education is a field-based program that provides extensive laboratory experiences with children 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 clinical and field experience component. Placements are made in cooperation with instructors and Teacher Education Office, 101 Ginger Hall.

Secondary education majors are required to complete 150 hours of clinical and field experiences prior to student teaching. One-half of these shall be devoted to experiences in the public school (field experiences).

### Teacher Education Program

#### Admission and Retention

Students seeking teacher certification must apply for and be admitted to the teacher education program. Students will be required to meet admission standards concurrent with their application to teacher education. They must also select areas of concentration, major(s) and/or minor(s) that are certifiable. Psychology and sociology majors must present a teaching minor in order to enter the teacher education program.

Students in teacher education must complete 45 hours of general education requirements, which shall include PSY 154, HLTH 150, one physical education activity course, and SPCH 110 or 370. Students should apply for admission to the teacher education program during the semester in which they are enrolled in Human Growth and Development. Failure to apply at the sophomore level may result in an extended program.

#### Criteria for admission

1. Formal application is filed during the semester in which the student is enrolled in Human Growth and Development.
2. Completion of 45 semester hours for secondary students; 30 semester hours for elementary and special education students.
3. An unofficial copy of the student's transcript with a minimum cumulative grade-point average of 2.25 on a 4.0 scale must accompany the application.
4. Three recommendations from instructors familiar with applicant's qualifications.
5. Successful completion of speech, hearing, and vision screening test.
6. Successful completion of Comprehensive Test of Basic Skills with minimum score of 12.5 on each section—reading, language arts, mathematics, and spelling.
7. Successful completion of prerequisite courses (Foundations of Education, Human Growth and Development, PSY 154, and SPCH 110 or 370) and prescribed pre-professional laboratory experiences.

8. Demonstrated proficiency in oral and written communication. (Successful completion of English Composition I and II; or Composition III, or Technical Composition, where applicable. Minimum grade of "C" in each course.)
9. ACT scores on file in the Testing Center.
10. Demonstrated moral, ethical, and social behavior commensurate with standards of the school and community-at-large.
11. Recommendation by College Admissions Interview Committee.

Transfer students and graduate students seeking initial certification must apply immediately 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. Transfer or substitution of education courses shall be approved by the Teacher Education Office, 101 Ginger Hall.

Education courses completed more than five years prior to readmission in a provisional certification program shall be reviewed for program needs or deficiencies. The review shall be conducted by the Department of Education. Readmission to provisional certification programs is contingent upon fulfilling current teacher education program admission requirements.

Students not attaining the minimum CTBS score(s) must complete an appropriate tutoring program in the Learning Lab with written permission from the Learning Lab required for retesting. Applicants may take the CTBS once each semester for a maximum of three times.

Permission to register for restricted courses may be given by the Teacher Education Office for one semester pending completion of admission requirements.

Retention in the teacher education program is dependent upon the maintenance of the levels of performance required for admission. Any student denied admission to, or suspended from, the teacher education program may reapply for admission once each semester through the coordinator of professional laboratory experiences.

#### Admission Procedures

Step 1—Enroll in Foundations of Education (EDF 207—3 hours).

- A. Complete Comprehensive Test of Basic Skills in Testing Center, 501 Ginger Hall.
- B. File ACT scores in Testing Center.
- C. Complete assigned pre-student teaching experiences in a public school.

Step 2—Enroll in Human Growth and Development (EDF 211—3 hours).

- A. Complete formal application for admission to teacher education program.
- B. Obtain three recommendations from instructors familiar with applicant's qualifications.
- C. Complete speech, hearing, and vision screening.
- D. Obtain unofficial copy of transcript from the Office of Registrar to accompany completed application.

Step 3—The student takes the completed application to the chairman of the Admissions Interview Committee of their



college and makes arrangements for an individual interview. Step 4—The Admissions Interview Committee chairman will return all materials to the Teacher Education Office, 101 Ginger Hall, for final review by the university Teacher Education Council.

### Courses for Which Admission to the Teacher Education Program is a Prerequisite

AGR 580—Methods of Teaching Vocational Agriculture  
 AGR 582—Adult and Young Farmer Education  
 AGR 584—Teaching Vocational Agriculture  
 AGR 586—Planning Programs in Vocational Agriculture  
 AGR 588—Curriculum Development and Content Selections  
 AGR 592—Supervision in Agriculture  
 ART 300—Elementary Materials and Methods  
 ART 321—Materials and Methods of Secondary Art  
 BSED 375—Teaching Typewriting and Office Practice  
 BSED 376—Teaching Shorthand and Transcription  
 BSED 475—Teaching Accounting and Basic Business  
 EDEC 529—Practicum in Early Childhood Education  
 EDEL 321—Teaching of Arithmetic  
 EDEL 322—Teaching Social Studies in the Elementary School  
 EDEL 323—Language Arts for the Elementary School  
 EDEL 333—Fundamentals of Elementary Education  
 EDEL 336—Foundations of Reading  
 EDEL 337—Reading Strategies for the Elementary Teacher  
 EDEL 410—Human Growth and Development II  
 EDEL 425—Supervised Teaching Practicum (Elementary)  
 EDEL 427—Professional Semester (Elementary)  
 EDSE 312—Teaching Skills and Media  
 EDSE 415—Teacher in Today's Schools  
 EDSE 416—Student Teaching  
 EDSE 576—Reading in the Secondary School  
 EDSP 332—Teaching the Exceptional Student  
 EDSP 435—Supervised Teaching Practicum (LBD)  
 EDSP 436—Supervised Teaching Practicum (TMH)  
 ENG 500—Studies in English for Teachers  
 ENG 502—Non-Print Literary Materials for Teachers  
 FRN 405—Linguistics and Language Teaching  
 GER 405—Linguistics and Language Teaching  
 HEC 470—Methods of Teaching Vocational Home Economics  
 HEC 573—Curriculum Development in Home Economics  
 HIS 375—The Teaching of Social Studies  
 HLTH 300—Health in the Elementary School  
 HLTH 304—Health in the Secondary School  
 IET 390—Principles of Industrial Education  
 IET 392—Technical Curriculum and Media Development  
 IET 393—Methods in Vocational Industrial Education  
 IET 394—Student Teaching in Vocational Industrial Education  
 IET 475—Teaching Industrial Arts  
 IET 478—Supervised Teaching Practicum in Industrial Education—Orientation and Exploration Levels  
 MATH 373—Principles and Techniques of Mathematics  
 MUSE 325—Materials and Methods for Elementary Grades  
 MUSE 375—Vocal Materials and Methods  
 MUSE 376—Instrumental Materials and Methods  
 PHED 300—Physical Education in the Elementary School  
 PHED 303—Physical Education in the Secondary School  
 PHYS 374—Physics for Secondary Teachers  
 RUS 405—Linguistics and Language Teaching  
 SCI 490—Science for the Elementary Teacher  
 SCI 591—Science for the Middle School Teacher  
 SCI 592—Science for the Secondary Teacher  
 SPA 405—Linguistics and Language Teaching

## Professional Laboratory Experiences

Application for student teaching practicums must be filed early in the semester immediately preceding the semester in which the student expects to enroll in the professional semester. Student teaching application forms are obtained from the coordinator of professional laboratory experiences, Room 101, Ginger Hall. To be eligible for the professional semester, the student must have completed the following requirements:

1. Admission to and good standing in teacher education program.

2. Completion of prerequisite courses in sequence of professional education. (Secondary certification program—EDF 207, 211, 311, EDSE 312, and EDSP 332. Elementary certification program—EDF 207 and 211, EDEL 301, 321, 322, 323, 336 or 337, EDSP 230. LBD and TMH certification program—elementary education requirements plus EDSP 231 (TMH only), 350, 537 or 547, 550, 551, 553, 555 or 556, and 557.)
3. Successfully completed pre-student teaching laboratory experiences associated with courses in the professional education sequence. Transfer or substitution of required education courses is dependent upon applicant completing appropriate pre-laboratory experiences. Documentation is required.
4. Present minimum grade-point standing of 2.50 on a 4.0 scale on courses completed at Morehead State University.
5. Present minimum grade-point standing of 2.5 on 4.0 scale on all course work completed in area of concentration, major(s), and minor(s).
6. Have completed a minimum of 90 semester hours.
7. Present unofficial copy of check sheet depicting approved major for teacher certification. (Psychology and sociology majors must also present a teaching minor.)
8. Completed 75 percent of course requirements in area of concentration or major teaching field (to include required methods courses.)
9. Have a minimum of one semester residence at Morehead State University.
10. Must have a satisfactory recommendation of the teacher education committee of the college in which the student is enrolled regarding personal, social, and ethical fitness for teaching.
11. Must have approval of university Teacher Education Council.
12. Must have teaching minor completed in order to student teach in that field.
13. Must successfully complete the National Teachers Examination. Expense for this examination is to be borne by the student.

Courses for which application must be made with coordinator of professional laboratory experiences one semester in advance include:

AGR 584—Teaching Vocational Agriculture  
 EDEL 425—Supervised Teaching Practicum (Elementary)  
 EDEL 427—Professional Semester—Elementary  
 EDEC 529—Practicum in Early Childhood Education  
 EDSE 416—Student Teaching  
 EDSP 435—Supervised Teaching Practicum (LBD)  
 EDSP 436—Supervised Teaching Practicum (TMH)  
 EDSP 675—Practicum in Special Education  
 EDGC 669—Practicum in Guidance and Counseling  
 IET 478—Supervised Teaching Practicum in Industrial Education—Orientation and Exploration Levels  
 REC 290—Field Experience I  
 REC 490—Field Experience II  
 REC 477—Recreation Internship

### Recommendation for Certification

Regulations of the Kentucky Department of Education stipulate that the applicant for a teacher's certificate must be recommended by the institution offering the teacher preparation program. The dean, College of Professional Studies, is the official designated to recommend for certification graduates of Morehead State University. Recommendation for provisional certification will be limited to those students completing their professional semester at Morehead State University.

Application for the appropriate certificate should be completed early in the semester prior to graduation. Application forms may be obtained in the Office of the Registrar, Howell-McDowell Administration Building.

**Secondary Education**

The primary role of secondary education is to serve various schools of the university by offering a professional education curriculum leading to certification of teachers for secondary schools. Students should consult with their advisors in their academic majors for additional program requirements.

**Requirements for Certification in  
Secondary Education**

	Sem. Hrs
PROFESSIONAL EDUCATION COURSES.....	24
EDF 207—Foundations of Education .....	3
EDF 211—Human Growth and Development .....	3
EDF 311—Learning Theories in the Classroom .....	3
EDSE 312—Teaching Skills and Media .....	3
EDSP 332—Teaching the Exceptional Student .....	2
PROFESSIONAL SEMESTER .....	15
EDSE 415—Teacher in Today's Schools .....	3
EDSE 416—Student Teaching .....	12

## Accounting

(606) 783-2152, 783-2174

222 Combs Building

Department of Business and Economics

College of Professional Studies

Faculty—J. Alcorn, J. Graham, J. Osborne, G. Van Meter, K. Williams

## Bachelor of Business Administration

### Accounting Option

#### General Education Requirements

The following specific courses must be included in the 42 hour general education component (see general education requirements)

	Sem. Hrs.
SPCH 370—Business and Professional Speech	3
MATH 160—Mathematics for Business and Economics	3
MATH 354—Business Statistics	3
ECON 201—Principles of Economics I	3
ECON 202—Principles of Economics II	3

#### Core Requirements

	Sem. Hrs.
ACCT 281—Principles of Accounting I	3
ACCT 282—Principles of Accounting II	3
DATA 201—Introduction to Computers	3
ECON 350—Microeconomic Theory	3
FIN 360—Business Finance	3
MKT 304—Marketing	3
MNGT 261—The Legal Environment of Business Organizations	3
MNGT 301—Principles of Management	3
MNGT 306—Production Management	3
MNGT 472—Business Policies and Problems	3
OADM 321—Business Communications	3
	33

#### Program Requirements

	Sem. Hrs.
BBA Core	33
ACCT 384—Intermediate Accounting I	3
ACCT 385—Intermediate Accounting II	3
ACCT 387—Income Tax	3
ACCT 390—Cost Accounting I	3
ACCT 483—Auditing	3
Approved accounting electives	6
	54

## Bachelor of Science

### Minor

Students selecting programs with accounting minors should first consult with advisors in their major areas.

#### Course Requirements

	Sem. Hrs.
ACCT 281—Principles of Accounting I	3
ACCT 282—Principles of Accounting II	3
ACCT 384—Intermediate Accounting I	3
ACCT 385—Intermediate Accounting II	3
ACCT 390—Cost Accounting I	3
Approved accounting electives	6
	21

## Agriculture

(606) 783-2662

332 Reed Hall

Department of Agriculture and Natural Resources

College of Applied Sciences and Technology

Faculty—A. Boston, J. Bendixen, G. Carswell, C. Derrickson, J. Martin, T. McMillan, M. Norris, B. Rogers, J. Willard, R. Wolfe.

## Bachelor of Science

### Area of Concentration

The student must complete a minimum of 54 semester hours in the area of concentration in agriculture, of which 26 semester hours are the following core agriculture course requirements and 28 semester hours are approved course electives selected from within one of the following six options: agriculture business, agriculture economics, agronomy, animal science, general agriculture, or horticulture. General course electives may also be taken in agriculture and related areas by students wishing greater depth in an agriculture field.

#### Core Requirements

	Sem. Hrs.
Required Courses in Agriculture	26
AGR 101—General Agriculture	1
AGR 133—Farm Livestock Production	3
AGR 180—Elementary Field Crops	3
AGR 203—Agriculture Economics	3
AGR 211—Soils	3
AGR 215—Horticulture	3
AGR 251—Introduction to Agriculture Mechanics	3
AGR 301—Farm Management	3
AGR 316—Feeds and Feeding	3
AGR 471—Seminar	1
Additional Course Requirements	8
CHEM 101—Survey of General Chemistry	3
CHEM 101A—Survey of General Chemistry Laboratory	1
CHEM 201—Survey of Organic Chemistry	3
CHEM 201A—Survey of Organic Chemistry Laboratory	1

### Agriculture Business Option

Students must complete the required core courses in the area of concentration in agriculture, ACCT 281—Principles of Accounting I (three semester hours), and 28 semester hours in agriculture and business, including a minimum of nine hours in business. Electives must be selected from at least three of the following groups:

	Sem. Hrs.
Group I	
AGR 302—Agriculture Finance	3
FIN 252—Mathematics of Finance	3
FIN 560—Financial Markets	3
FIN 360—Business Finance	3
FIN 264—Personal Finance	3
Group II	
OADM 363—Office Management	3
MNGT 301—Principles of Management	3
MNGT 311—Personnel Management	3
Group III	
MKT 350—Salesmanship	3
MKT 450—Consumer Behavior	3
MKT 451—Retail Merchandising	3
MKT 555—Advertising	3

Group IV	
MNGT 261—Business Law I	3
MNGT 461—Business Law II	3
Group V	
AGR 303—Land Economics	3
ACCT 282—Principles of Accounting II	3
FIN 407—Principles of Insurance	3
ACCT 387—Income Tax	3

### Agriculture Economics Option

Students who select this option must complete the required courses in the area of concentration in agriculture and 28 semester hours of requirements and electives in agriculture and economics. Requirements and electives are listed below:

	Sem. Hrs.
Required courses	9
ECON 202—Principles of Economics II	3
ECON 350—Microeconomics Theory	3
ECON 551—Macroeconomics Theory	3
Approved electives	
AGR 302—Agriculture Finance	3
AGR 303—Land Economics	3
AGR 386—Introductory Agricultural Policy	3
ECON 510—History and Economic Thought	3
FIN 342—Money and Banking	3
FIN 343—Investments	3
ECON 547—International Economics	3
MATH 354—Business Statistics	3

### Agronomy Option

Students must complete the required core courses in the area of concentration in agriculture and 28 semester hours of approved electives selected from the following list:

	Sem. Hrs.
AGR 205—Farm Records	3
AGR 303—Land Economics	3
AGR 308—Weed Control	3
AGR 311—Soil Conservation	3
AGR 312—Soil Fertility and Fertilizers	3
AGR 350—Farm Power and Machinery Management	3
AGR 384—Forage Crops	3
BIOL 215—General Botany	4
BIOL 334—Entomology	3
BIOL 513—Plant Physiology	3
BIOL 514—Plant Pathology	3
BIOL 550—Plant Anatomy	3
CHEM 326, 326A—Organic Chemistry I and Laboratory	4
CHEM 327, 327A—Organic Chemistry II and Laboratory	4

### Animal Science Option

Students complete the required core courses in the area of concentration in agriculture and 28 semester hours of approved electives selected from the following list:

	Sem. Hrs.
AGR 108—Elementary Horsemanship (Stockseat)	1
AGR 109—Elementary Horsemanship (Saddle Seat)	1
AGR 110—Elementary Horsemanship (Hunt Seat)	1
AGR 118—Intermediate Horsemanship (Stockseat)	1
AGR 119—Intermediate Horsemanship (Saddle Seat)	1
AGR 120—Intermediate Horsemanship (Hunt Seat)	1
AGR 121—Equitation	3
AGR 231—Livestock Judging	3
AGR 242—Light Horse Husbandry	3
AGR 245—Horseshoeing	3
AGR 330—Livestock Improvement	3
AGR 331—Advanced Livestock Judging	3
AGR 332—Advanced Horsemanship	3
AGR 335—Equitation Teaching	3
AGR 336—Dairy Production	3
AGR 337—Poultry Production	3
AGR 342—Horse Production	3
AGR 343—Beef Production	3
AGR 344—Swine Production	3
AGR 345—Sheep Production	3
AGR 480—Equine Breeding and Reproduction	3
AGR 515—Animal Nutrition	3

VET 105—Anatomy of Domestic Animals	3
VET 206—Physiology of Domestic Animals	3
VET 210—Parasitology and Entomology	3

### General Agriculture Option

Students must complete the required core courses in the area of concentration in agriculture and 28 semester hours of approved electives from the list below. The minimum number of semester hours is shown for each of five fields.

	Sem. Hrs.
(1)—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—Introductory Agriculture Policy	3
(2)—Agricultural mechanics	3
AGR 350—Farm Power and Machinery Management	3
(3)—Animal science	6
AGR 231—Livestock Judging	3
AGR 242—Light Horse Husbandry	3
AGR 330—Livestock Improvement	3
AGR 331—Advanced Livestock Judging	3
AGR 336—Dairy Production	3
AGR 337—Poultry Production	3
AGR 342—Horse Production	3
AGR 343—Beef Production	3
AGR 344—Swine Production	3
AGR 515—Animal Nutrition	3
(4)—Plant science	6
AGR 212—Landscape Plants	3
AGR 213—Landscape Gardening	3
AGR 216—Floriculture	2
AGR 308—Weed Control	3
AGR 314—Plant Propagation	3
AGR 315—Fruit Production	3
AGR 317—Floral Design	3
AGR 320—Principles of Vegetable Production	3
AGR 321—Greenhouse Production I	3
AGR 322—Greenhouse Production II	3
AGR 325—Turf Management	3
AGR 326—Nursery Management	3
AGR 327—Advanced Landscape Design	3
AGR 384—Forage Crops	3
(5)—Soil science	3
AGR 311—Soil Conservation	3
AGR 312—Soil Fertility and Fertilizers	3

### Horticulture Option

Students must complete the required core courses in the area of concentration in agriculture and 28 semester hours of approved electives selected from the following list:

	Sem. Hrs.
AGR 212—Landscape Plants	3
AGR 213—Landscape Gardening	3
AGR 216—Floriculture	2
AGR 308—Weed Control	3
AGR 312—Soil Fertility and Fertilizers	3
AGR 314—Plant Propagation	3
AGR 315—Fruit Production	3
AGR 317—Floral Design	3
AGR 320—Principles of Vegetable Production	3
AGR 321—Greenhouse Production I	3
AGR 322—Greenhouse Production II	3
AGR 325—Turf Management	3
AGR 326—Nursery Management	3
AGR 327—Advanced Landscape Design	3
BIOL 215—General Botany	4
BIOL 304—Genetics	3
BIOL 318—Local Flora	3
BIOL 334—Entomology	3
BIOL 513—Plant Physiology	3
BIOL 514—Plant Pathology	3
BIOL 550—Plant Anatomy	3
BIOL 555—Plant Morphology	3
CHEM 326, 326A—Organic Chemistry I and Laboratory	4
CHEM 327, 327A—Organic Chemistry II and Laboratory	4
HEC 103—Interior Graphics	3



## Major

The student must complete a minimum of the core course requirements listed under the area of concentration in agriculture, five 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.

## Minor

The student must complete a minimum of the 17 semester hours of agriculture courses and 4 semester hours of required additional courses in the following list, plus 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.

	Sem. Hrs.
Required courses in agriculture	17
AGR 101—General Agriculture	1
AGR 133—Farm Livestock Production	3
AGR 180—Elementary Field Crops	3
AGR 203—Agricultural Economics	3
AGR 211—Soils	3
AGR 215—Horticulture	3
AGR 471—Seminar	1
Approved agriculture electives	4
Additional course requirements	4
CHEM 101—Survey of General Chemistry	3
CHEM 101A—Survey of General Chemistry Laboratory	1

## Agriculture Business Technology

(606) 783-2662

332 Reed Hall

Department of Agriculture and Natural Resources  
College of Applied Sciences and Technology

Faculty—A. Boston, J. Bendixen, J. Martin, T. McMillan, M. Norris, B. Rogers, J. Willard, R. Wolfe

## Associate of Applied Science (Two-Year Program)

The student must complete a minimum of the 50 semester hours of required courses in the following list. Additional course electives may also be taken in agriculture and related areas by students wishing greater depth in agriculture business.

### Core Requirements

	Sem. Hrs.
Required courses	50
AGR 133—Farm Livestock Production	3
AGR 180—Elementary Field Crops	3
AGR 203—Agricultural Economics	3
AGR 302—Agriculture Finance	3
AGR 305—Marketing of Farm Products	3
AGR 251—Introduction to Agriculture Mechanics	3
ECON 101—Introduction to American Economy	3
OADM 111—Beginning Typewriting	3
DATA 201—Introduction to Computers	3
FIN 252—Mathematics of Finance	3
MKT 350—Salesmanship	3
ACCT 281—Principles of Accounting I	3
ENG 101—Composition I	3

CHEM 101—Survey of General Chemistry	3
CHEM 101A—Survey of General Chemistry Laboratory	1
ENG 192—Technical Composition	3
BIOL 150—Introduction to Plant Science	3
Approved electives in option	15
(see available options below)	

### Animal Science Option

AGR 231—Livestock Judging	3
AGR 316—Feeds and Feeding	3
AGR 330—Livestock Improvement	3
AGR 331—Advanced Livestock Judging	3
AGR 336—Dairy Production	3
AGR 337—Poultry Production	3
AGR 343—Beef Production	3
AGR 344—Swine Production	3
AGR 345—Sheep Production	3

### Crop Science Option

AGR 207—Land Conservation and Forest Management	3
AGR 211—Soils	3
AGR 308—Weed Control	3
AGR 311—Soil Conservation	3
AGR 312—Soil Fertility and Fertilizers	3
AGR 384—Forage Crops	3

### Horticulture Option

AGR 212—Landscape Plants	3
AGR 213—Landscape Gardening	3
AGR 215—Horticulture	3
AGR 216—Floriculture	3
AGR 314—Plant Propagation	3
AGR 315—Fruit Production	3
AGR 317—Floral Design	3
AGR 320—Principles of Vegetable Production	3
AGR 325—Turf Management	3

### Agriculture Management Option

AGR 205—Farm Records	3
AGR 301—Farm Management	3
AGR 303—Land Economics	3
AGR 385—Agribusiness Management	3
AGR 386—Introductory Agricultural Policy	3

## Art

606-783-2193

211 Claypool-Young Art Building

Department of Art

College of Arts and Sciences

Faculty—D. Bartlett, B. Booth, D. Ferrell, R. Franzini, R. Howard, R. Jones, J. Sartor, T. Sternal (head), S. Tirone

## Bachelor of Arts

The Department of Art offers undergraduate and graduate programs in art education and studio art. Courses on the beginning, intermediate, and advanced levels are available in art education, art history, ceramics, commercial art, crafts, drawing, figure drawing, painting, photography, printmaking, and sculpture.

### Art Major\*

	Sem. Hrs.
ART 101—Two Dimensional Foundation	3
ART 102—Three Dimensional Foundation	3
ART 103—Color Foundation	3
ART 263—Introduction to Ancient Art	3
ART 264—Introduction to Medieval and Renaissance Art	3

ART 283—Basic Black and White Photography .....	3
OR	
ART 351—Intaglio Printmaking .....	
OR	
ART 352—Lithographic Printmaking .....	
ART 245—Ceramics I .....	3
OR	
ART 294—Sculpture I .....	
ART history (300 or higher elective) .....	3
Three elective art courses (could include any studio, art education, or art history courses as choices) .....	9
Art major (minimum) credits .....	36

### Area of Concentration beyond the Major\*

Six additional elective art courses (could include all studio, commercial art, art history, art education, internship courses as choices) .....	18
Art concentration (minimum) credits .....	54

### Studio Art Minor\*

ART 101—Two Dimensional Foundation .....	3
ART 102—Three Dimensional Foundation .....	3
ART 103—Color Foundation .....	3
ART 263—Introduction to Ancient Art .....	3
ART 264—Introduction to Medieval and Renaissance Art .....	3
ART 283—Basic Black and White Photography .....	3
OR	
ART 351—Intaglio Printmaking .....	
OR	
ART 352—Lithographic Printmaking .....	
ART 245—Ceramics I .....	3
OR	
ART 294—Sculpture I .....	
ART elective .....	3
	24

### Art History Minor\*

ART 101—Two Dimensional Foundation .....	3
ART 103—Color Foundation .....	3
ART 263—Introduction to Ancient Art .....	3
ART 264—Introduction to Medieval and Renaissance Art .....	3
Art history 300 or above .....	6
Art elective course .....	3
	21

### Art Education Minor\*

ART 101—Two Dimensional Foundation .....	3
ART 102—Three Dimensional Foundation .....	3
ART 263—Introduction to Ancient Art .....	3
ART 264—Introduction to Medieval and Renaissance Art .....	3
ART 283—Basic Black and White Photography .....	3
OR	
ART 351—Intaglio Printmaking .....	
OR	
ART 352—Lithographic Printmaking .....	
ART 245—Ceramics I .....	3
OR	
ART 294—Sculpture I .....	
ART 300—Elementary Materials and Methods .....	3
ART 321—Secondary Materials and Methods .....	3
ART elective courses .....	6
	30

## Athletic Training

(606) 783-2180

201 Laughlin Health Building

Department of Health, Physical Education, and Recreation

College of Professional Studies

Faculty—E. Bentley (head), B. Crager, E. Lucke

## Minor

	Sem. Hrs.
HLTH 203—Safety and First Aid .....	3
PHED 302—Athletic Injuries .....	2
PHED 402—Kinesiology .....	3
PHED 420—Administration of School Athletic Programs .....	3
PHED 207—Training Room Modalities .....	2
PHED 208—Medical Aspects of Athletic Training .....	2
PHED 209—Training Room Practice .....	2
PHED 210—Diagnostic Techniques of Athletic Injuries .....	2
PHED 432—Physiology of Exercise .....	3
HLTH 320—Elements of Nutrition .....	3
	25

## Basic Business

(606) 783-2154, 783-2174

320 Combs Building

Department of Business and Economics

College of Professional Studies

Faculty—R. Bernardi, S. Hunt, S. Luckey, H. Northcutt, G. Ousley

## Bachelor of Business Administration

### Basic Business Option

Students wishing to teach in the non-secretarial programs in business on the secondary level should select the basic business option. This curriculum will satisfy certification requirements for teaching accounting and basic business courses. In addition, an endorsement for teaching advanced data processing may be added to a high school certificate upon completion of a total of 9 semester hours credit in data processing.

### General Education Requirements

The following specific courses must be included in the 42 hour general education component (see general education requirements)

	Sem. Hrs.
SPCH 370—Business and Professional Speech .....	3
MATH 160—Mathematics for Business and Economics .....	3
MATH 354—Business Statistics .....	3
ECON 201—Principles of Economics I .....	3
ECON 202—Principles of Economics II .....	3

### Core for Teacher Education Programs

	Sem. Hrs.
ACCT 281—Principles of Accounting I .....	3
ACCT 282—Principles of Accounting II .....	3
DATA 201—Introduction to Computers .....	3
FIN 360—Business Finance .....	3
MKT 304—Marketing .....	3
MNGT 261—The Legal Environment of Business Organizations .....	3
MNGT 301—Principles of Management .....	3
OADM 136—Business Calculations .....	3
OADM 321—Business Communications .....	3
	27

### Program Requirements

	Sem. Hrs.
BBA—Teacher education core .....	27
ACCT—elective .....	3
FIN 264—Personal Finance .....	3
OADM 112—Intermediate Typewriting .....	3
OADM 190—Office Accounting .....	3
OADM 210—Word Processing I .....	3
OADM 220—Word Processing II .....	3
OADM 340—Simulated Office Education .....	3
OADM 363—Office Management .....	5
OADM 475—Methods of Teaching Business Subjects .....	5
	56

## Bachelor of Science

### Minor

For students who are majoring in another discipline and who do not desire teacher certification in business education.

### Course Requirements

	Sem. Hrs.
DATA 201—Introduction to Computers .....	3
OADM—Typewriting .....	3
OADM 136—Business Calculations .....	3
OADM 190—Office Accounting .....	3
OADM 321—Business Communications .....	3
OADM 363—Office Management .....	3
Approved elective .....	3
	21

## Biology

Teaching, (606) 783-2947 (H. Setser)  
Non-Teaching, (606) 783-2944 (J. Howell)  
102 Lappin Hall

Department of Biological and Environmental Sciences  
College of Arts and Sciences

Faculty—D. Brumagen, F. Busroe, G. DeMoss, R. Eversole, J. Howell, D. Magrane, D. McNeely, L. Meade, T. Pass, M. Pryor, D. Saxon, H. Setser, C. Van Bell.

The Department of Biological and Environmental Sciences offers a major in biology and an area in secondary science

teaching with a biology emphasis (see the curriculum outlined at the end of the Science Education section). The area is designed for teaching only, while the biology major can be taken for teaching or non-teaching purposes. A teaching minor in biology is possible for those students with a teaching major in another science. Requirements for the non-teaching biology major and the teaching major are identical, except that teaching majors take the professional semester (student teaching) and other preparatory courses instead of various elective courses.

## Bachelor of Science

### Major (Teaching or Non-Teaching)

	Sem. Hrs.
BIOL 100—Orientation to Biological and Environmental Sciences Programs 1 .....	2
BIOL 206—Biological Etymology .....	2
BIOL 208—Invertebrate Zoology .....	3
BIOL 209—Vertebrate Zoology .....	3
BIOL 215—General Botany .....	4
BIOL 304—Genetics .....	3
BIOL 317—Principles of Microbiology .....	4
BIOL 337—Comparative Anatomy .....	4
OR .....	
BIOL 555—Plant Morphology .....	3
BIOL 380—Cell Biology .....	3
BIOL 471—Seminar in Biological Science .....	1
Biology field course .....	3
*Biology electives .....	6
Total hours for a biology major .....	36
*Three hours of electives from the Gulf Coast Research Laboratory (GCRL), Ocean Springs, Mississippi, may apply towards the biology major. For a complete selection of courses, see the listing outlined under "Marine Science."	

### Supplemental Requirements

	Sem. Hrs.
CHEM 111—Principles of Chemistry I .....	3
CHEM 111A—Principles of Chemistry I Lab .....	1
CHEM 112—Principles of Chemistry II .....	3
CHEM 112A—Principles of Chemistry II Lab .....	1
PHYS 201—Elementary Physics I .....	3
PHYS 201A—Elementary Physics I Lab .....	1
PHYS 202—Elementary Physics II .....	3
PHYS 202A—Elementary Physics II Lab .....	1
*GEOS 410—Geological History of Plants and Animals .....	3
MATH 141—Plane Trigonometry or equivalent .....	3
MATH 152—College Algebra or equivalent .....	3
	25

\*Pre-medical, pre-dental, and other pre-professional students obtaining a major in biology may substitute PHYS 350 (Nuclear Science) for GEOS 410.

### Minor

	Sem. Hrs.
BIOL 206—Biological Etymology .....	2
BIOL 208—Invertebrate Zoology .....	3
BIOL 209—Vertebrate Zoology .....	3
BIOL 215—General Botany .....	4
Approved electives in biology .....	10
Minimum for a minor .....	22

### Supplemental Requirements

	Sem. Hrs.
CHEM 101 or 111—Survey or Principles of Chemistry I .....	3
CHEM 101A or 111A—Survey or Principles of Chemistry I Lab .....	1
CHEM 102 or 112—Survey or Principles of Chemistry II .....	3
CHEM 102A or 112A—Survey or Principles of Chemistry II Lab .....	1
	8

## Broadcast Technology

(606) 783-2013

210 Lloyd Cassity Building

Department of Industrial Education and Technology

College of Applied Sciences and Technology

Faculty—D. Karwatka, M. Roberts

## Associate of Applied Science (Two-Year Program)

### General Education Requirements

The following specific courses must be included in the general education component (see general education requirements).

	Sem. Hrs.
ENG 101—Composition I	3
MATH 135—Problem Solving Techniques	3
ENG 192—Technical Composition	3
MATH 141—Plane Trigonometry	3
ECON 101—Introduction to American Economics	3
	15

### Core Requirements

GCT 103—Technical Drawing I	3
EET 141—Electric Circuits	3
R-TV 151—Introduction to Broadcast Technicians	2
IET—Approved industrial technology elective	2
R-TV 155—Broadcast Performance	3
EET 241—Circuit Analysis	3
EET 338—Radio Operating Practices	1
R-TV 250—Audio Production and Direction	4
EET 245—Digital Electronics	3
R-TV 340—Video Production and Direction I	3
EET 344—Communication Circuits	3
EET 242—Transistors and Semiconductors	3
EET 341—Electrical Drafting and Design	3
EET 444—Communication Systems	3
Approved electronics electives	6
PSY 202—Elementary Physics II	3
MATH 110—Problem Solving Techniques	1
	49

## Chemistry

(606) 783-2914

206 Lappin Hall

Department of Physical Sciences

College of Arts and Sciences

Faculty—H. Cain, H. Hedgecock, R. Hunt, L. Payne

The chemistry program attempts (1) to educate students both in chemical theory and in laboratory techniques to the degree required for professional chemists or to support other career objectives; (2) to prepare students to enter graduate school; (3) to prepare chemistry teachers for the public schools; or (4) to offer supportive courses needed by students in other disciplines.

## Bachelor of Science

### Major

Students who plan to become professional chemists or to attend graduate schools must take the following courses:

	Sem. Hrs.
CHEM 111—Principles of Chemistry I	3
CHEM 111A—Principles of Chemistry I Laboratory	1
CHEM 112—Principles of Chemistry II	3
CHEM 112A—Principles of Chemistry II Laboratory	1
CHEM 223—Quantitative Analysis	4
CHEM 326—Organic Chemistry I	3
CHEM 326A—Organic Chemistry I Lab	1
CHEM 327—Organic Chemistry II	3
CHEM 327A—Organic Chemistry II Lab	1
CHEM 328—Organic Chemistry III	3
CHEM 328A—Organic Chemistry III Lab	2
CHEM 350—Inorganic Chemistry	3
CHEM 441—Physical Chemistry I	1
CHEM 442—Physical Chemistry II	4
CHEM 450—Qualitative Organic Analysis	4
CHEM 460—Instrumental Analysis	4
SCI 471—Seminar	1
	44

### Supplemental Requirements

MATH 175—Analytic Geometry and Calculus I	4
MATH 275—Analytic Geometry and Calculus II	4
MATH 276—Analytic Geometry and Calculus III	4
PHYS 231—Engineering Physics I	4
PHYS 231A—Engineering Physics I Lab	1
PHYS 232—Engineering Physics II	4
PHYS 232A—Engineering Physics II Lab	1
GER 101—Beginning German I	3
GER 102—Beginning German II	3
DATA 202—Computer Programming BASIC	
OR	
DATA 260—Fortran Programming I	3
This curriculum is designed to meet the standards of the American Chemical Society.	

Those who desire teacher certification or wish to major in chemistry for supportive purposes must take the following courses:

	Sem. Hrs.
CHEM 111—Principles of Chemistry I	3
CHEM 111A—Principles of Chemistry I Laboratory	1
CHEM 112—Principles of Chemistry II	3
CHEM 112A—Principles of Chemistry II Laboratory	1
CHEM 223—Quantitative Analysis	4
CHEM 326—Organic Chemistry I	3
CHEM 326A—Organic Chemistry I Laboratory	1
CHEM 441—Physical Chemistry I	3
CHEM—electives approved by advisor	11
SCI 471—Seminar	1
	32

### Minor

	Sem. Hrs.
CHEM 111—Principles of Chemistry I	3
CHEM 111A—Principles of Chemistry I Laboratory	1
CHEM 112—Principles of Chemistry II	3
CHEM 112A—Principles of Chemistry II Laboratory	1
CHEM 223—Quantitative Analysis	4
CHEM 326—Organic Chemistry I	3
CHEM 326A—Organic Chemistry I Laboratory	1
CHEM—electives approved by department head	5



## Clerical Studies

(606) 783-2154, 783-2174

320 Combs Building

Department of Business and Economics

College of Professional Studies

Faculty—R. Bernardi, S. Hunt, S. Luckey, H. Northcutt,  
G. Ousley

## One-Year Certificate

### Course Requirements

	Sem. Hrs.
DATA 201—Introduction to Computers	3
ENG 101—Composition I	3
MNGT 160—Introduction to Business	3
OADM—Typewriting	6
OADM 136—Business Calculations	3
OADM 190—Office Accounting	3
OADM 210—Word Processing I	3
OADM 321—Business Communications	3
OADM 340—Simulated Office Education	3
OR	
OADM 363—Office Management	3
Approved electives	2
	32

## Clothing and Textiles

(606) 783-2966

100 Lloyd Cassity Building

Department of Home Economics

College of Applied Sciences and Technology

Faculty—J. Ellington, C. Flatt, N. Graham, M. Shaner  
(head), B. Woodard

## Bachelor of Science

### Area of Concentration

This curriculum serves to prepare students to enter careers in the retailing or production of apparel and textiles. In addition to the general education requirements, the students take selected courses from home economics, business, and other related fields of study.

	Sem. Hrs.
Required courses in home economics	38
HEC 130—Elementary Foods	3
HEC 141—Basic Clothing Construction	3
HEC 240—Textiles	3
HEC 241—Advanced Clothing Problems	3
HEC 303—Health of the Family	3
HEC 340—Textile Testing	2
HEC 341—Flat Pattern Design	2
OR	
HEC 545—Clothing Design in Draping	3
HEC 344—Historic Costume	3
OR	
HEC 480—Historic Textiles	3
HEC 362—Consumer Education	3
HEC 451—Home Furnishings	3
HEC 453—Marriage and Family Living	3
HEC 471—Seminar	1
HEC 541—Tailoring	3
HEC 542—Social-Psychological Aspects of Clothing	3

Approved electives in option	12
Additional requirements	15
ART 291—Color and Design	3
BIOL 331—Human Anatomy	3
CHEM 101—Survey of General Chemistry	3
CHEM 101A—Survey of General Chemistry Laboratory	1
SCI—science elective	5

### Design Option

ART 101—Drawing I	3
ART 202—Composition and Drawing	3
ART 204—Figure Drawing I	3
ART 241—Crafts I	3
ART 365—Arts of the United States I	3
ART 555—Advanced Art Problems	1-6
HEC 251—Household Equipment or approved elective	3
HEC 343—Textiles for Interiors	3
HEC 346—Introduction to the Apparel Industry	3
HEC 351—Housing	3
HEC 557—Interior Decoration Projects	3
GCT 102—Graphic Arts I	3
GCT 103—Technical Drawing I	3
GCT 305—Housing	3

### Fashion Merchandising Option

HEC 343—Textiles for Interiors	3
HEC 346—Introduction to the Apparel Industry	3
ECON 201—Principles of Economics I	3
MKT 304—Marketing	3
MKT 350—Salesmanship	3
MKT 450—Consumer Behavior	3
MKT 451—Retail Merchandising	3
MNGT 160—Introduction to Business	3
MNGT 461—Business Law I	3
OADM 136—Business Calculations	3
OADM 190—Office Accounting	3
OADM 111—Beginning Typewriting	3
OADM 112—Intermediate Typewriting	3
OADM 321—Business Communications	3

### Textile Technology Option

HEC 343—Textiles for Interiors	3
HEC 543—Advanced Textile Testing	3
HEC 544—Dyes and Finishes	3
Approved science electives	3

## Communications

(606) 783-2184

109 Breckinridge Hall

Department of Communications

College of Arts and Sciences

Faculty—J. Wilson (head)

## Bachelor of Arts

### Area of Concentration

### Core Requirements

	Sem. Hrs.
JOUR 110—Introduction to Mass Communications	3
JOUR 201—News Writing and Reporting	3
SPCH 100—Voice and Articulation	3
SPCH 370—Business and Professional Speech	3
R-TV 240—Writing for Broadcast	3
THEA 100—Fundamentals of the Theatre	3
THEA 200—Introduction to Dramatic Literature	3
	24

**Journalism Emphasis (Non-Teaching)**

	Sem. Hrs.
JOUR 204—Copyreading and Editing	3
JOUR 285—Introduction to Photojournalism	3
JOUR 301—Advanced News Writing and Reporting	3
JOUR 364—Feature Writing	3
OR	
JOUR 383—Principles of Advertising	3
JOUR electives	8
COMM-electives from R-TV, SPCH, THEA	4
	24

**Radio-Television Emphasis (Non-Teaching)**

R-TV 250—Audio Production Direction	4
R-TV 340—Video Production and Direction I	3
R-TV 344—Broadcast News and Public Affairs	3
OR	
R-TV 450—Broadcast Management	3
R-TV electives	11
COMM—electives from JOUR, SPCH, THEA	3
	24

**Speech Emphasis (Non-Teaching)**

SPCH 110—Basic Speech	3
SPCH 200—Oral Interpretation	3
SPCH 382—Argumentation and Debate	3
SPCH 383—Group Discussion	3
SPCH 385—Persuasion	3
SPCH electives	6
COMM electives from JOUR, R-TV, THEA	6
	27

**Theatre Emphasis (Non-Teaching)**

THEA 210—Technical Production	3
THEA 284—Acting Techniques	3
THEA 320—Scenographic and Drawing Techniques	3
THEA 322—Scene Design	3
THEA 354—Theatre History	3
THEA 380—Play Directing	3
COMM electives from JOUR, R-TV, SPCH	4
	25

**Minor in Organization Communication**

	Sem. Hrs.
SPCH 310—Interpersonal Communication	3
SPCH 370—Business and Professional Speech	3
SPCH 567—Organizational Communication	3
ENG—option—one of the following courses	3
ENG 192—Technical Composition	
ENG 591—Technical Writing I	
ENG 592—Technical Writing II	
Electives chosen from the following list	9
	21
SPCH 210—Listening	3
SPCH 315—Verbal Survival	3
SPCH 383—Group Discussion	3
SPCH 385—Persuasion	3
SPCH 510—Advanced Public Speaking	3
SPCH 571—Interviewing	3
OADM 210—Word Processing I	3
OADM 321—Business Communications	3
JOUR 364—Feature Writing	3
ENG—technical writing courses not taken to meet the above requirements	3-6

**Construction Technology**

(606) 783-2013

210 Lloyd Cassity Building

Department of Industrial Education and Technology  
College of Applied Sciences and Technology

Faculty—L. McWard

**Associate of Applied Science  
(Two-Year Program)****General Education Requirements**

The following specific courses must be included in the general education component (see general education requirements):

	Sem. Hrs.
ENG 101—Composition I	3
ECON 101—Introduction to American Economy	3
MATH 135—Mathematics for Technical Students	3
ENG 192—Technical Composition	3
SPCH 370—Business and Professional Speech	3
	15

**Core Requirements**

	Sem. Hrs.
CON 101—Introduction to Construction Technology	3
CON 201—Properties of Construction Materials	3
CON 102—Surveying I	3
GCT 103—Technical Drawing I	3
CON 103—Materials Testing	3
EET 240—Residential Wiring	3
CON 204—Codes, Contracts and Specifications	3
Approved technical elective	2
IET 111—Basic Woods	3
CON 203—Construction Methods and Equipment	3
CON 104—Surveying II	3
CON 202—Structural Design	3
CGT 305—Housing	3
CON 205—Estimating Construction Costs	3
CON 206—Construction Management	3
IET 320—Supervisory Practices	3
MATH 110—Problem Solving Techniques	1
	49

**Corrections**

(606) 783-2090

350 Rader Hall

Department of Sociology, Social Work and Corrections  
College of Professional Studies

Faculty—R. Bylund, L. Crosthwaite, T. Marshall, T. Munson, M. Patton, E. Reeves, D. Rudy, J. Seelig, A. Wheeler, M. Whitson, P. Whitson

**Bachelor of Arts****Area of Concentration**

	Sem. Hrs.
COR 201—Sociology of Corrections	3
COR 320—Probation and Parole	3

COR 420—Seminar in Criminal Behavior	3
COR 450—Research Methodology	3
COR 510—Law of Corrections	3
COR 515—Correctional Counseling	3
COR 590—Practicum in Corrections	6
COR—advanced electives	12
SOC 101—General Sociology	3
SOC 203—Contemporary Social Problems	3
SOC 354—The Individual and Society	3
SOC 374—American Minority Relations	3
SOC 405—Sociological Theory	3
SOC—advanced electives	6
GOVT 540—Public Administration	3
SWK 535—Group Dynamics	3
ENG 591 or 592—Technical Writing	3
PSY 154—Introduction to Psychology	3
PSY 590—Abnormal Psychology	3
General requirements and electives	56
	128

## Minor

	Sem. Hrs.
COR 201—Sociology of Corrections	3
COR 320—Probation and Parole	3
COR 420—Seminar in Criminal Behavior	3
Advanced electives in corrections	12
	21

## Associate of Applied Arts (Two-Year Program)

### Program Requirements

	Sem. Hrs.
COR 201—Sociology of Corrections	3
COR 320—Probation and Parole	3
COR 390—Field Experience in Corrections	3
COR 420—Seminar in Criminal Behavior	3
Advanced corrections electives	9
SOC 101—General Sociology	3
SOC 203—Contemporary Social Problems	3
SOC 354—The Individual and Society	3
SOC 374—American Minority Relations	3
SWK 210—Orientation to Social Welfare	4
SWK 315—Child Welfare Services	3
GOVT 380—American Courts and Civil Rights	3
PSY 154—Introduction to Psychology	3
ENG 101—Composition I	3
ENG 102—Composition II	3
ENG 192—Technical Composition	3
MATH 131—General Mathematics	3
Approved electives	7
	65

	Sem. Hrs.
SPCH 370—Business and Professional Speech	3
MATH 160—Mathematics for Business and Economics	3
MATH 354—Business Statistics	3
ECON 201—Principles of Economics I	3
ECON 202—Principles of Economics II	3

### Core Requirements

ACCT 281—Principles of Accounting I	3
ACCT 282—Principles of Accounting II	3
DATA 201—Introduction to Computers	3
ECON 350—Microeconomic Theory	3
FIN 360—Business Finance	3
MKT 304—Marketing	3
MNGT 261—The Legal Environment of Business Organizations	3
MNGT 301—Principles of Management	3
MNGT 306—Production Management	3
MNGT 472—Business Policies and Problems	3
OADM 321—Business Communications	3
	33

### Course Requirements

	Sem. Hrs.
BBA Core	33
DATA 202—Computer Programming BASIC	3
DATA 210—Computer Programming ASSEMBLER I	3
DATA 215—Computer Programming COBOL I	3
DATA 260—FORTRAN Programming I	3
DATA 315—Computer Programming COBOL II	3
DATA 320—Computerized Business Systems	3
DATA 405—Systems Analysis and Design	3
	54

## Minor

Students selecting a data processing minor should first consult with advisors in their major areas.

	Sem. Hrs.
DATA 201—Introduction to Computers	3
DATA 202—Computer Programming BASIC	
OR	
DATA 260—FORTRAN Programming I	3
DATA 210—Computer Programming ASSEMBLER I	3
DATA 215—Computer Programming COBOL I	3
DATA 315—Computer Programming COBOL II	3
DATA 320—Computerized Business Systems	3
DATA 405—Systems Analysis and Design	3
DATA elective	3
	24

## Associate of Applied Business (Two-Year Program)

### Course Requirements

	Sem. Hrs.
ACCT 281—Principles of Accounting I	3
ACCT 282—Principles of Accounting II	3
DATA 201—Introduction to Computers	3
DATA 202—Computer Programming BASIC	3
DATA 210—Computer Programming ASSEMBLER I	3
DATA 215—Computer Programming COBOL I	3
DATA 260—FORTRAN Programming I	3
DATA 315—Computer Programming COBOL II	3
DATA 320—Computerized Business Systems	3
DATA 405—Systems Analysis and Design	3
ECON 201—Principles of Economics I	3
ENG 101—Composition I	3
ENG 102—Composition II	3
FIN 252—Mathematics of Finance	3
MATH 160—Mathematics for Business and Economics	4
MNGT 160—Introduction to Business	3
OADM 321—Business Communications	3
SPCH 370—Business and Professional Speech	3
Approved electives	9
	64

## Data Processing

(606) 783-2163, 783-2174

306 Combs Building

Department of Business and Economics

College of Professional Studies

Faculty—B. Bailey, H. Berry, W. Counts, S. Hunt, P. Mulcahy, W. Rodgers

## Bachelor of Business Administration

### Data Processing Option

#### General Education Requirements

The following specific courses must be included in the 42 hour general education component (see general education requirements)

## Dietetics

(606) 783-2966

Department of Home Economics

College of Applied Sciences and Technology

Faculty—M. Shaner (head), N. Graham, J. Ellington

## Bachelor of Science

### Area of Concentration in General Dietetics

Students who complete the general dietetics area are eligible to apply for dietetic internship or traineeship in order to complete their training to become registered dietitians. Dietitians may work in hospitals, university foodservice, research, college teaching, or as consultants.

	Sem. Hrs.
Required courses in home economics	44
HEC 120—Food and People Interactions	3
HEC 130—Elementary Foods	3
HEC 230—Quantity Food Purchasing	3
HEC 231—Food and Nutrition Management	3
HEC 232—Foodservice Sanitation and Safety	3
HEC 235—Foodservice Equipment	3
HEC 310—Nutrient Supply/Demand	3
HEC 331—Foodservice Systems Management	3
HEC 334—Quantity Food Preparation	3
HEC 336—Foodservice Administration	3
HEC 337—Food Production Management	3
HEC 410—Bionutrition	3
HEC 433—Diet Therapy	4
HEC 438—Experimental Foods	4
Additional requirements	46
BIOL 217—Elementary Medical Microbiology	
OR	
BIOL 317—Principles of Microbiology	3
BIOL 301—Survey of Biochemistry	3
BIOL 301A—Survey of Biochemistry Laboratory	1
BIOL 332—Human Physiology	3
BIOL 332A—Human Physiology Laboratory	1
CHEM 101—Survey of General Chemistry	3
CHEM 101A—Survey of General Chemistry Laboratory	1
CHEM 201—Survey of Organic Chemistry	3
CHEM 201A—Survey of Organic Chemistry Laboratory	1
*DATA 201—Introduction to Computers	3
DATA 202—Computer Programming BASIC	3
ECON 202—Principles of Economics II	3
ENG 192—Technical Composition	3
ENG 101—Composition I	3
HEC 470—Methods of Teaching Vocational Home Economics	3
MATH 152—College Algebra	3
MATH 354—Business Statistics	3
MNGT 301—Principles of Management	3
MNGT 311—Principles of Personnel Management	3
PSY 154—Introduction to Psychology	3
PSY 589—Psychology of Learning	3
SPCH 110—Basic Speech	3
SOC 101—General Sociology	3
SOC—approved sociology elective	3

\*Recommended but not required by ADA.

## Drafting and Design Technology

(606) 783-2013

210 Lloyd Cassity Building

Department of Industrial Education and Technology

College of Applied Science and Technology

Faculty—J. English

## Associate of Applied Science (Two-Year Program)

### General Education Requirements

The following specific courses must be included in the general education component (see general education requirements):

	Sem. Hrs.
ENG 101—Composition I	3
MATH 135—Mathematics for Technical Students	3
MATH elective	3
ENG 192—Technical Composition	3
SPCH 370—Business and Professional Speech	3
	15

### Core Requirements

GCT 103—Technical Drawing I	3
IET 111—Basic Wood Technics	3
MFT 186—Manufacturing and Fabrication	3
GCT 203—Technical Drawing II	3
GCT 301—Tool Layout and Design	3
IET 317—Time and Motion Study	2
MFT 286—Machine Tool Processes	3
IET 160—Introduction to Power and Fluid Mechanics	3
GCT 204—Descriptive Geometry	3
CON 202—Structural Design	3
GCT 305—Housing	3
IET 330—Industrial Design	2
GCT 303—Technical Illustration	3
IET 319—Quality Control	3
GCT 403—Machine Drawing and Design	3
IET 320—Supervisory Practices	3
GCT 404—Architectural Drawing	3
	49

## Earth Science

(606) 783-2914

206 Lappin Hall

Department of Physical Sciences

College of Arts and Science

Faculty—D. Hylbert, C. Mason, J. Philley

## Bachelor of Science

### Major

	Sem. Hrs.
GEOS 100—Physical Geology	1
GEOS 107—Introduction to Geoscience	3



GEOS 201—Historical Geology	3
GEOS 250—Minerals and Rocks (OR GEOS 262—Mineralogy)	3-4
GEOS 276—Geologic Methods	3
GEOS 410—Geological History of Plants and Animals	3
SCI 200—Descriptive Astronomy	3
SCI 471—Seminar	1
AGR 211—Soils	3
GEO 390—Weather and Climate	3
GEOS—electives approved by advisor	5-6
	32

Students can also follow the above program to gain teacher certification. However, supplemental course work in biology, mathematics, chemistry, and physics is required for certification. Please consult your advisor.

## Minor

	Sem. Hrs.
GEOS 100—Physical Geology	1
GEOS 107—Introduction to Geoscience	3
GEOS 201—Historical Geology	3
GEOS 276—Geologic Methods	3
SCI 200—Descriptive Astronomy	3
GEO 390—Weather and Climate	3
Electives approved by advisor	5
	21

## Economics

(606) 783-2152, 783-2174

222 Combs Building

Department of Business and Economics

College of Professional Studies

Faculty—R. Buck, E. Campbell, L. Magda, G. Miller, T. Morrison

## Bachelor of Business Administration

### Economics Option

#### General Education Requirements

The following specific courses must be included in the 42 hour general education component (see general education requirements)

	Sem. Hrs.
SPCH 370—Business and Professional Speech	3
MATH 160—Mathematics for Business and Economics	3
MATH 354—Business Statistics	3
ECON 201—Principles of Economics I	3
ECON 202—Principles of Economics II	3

#### Core Requirements

ACCT 281—Principles of Accounting I	3
ACCT 282—Principles of Accounting II	3
DATA 201—Introduction to Computers	3
ECON 350—Microeconomic Theory	3
FIN 360—Business Finance	3
MKT 304—Marketing	3
MNGT 261—The Legal Environment of Business Organizations	3
MNGT 301—Principles of Management	3
MNGT 306—Production Management	3
MNGT 472—Business Policies and Problems	3
OADM 321—Business Communications	3
	33

#### Course Requirements

	Sem. Hrs.
BBA core	33
ECON 302—Labor Economics	3

ECON 541—Public Finance	3
ECON 547—International Economics	3
ECON 551—Macroeconomic Theory	3
FIN 342—Money and Banking	3
*Approved electives	6
	54

## Bachelor of Science

### Minor

Students selecting programs with economics minors should first consult with advisors in their major areas.

#### Course Requirements

	Sem. Hrs.
ECON 201—Principles of Economics I	3
ECON 202—Principles of Economics II	3
ECON 350—Microeconomic Theory	3
ECON 551—Macroeconomic Theory	3
FIN 342—Money and Banking	3
*Economics electives	6
	21

\*To be selected with consent of faculty advisor.

## Electrical Technology

(606) 783-2013

210 Lloyd Cassity Building

Department of Industrial Education and Technology

College of Applied Sciences and Technology

Faculty—R. Jinbo

## Associate of Applied Science (Two-Year Program)

### General Education Requirements

The following specific courses must be included in the general education component (see general education requirements):

	Sem. Hrs.
ENG 101—English Composition I	3
MATH 135—Math for Technical Students	3
ECON 101—Introduction to the American Economy	3
ENG 192—Technical Composition	3
MATH 141—Plane Trigonometry	3
	15

#### Core Requirements

GCT 103—Technical Drawing I	3
EET 141—Electrical Circuits	3
EET 241—Circuit Analysis	3
EET 245—Digital Electronics	3
EET 240—Residential Wiring	3
EET 242—Transistors and Semiconductors	3
EET 243—Power Transformers and Distribution	3
EET 345—Microprocessor Electronics	3
EET 442—Industrial Electronics	3
IET 317—Time and Motion	2
IET 319—Quality Control	3
EET 341—Electrical Drafting and Design	3
EET 343—Motors and Generators	3
EET 443—Industrial Electricity	3
ROB 170—Introduction to Robotics	3
DATA 201—Introduction to Computers	3
Technical electives	2
	49

## Electronics Technology

(606) 783-2013

210 Lloyd Cassity Building

Department of Industrial Education and Technology

College of Applied Sciences and Technology

Faculty—M. Roberts

## Associate of Applied Science (Two-Year Program)

### General Education Requirements

The following specific courses must be included in the general education component (see general education requirements):

	Sem. Hrs.
MATH 135—Math for Technical Students	3
ENG 101—Composition I	3
ECON 101—Introduction to American Economy	3
ENG 192—Technical Composition	3
MATH 141—Plane Trigonometry	3
	15

### Core Requirements

GCT 103—Technical Drawing I	3
EET 141—Electrical Circuits	3
EET 241—Circuit Analysis	3
EET 245—Digital Electronics	3
EET 242—Transistors and Semiconductors	3
EET 240—Residential Wiring	3
EET 338—Radio Operating Practice	1
EET 344—Communications Circuits	3
EET 345—Microprocessor Electronics	3
EET 442—Industrial Electronics	3
IET 317—Time and Motion Study	2
IET 319—Quality Control	3
EET 341—Electrical Drafting and Design	3
EET 444—Communications Systems	3
EET 445—Computer Electronics	3
ROB 170—Introduction to Robotics	3
DATA 201—Introduction to Computers	3
MATH 110—Problem Solving Techniques	1
	49

## Elementary Education

(606) 783-2859

401 Ginger Hall

Department of Education

College of Professional Studies

Faculty—S. Blair, D. Cox, G. Duncan, K. Freeland, C. Grindstaff, C. Hampton, K. Herzog, G. Horsky, L. Huang, J. Mangrum, M. Pollock, D. Price, D. Ris, L. Sabie

Students who complete this program are eligible to apply for Kentucky teacher certification grades 1-8. *Impor-*

*tant*—Please see “Teacher Education Program” and “Professional Laboratory Experiences” requirements elsewhere in this catalog.

## Bachelor of Arts

### Area of Concentration

### Area and General Education Requirements

	Sem. Hrs.
EDUCATION	44
EDF 207—Foundations of Education	3
EDF 211—Human Growth and Development	3
EDEL 228—Literature and Materials for Children	3
EDSP 230—Education of Exceptional Children	3
EDEL 301—Media Strategies	2
EDEL 321—Teaching of Arithmetic	3
EDEL 322—Teaching Social Studies in Elementary School	3
EDEL 323—Language Arts for the Elementary School	3
EDEL 336—Foundations of Reading	3
EDEL 337—Reading Strategies for the Elementary Teacher	3
EDEL 425—Supervised Teaching Practicum—Elementary	12
EDUC 582—Discipline and Classroom Management	3
RELATED STUDIES	29
ART 121 or 221	3
GEO 100, 211, 241, or 300	3
HLTH 300—Health in the Elementary School	2
*MATH 231—Mathematics for the Elementary Teacher I	3
*MATH 232—Mathematics for the Elementary Teacher II	3
MUST 100—Rudiments of Music	2
MUSE 221—Music for the Elementary Teacher	2
PHED 300—Physical Education in the Elementary School	2
PSY 154—Introduction to Psychology	3
SCI 490—Science for the Elementary Teacher	3
Elective—Creative Expression	3
GENERAL EDUCATION	39
ENG 101—Composition I	3
ENG 102—Composition II	3
ENG 202 or 211 or 212	3
SPCH 110 or 370	3
FNA 160—Appreciation of Fine Arts	3
SCI 103 or higher	3
BIOL 105 or higher	3
PHIL 200—Introduction to Philosophy	3
HIST 130 or 131 and 132	3
HIST 140 or 141 and 142	3
GOVT 141 or 242 or 310	3
SOC 101—General Sociology	3
HLTH 150—Personal Health	2
Elective—PHED activity course	1
*Course meets general education requirements	
APPROVED ELECTIVES	16
	128

### Early Childhood Endorsement

The objective of the program in Early Childhood Education is to provide an additional kindergarten endorsement for teachers holding elementary certification. Training activities for child care givers in child/infant care centers and nursery schools.

### Certification in Kindergarten Education

In addition to meeting all requirements for elementary certification:

	Sem. Hrs.
EDEC 527—The Pre-School Child	3
EDEC 528—Activities and Materials in Early Childhood Education	3
EDEC 529—Practicum in Early Childhood Education	4

## English

(606) 783-2185

103 Combs Building

Department of English, Foreign Languages, and  
Philosophy

College of Arts and Sciences

Faculty—R. Burns, G. Campbell, B. Clarke, D. Dillinger,  
R. Dobler, M. Glasser, F. Helphinstine, J. LeMaster, I.  
Lowe, G. Mays, E. Morrow, R. Orlich, E. Payne, C.  
Pelfrey, B. Peters, G. Rogers, J. Rogers, M. Thomas,  
V. Venettozzi, E. Young

## 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 that they may use their language as effectively and precisely as possible and by introducing them to the sympathetic understanding of literature so that their personal lives will be enriched by literary art. It prepares students for such vocations as teaching, publishing, business, public relations, and for further professional studies.

### Requirements

In addition to the requirements listed, a minimum of two semesters (6 hrs.) of a foreign language is required of students completing an area or major in English. Four semesters (12 hrs.) of a foreign language are recommended.

### Area of Concentration\*

	Sem. Hrs.
ENG 101—Composition I	3
ENG 102—Composition II	3
OR	
ENG 192—Technical Composition	3
At least one but no more than two literature courses at 200 level	
At least one course in advanced composition	
At least one course in American literature	
ENG 435—Shakespeare	3
ENG 505—Linguistics: Grammar	3
No more than two literature classes at 300 level	
All remaining (four to eight) electives at 400 and 500 level	
SPCH 100—Voice and Articulation I	3
OR	
SPCH 110—Basic Speech	3
SPCH 200—Oral Interpretation	3
Theatre elective	
JOUR 201—News Writing and Reporting	3
	54

### Major\*

ENG 101—Composition I	3
ENG 102—Composition II	3
OR	
ENG 192—Technical Composition	3
At least one but no more than two literature courses at 200 level	
At least one course in advanced composition	
At least one course in American literature	
ENG 435—Shakespeare	3
ENG 505—Linguistics: Grammar	3
No more than two literature courses at 300 level	
All remaining (two to six) electives at 400 and 500 level	
	36

### Minor\*

ENG 101—Composition I	3
ENG 102—Composition II	3
OR	
ENG 192—Technical Composition	3
At least one but no more than two literature courses at 200 level	
At least one course in advanced composition	
At least one course in American literature	
ENG 505—Linguistics: Grammar	3
No more than one literature course at 300 level	
All remaining (two to four) electives at 400 and 500 level	
	27

\*For teacher certification and AREA or MAJOR, one must take as two of the electives ENG 500 and one of the following: 215, 393, 409, 434, 501, 516. MINOR must take as one of the electives ENG 500. Certification requires a course in the teaching of reading: EDSE 576 is recommended.

## Engineering Science

(606) 783-2914

206 Lappin Hall

Department of Physical Sciences  
College of Arts and Sciences

Faculty—R. Brengelman, D. Cutts, C. Whidden

## Associate of Science (Two-Year Program)

The student completes the core courses in the Associate of Science degree program, and elective courses can be chosen from such fields as electronics, mining, machine tool, or power and fluids technology. *At least one-half of the core courses must be completed at Morehead State University.*

The two-year Associate of Science degree in engineering science is designed for students who wish to seek immediate employment as engineering technicians or aides. Such employment may be in a permanent position, or the student may wish to gain engineering employment experience before returning to school to complete a four-year engineering degree.

### Suggested Program

#### FIRST YEAR

	First Semester	Sem. Hrs.
ENG 101—Composition I		3
MATH 175—Analytic Geometry and Calculus I*		4
CHEM 111—Principles of Chemistry I*		3
CHEM 111A—Principles of Chemistry I Laboratory*		1
PSY 154—Introduction to Psychology		3
GEO 100—Fundamentals of Geography		3
		17

#### Second Semester

ENG 192—Technical Composition	3
MATH 275—Analytic Geometry and Calculus II*	4
CHEM 112—Principles of Chemistry II*	3
CHEM 112A—Principles of Chemistry II Laboratory*	1
IET 103—Technical Drawing I*	3
DATA 260—FORTRAN Programming I*	3
	17

#### SECOND YEAR

	First Semester	Sem. Hrs.
MATH 276—Analytic Geometry and Calculus III*		4
PHYS 231—Engineering Physics I*		4
PHYS 231A—Engineering Physics I Lab*		1
ECON 201—Principles of Economics I		3
ENG 202—Introduction to Literature		3
		15

## Second Semester

MATH 363—Differential Equations*	3
PHYS 232—Engineering Physics II*	4
PHYS 232A—Engineering Physics II Lab*	1
PHYS 221—Statics*	3
ECON 202—Principles of Economics II	3
	14

\*core courses

## Environmental Science

(606) 783-2944

317 Lappin Hall

Department of Biological and Environmental Sciences  
College of Arts and Sciences

Faculty—D. Brumagen, F. Busroe, G. DeMoss (coordinator), J. Howell (head), D. Magrane, D. McNeely, L. Meade, T. Pass, M. Pryor, D. Saxon, H. Setser, C. Van Bell

## Bachelor of Science

An environmental science major with four options is offered. The four options are in ecology; geology; social sciences and economics; and chemistry and physics. With careful planning between the student and the advisor, a teaching certificate can be obtained in one of the option fields. Private industry, governmental agencies, municipalities, public utilities, and ecological contracting companies are primary sources of employment.

## Major

All majors must take the environmental science core.

	Sem. Hrs.
BIOL 100—Orientation to Biological and Environmental Sciences Programs	1
BIOL 355—Population, Resources, Environment	3
BIOL 472—Seminar in Environmental Science	1
BIOL 356—Environmental Biology	3
GEOS 376—Environmental Geology	3
ECON 501—Environmental Economics	3
GOVT 505—Politics of Ecology	3
GEOG 505—Conservation of Natural Resources	3
	20

All environmental science majors are also requested to take certain complementary general education courses to complete university requirements.

## Ecology Option

	Sem. Hrs.
Environmental science core courses	20
BIOL 208—Invertebrate Zoology	3
BIOL 209—Vertebrate Zoology	3
BIOL 215—General Botany	4
BIOL 357—Environmental Testing Methods	3
BIOL 510—Limnology	3
BIOL 561—Ecology	3
Elective from Biology 318, 334, 530, 531, 535, or 537	3

## Supplemental Requirements

	Sem. Hrs.
CHEM 111—Principles of Chemistry I	3
CHEM 111A—Principles of Chemistry I Laboratory	1
CHEM 112—Principles of Chemistry II	3

CHEM 112A—Principles of Chemistry II Laboratory	1
GEOS 240—Oceans	3
MATH 353—Statistics	3

## Geology Option

	Sem. Hrs.
Environmental science core courses	20
GEOS 107—Introduction to Geoscience	3
GEOS 100—Physical Geology	1
GEOS 201—Historical Geology	3
GEOS 240—Oceans	3
GEOS—electives approved by advisor	9

## Supplemental Requirements

	Sem. Hrs.
MATH 353—Statistics	3
BIOL 357—Environmental Testing Methods	3
CHEM 111—Principles of Chemistry I	3
CHEM 111A—Principles of Chemistry I Lab	1
PHYS 201—Elementary Physics I	3
PHYS 201A—Elementary Physics I Lab	1
CHEM 112—Principles of Chemistry II	3
CHEM 112A—Principles of Chemistry II Lab	1
OR	
PHYS 202—Elementary Physics II	3
PHYS 202A—Elementary Physics II Lab	1

## Social Sciences and Economics Option

	Sem. Hrs.
Environmental science core courses	20
GEO 211—Economic Geography	3
GEO 390—Weather and Climate	3
ECON 201—Principles of Economics I	3
ECON 541—Public Finance	3
GOVT 370—Pressure Groups and Politics	3
GOVT 540—Public Administration	3
Social sciences and economics electives approved by advisor	12

## Supplemental Requirements

	Sem. Hrs.
GEOS 240—Oceans	3
BIOL 357—Environmental Testing Methods	3

## Chemistry and Physics Option

	Sem. Hrs.
Environmental science core courses	20
CHEM 111—Principles of Chemistry I	3
CHEM 111A—Principles of Chemistry I Lab	1
CHEM 112—Principles of Chemistry II	3
CHEM 112A—Principles of Chemistry II Lab	1
CHEM 223—Quantitative Analysis	4
CHEM 460—Instrumental Analysis	4
PHYS 201—Elementary Physics I	3
PHYS 201A—Elementary Physics I Lab	1
PHYS 202—Elementary Physics II	3
PHYS 202A—Elementary Physics II Lab	1
PHYS 350—Nuclear Science	4
PHYS 361—Fundamentals of Electronics	3

## Supplemental Requirements

	Sem. Hrs.
GEOS 240—Oceans	3
MATH 353—Statistics	3
BIOL 357—Environmental Testing Methods	3

## Minor

	Sem. Hrs.
GEOS 240—Oceans	3
GEOS 376—Environmental Geology	3



BIOL 355—Population, Resources, Environment	3
BIOL 472—Seminar in Environmental Science	1
BIOL 356—Environmental Biology	3
GOVT 505—Politics of Ecology	3
Electives from PHIL 303, MATH 353, BIOL 357, ECON 501, GEO 505 and BIOL 553 (only one course may be chosen from last two listed)	6
	22

## Farm Production Technology

(606) 783-2662

332 Reed Hall

Department of Agriculture and Natural Resources  
College of Applied Sciences and Technology

Faculty—A. Boston, J. Bendixen, J. Martin, T. McMillan, M. Norris, B. Rogers, J. Willard, R. Wolfe

## Associate of Applied Science (Two-Year Program)

The student must complete a minimum of the 64 semester hours of required courses in the following list. Additional course electives may also be taken in agriculture and related areas by students wishing greater depth in farm production technology.

### Core Requirements

	Sem. Hrs.
Required courses	64
AGR 101—General Agriculture	1
AGR 133—Farm Livestock Production	3
AGR 180—Elementary Field Crops	3
AGR 203—Agricultural Economics	3
AGR 211—Soils	3
AGR 215—Horticulture	3
AGR 316—Feeds and Feeding	3
ENG 101—Composition I	3
ENG 192—Technical Composition	3
CHEM 101—Survey of General Chemistry	3
CHEM 101A—Survey of General Chemistry Laboratory	1
BIOL 150—Introduction to Plant Science	3
ECON 101—Introduction to American Economy	3
Approved electives	29
(see available options below)	

### Animal Science Option

	Sem. Hrs.
AGR 231—Livestock Judging	3
AGR 242—Light Horse Husbandry	3
AGR 330—Livestock Improvement	3
AGR 331—Advanced Livestock Judging	3
AGR 336—Dairy Production	3
AGR 337—Poultry Production	3
AGR 342—Horse Production	3
AGR 343—Beef Production	3
AGR 344—Swine Production	3
AGR 345—Sheep Production	3
VET 105—Anatomy of Domestic Animals	3
VET 206—Physiology of Domestic Animals	3
VET 210—Parasitology and Entomology	3

### Agriculture Management Option

AGR 205—Farm Records	3
AGR 301—Farm Management	3
AGR 302—Agriculture Finance	3
AGR 303—Land Economics	3

AGR 305—Marketing of Farm Products	3
AGR 385—Agribusiness Management	3
AGR 386—Introductory Agricultural Policy	3
ACCT 281—Principles of Accounting I	3
ACCT 282—Principles of Accounting II	3
FIN 252—Mathematics of Finance	3
MKT 350—Salesmanship	3
FIN 264—Personal Finance	3
ECON 201—Principles of Economics I	3
ECON 202—Principles of Economics II	3

## Crop Science

AGR 205—Farm Records	3
AGR 207—Land Conservation and Forest Management	3
AGR 251—Introduction to Agriculture Mechanics	3
AGR 301—Farm management	3
AGR 303—Land Economics	3
AGR 308—Weed Control	3
AGR 311—Soil Conservation	3
AGR 312—Soil Fertility and Fertilizers	3
AGR 341—Apiculture	3
AGR 350—Farm Power and Machinery Management	3
AGR 384—Forage Crops	3
BIOL 215—General Botany	3
BIOL 304—Genetics	3
BIOL 334—Entomology	3

## Horticulture Option

AGR 212—Landscape Plants	3
AGR 231—Landscape Gardening	3
AGR 312—Soil Fertility and Fertilizers	3
AGR 314—Plant Propagation	3
AGR 315—Fruit Production	3
AGR 317—Floral Design	3
AGR 320—Principles of Vegetable Production	3
AGR 321—Greenhouse Production I	3
AGR 322—Greenhouse Production II	3
AGR 325—Turf Management	3
AGR 326—Nursery Management	3
AGR 327—Advanced Landscape Design	3
AGR 341—Apiculture	3
AGR 350—Farm Power and Machinery Management	3
BIOL 334—Entomology	3

## Fashion Merchandising

(606) 783-2966

100 Lloyd Cassity Building

Department of Home Economics

College of Applied Sciences and Technology

Faculty—C. Taylor, B. Woodard

The two-year associate degree program in fashion merchandising prepares students for employment by retail stores and manufacturers of clothing and textile products. Career positions include buyer, assistant buyer, fashion coordinator, bridal consultant, comparison shopper, and fashion consultant. Many prefer to operate self-owned businesses.

## Associate of Applied Science Degree (Two-Year Program)

### Course Requirements

	Sem. Hrs.
Required courses in home economics	27
HEC 141—Basic Clothing Construction	3
HEC 240—Textiles	3

HEC 241—Advanced Clothing Problems	3
HEC 343—Textiles for Interiors	3
HEC 344—Historic Costume	3
HEC 346—Introduction to the Apparel Industry	3
HEC 350—Merchandise Display and Promotion	3
HEC 380—Clothing for Consumers	3
HEC electives	3

### Additional Requirements

ART 101—Drawing I	39
ART 291—Color and Design	3
ENG 101—Composition I	3
ENG 102—Composition II	3
PDI 100—Personal Development	1
FNA 160—Appreciation of Fine Arts	3
OADM 321—Business Communications	3
SPCH 110—Basic Speech	3
JOUR 364—Feature Writing	3
MKT 350—Salesmanship	3
ECON 201—Principles of Economics	3
JOUR 383—Principles of Advertising	3
COOP—Cooperative Education	4
General elective	1

### Minor

The minor in fashion merchandising is offered to complement majors in varied disciplines such as art, business, journalism, and general home economics.

Required courses	24
HEC 240—Textiles	3
HEC 343—Textiles for Interiors	3
HEC 346—Introduction to the Apparel Industry	3
HEC 350—Merchandise Display and Promotion I	3
HEC 380—Clothing for Consumers	3
HEC 450—Fashion Merchandising Techniques	3
Approved home economics elective in clothing design or construction	3
Approved home economics elective	3

### Finance

(606) 783-2152, 783-2174

222 Combs Building

Department of Business and Economics  
College of Professional Studies

Faculty—A. Conyers, B. Davis (Head), V. McGlone, R. Peavler, W. Whitaker

## Bachelor of Business

### Finance Option

#### General Education Requirements

The following specific courses must be included in the 42 hour general education component (see general education requirements).

SPCH 370—Business and Professional Speech	3
MATH 160—Mathematics for Business and Economics	3
MATH 354—Business Statistics	3
ECON 201—Principles of Economics I	3
ECON 202—Principles of Economics II	3

### Core Requirements

ACCT 281—Principles of Accounting I	3
ACCT 282—Principles of Accounting II	3

DATA 201—Introduction to Computers	3
ECON 350—Microeconomic Theory	3
FIN 360—Business Finance	3
MKT 304—Marketing	3
MNGT 261—The Legal Environment of Business Organizations	3
MNGT 301—Principles of Management	3
MNGT 306—Production Management	3
MNGT 472—Business Policies and Problems	3
OADM 321—Business Communications	3
	33

### Program Requirements

BBA Core	Sem. Hrs. 33
ACCT 384—Intermediate Accounting I	3
ACCT 387—Income Tax	3
FIN 342—Money and Banking	3
FIN 343—Investments	3
FIN 560—Financial Markets	3
*Approved electives	6
	54

## Foodservice Administration

(606) 783-2966

100 Lloyd Cassity Building

Department of Home Economics

College of Applied Sciences and Technology

Faculty—M. Shaner (head), N. Graham

## Bachelor of Science

### Major

The major in foodservice administration prepares graduates for the commercial foodservice field. It provides business and management background for the restaurant industry. A minor in business is required.

Required courses in home economics	Sem. Hrs. 36
HEC 120—Food and People Interaction	3
HEC 130—Elementary Foods	3
HEC 132—Introduction to Foodservice	3
HEC 136—Introductory Restaurant Management	3
HEC 231—Food and Nutrition Management	3
HEC 232—Food Sanitation and Safety	3
HEC 230—Quantity Food Purchasing	3
HEC 301—Principles of Nutrition	3
HEC 331—Foodservice Systems Management	3
HEC 334—Quantity Food Preparation	3
HEC 235—Foodservice Equipment	3
HEC 336—Foodservice Administration	3
HEC 337—Food Production Management	3
Approved home economics electives	3

Additional requirements	15
ECON 202—Principles of Economics II	3
ENG 101—Composition I	3
ENG 192—Technical Composition	3
MATH 131—General Mathematics	3
SPCH 110—Basic Speech	3

### Minor

Students who major in business or other related fields may choose the minor to enhance their understanding of food preparation, service, and management.

Required courses in home economics	Sem. Hrs. 24
HEC 120—Food and People Interaction	3
HEC 130—Elementary Foods	3
HEC 136—Introduction to Restaurant Management	3

HEC 230—Quality Food Purchasing	3
HEC 232—Foodservice Sanitation and Safety	3
HEC 235—Foodservice Equipment	3
HEC 334—Quantity Food Preparation	3
HEC 337—Food Production Management	3

## Foodservice Technology

(606) 783-2966

100 Lloyd Cassity Building

Department of Home Economics

College of Applied Sciences and Technology

Faculty—M. Shaner (head), N. Graham

The associate degree program in foodservice technology is designed to prepare students for careers in the management and supervision of commercial foodservice areas of hotels, motels, cafeterias, schools, hospitals, airlines, and in commercial food processing. Course work and practical experience are included in management, supervision, purchasing and quality cooking, as well as courses in the supporting sciences.

## Associate of Applied Science (Two-Year Program)

### Course Requirements

	Sem. Hrs.
Required home economics courses	34
HEC 120—Food and People Interactions	3
HEC 130—Elementary Foods	3
HEC 132—Introduction to Foodservice	3
HEC 136—Introduction to Restaurant Management	3
HEC 139/239—Cooperative Education	4
HEC 230—Quantity Food Purchasing	3
HEC 231—Food and Nutrition Management	3
HEC 235—Foodservice Equipment	3
HEC 301—Principles of Nutrition	3
HEC 334—Quantity Food Preparation	3
HEC 337—Food Production Management	3
Additional requirements	25
ENG 101—Composition I	3
ENG 192—Technical Composition	3
MATH 131—General Math	3
MNGT 160—Introduction to Business	3
MNGT 301—Principles of Management	3
MNGT 311—Principles of Personnel Management	3
Electives	7

## French

(606) 783-2185

103 Combs Building

Department of English, Foreign Languages, and  
Philosophy

College of Arts and Sciences

Faculty—M. Netherton

The French curriculum at Morehead State University teaches the language and literature of France, whereby

students will perceive areas of thought and action different from their own. More specifically, it surveys French civilization through its literature as a complex development of France's history, geography, fine arts, and political and social institutions. It helps students attain a comfortable proficiency in speaking, reading, and writing French. Finally, it trains prospective teachers in techniques of foreign language teaching.

NOTE: French 202 or the equivalent is prerequisite to all courses numbered 300 or above.

## Bachelor of Arts

### Major

	Sem. Hrs.
FRN 101—Beginning French I	3
FRN 102—Beginning French II	3
FRN 201—Intermediate French	3
FRN 202—Conversation and Composition	3
FRN 203—Introduction to France	3
FRN 435—Twentieth Century Literature	3
Approved electives	12
	30

### Minor

	Sem. Hrs.
FRN 101—Beginning French I	3
FRN 102—Beginning French II	3
FRN 201—Intermediate French	3
FRN 202—Conversation and Composition	3
FRN 203—Introduction to France	3
Approved electives	6
	21

Students with high school credit in French may be placed in a course more advanced than 101 to begin their studies.

Students who expect to teach French should choose FRN 405 as one of their electives.

## Geography

(606) 783-2090

350 Rader Hall

Department of Geography, Government, and History  
College of Arts and Sciences

Faculty—R. Burns, W. Clark, G. Cox, R. Gould, J. Robinson

The Department of Geography, Government, and History offers a well-balanced undergraduate program in geography which includes a 30-semester hour major and a 21-semester hour minor.

Appropriate educational experiences and training are provided to prepare persons for entry into careers in teaching, government service, planning, and resource management.

## Bachelor of Arts

### Major

	Sem. Hrs.
GEO 100—Fundamentals of Geography	3
GEO 101—Physical Geography	3

GEO 211—Economic Geography	3
GEO 241—United States and Canada	3
GEO—electives in systematic geography	9
GEO—electives in regional geography	9
Minimum for a major	30

## Minor

	Sem. Hrs.
GEO 100—Fundamentals of Geography	3
GEO 101—Physical Geography	3
GEO 211—Economic Geography	3
GEO 241—United States and Canada	3
GEO—Systematic geography elective	3
GEO—electives	6
Minimum for a minor	21

\*Electives in systematic and regional geography must be selected with the approval of the student's faculty advisor.

\*\*Students desiring a teacher's certificate must complete the required courses in professional education and the professional semester. College algebra and trigonometry or statistics are suggested electives for students who plan to pursue a graduate degree in geography.

## Geology

(606) 783-2914  
206 Lappin Hall  
Department of Physical Sciences  
College of Arts and Sciences  
Faculty—D. Hylbert, C. Mason, J. Philley

The geoscience program attempts: (1) to train students for careers as professional geologists in industry and county, state, and federal programs; (2) to prepare earth-science teachers for the public schools; (3) to prepare students to enter graduate school; or (4) to offer supportive courses needed by students in other disciplines.

## Bachelor of Science

### Major

	Sem. Hrs.
GEOS 100—Physical Geology	1
GEOS 107—Introduction to Geoscience	3
GEOS 201—Historical Geology	3
GEOS 262—Mineralogy	4
GEOS 276—Geologic Methods	3
GEOS 300—Petrology	3
GEOS 315—Stratigraphy and Sedimentation	4
GEOS 325—Structural Geology	3
GEOS 379—Paleontology	4
GEOS—electives approved by advisor	3
SCI 471—Seminar	1

### Supplemental Requirements\*

	Sem. Hrs.
BIOL 208—Invertebrate Zoology	3
CHEM 111—Principles of Chemistry I	3

CHEM 111A—Principles of Chemistry Lab	1
CHEM 112—Principles of Chemistry II	3
CHEM 112A—Principles of Chemistry II Lab	1
PHYS 201—Elementary Physics I	3
PHYS 201A—Elementary Physics I Lab	1
PHYS 202—Elementary Physics II	3
PHYS 202A—Elementary Physics II Lab	1
MATH—electives approved by advisor	6-8

Students are also urged to take MATH 175, DATA 202 or 260 and a summer geology field camp.

\*However, students who do not plan to attend graduate school may waive, or make substitutions for, the supplemental requirements; approval by the advisor is required.

## Minor

	Sem. Hrs.
GEOS 100—Physical Geology	1
GEOS 107—Introduction to Geoscience	3
GEOS 201—Historical Geology	3
GEOS 250—Minerals and Rocks (or GEOS 262—Mineralogy)	3-4
GEOS 276—Geologic Methods	3
GEOS 410—Geological History of Plants and Animals	3
GEOS—electives approved by department head	5
	21 or 22

## German

(606) 783-2185  
103 Combs Building  
Department of English, Foreign Languages, and  
Philosophy  
College of Arts and Sciences  
Faculty—B. Hamilton

The German program teaches the language and literature of Germany, whereby students will understand cultural points of view different from their own. It surveys German culture as seen through its literature as a complex development of historical, aesthetic, artistic, and social elements. It helps students attain a comfortable proficiency in speaking, reading, and writing German. Finally, it trains prospective teachers in techniques of foreign language teaching.

NOTE: GER 202 or its equivalent is prerequisite to all courses numbered 300 or above.

## Minor

	Sem. Hrs.
GER 101—Beginning German I	3
GER 102—Beginning German II	3
GER 201—Intermediate German I	3
AND	
GER 202—Intermediate German II	3
OR	
GER 203—Expository German	3
Approved electives	9
	21

Students with high school credit in German may be placed in a course more advanced than 101 to begin their studies.

Students who expect to teach German should choose GER 405 as one of their electives.



## Government

(606) 783-2090

350 Rader Hall

Department of Geography, Government, and History  
College of Arts and Sciences

Faculty—L. Back, J. Bizzel, W. Green, K. Hoffman, K. Schafer

The Department of Geography, Government, and History offers courses in major areas of study, including American government, state and local government, comparative government, international relations, group dynamics, constitutional law, and public and personnel administration.

## Bachelor of Arts Degree

### Major

	Sem. Hrs.
GOVT 141—Government of the United States	3
GOVT 242—State and Local Government	3
GOVT 330—Parliamentary Democracies	3
OR	
GOVT 450—International Relations	
GOVT—elective in international field	3
Approved electives in government	18
Minimum for a major	30

### Minor

	Sem. Hrs.
GOVT 141—Government of the United States	3
GOVT 242—State and Local Government	3
GOVT 330—Parliamentary Democracies	3
OR	
GOVT 450—International Relations	
GOVT—elective in international field	3
Approved electives in government	9
Minimum for a minor	21

## Graphic Arts Technology

(606) 783-2013

210 Lloyd Cassity Building

Department of Industrial Education and Technology  
College of Applied Sciences and Technology

Faculty—E. Nass

## Associate of Applied Science (Two-Year Program)

### General Education Requirements

The following specific courses must be included in the general education component (see general education requirements).

	Sem. Hrs.
ENG 101—Composition I	3
MATH 135—Math for Technical Students	3
DATA 201—Introduction to Computers	3

ENG 192—Technical Composition	3
SPCH 370—Business and Professional Speech	3
	15

### Core Requirements

GCT 102—Graphic Arts I	3
GCT 103—Technical Drawing I	3
OADM 111—Beginning Typewriting	3
GCT 202—Graphic Arts II	3
IET 317—Time and Motion Study	2
GCT 350—Machine Composition I	3
Elective	3
GCT 351—Graphic Duplication	3
GCT 322—Photography	2
ART 291—Color and Design	3
Elective	3
JOUR 305—Newspaper Typography and Design	3
IET 320—Supervisory Practices	3
GCT 302—Offset Lithography	3
GCT 450—Machine Composition II	3
IET 319—Quality Control	3
Electives	49

## Health

(606) 783-2180

201 Laughlin Health Building

Department of Health, Physical Education, and Recreation

College of Professional Studies

Faculty—E. Bentley (head), L. Brown, E. Nesbitt, G. Osborne, J. Osborne, P. Raines, H. Sweeney, B. Willey

## Bachelor of Arts Degree

### Requirements for a Major

	Sem. Hrs.
PHED 301—Evaluation in Health, Physical Education, and Recreation	3
PHED 402—Kinesiology	3
PHED 432—Physiology of Exercise	3
HLTH 205—Mental Health	3
HLTH 303—Community Health	3
HLTH 304—Health in the Secondary School	2
HLTH 320—Elements of Nutrition	3
HLTH 360—Family Health	3
HLTH 475—The School Health Program	3
HLTH 508—Principles of General School Safety	3
HLTH 518—Use and Abuse of Drugs	3
	32

### Requirements for a Minor

	Sem. Hrs.
PHED 402—Kinesiology	3
PHED 432—Physiology of Exercise	3
HLTH 320—Elements of Nutrition	3
HLTH 360—Family Health	3
HLTH 475—The School Health Program	3
HLTH 508—Principles of General School Safety	3
HLTH 518—Use and Abuse of Drugs	3
HLTH 304—Health in the Secondary School	2
	23

### Requirements for Endorsement in Driver Education

	Sem. Hrs.
HLTH 203—Safety and First Aid	3
HLTH 200—Introduction to Driver Education	3
HLTH 307—Intermediate Driver Education	3
HLTH 400—Advanced Driver Education	3
	12

## History

(606) 783-2090

350 Rader Hall

Department of Geography, Government, and History  
College of Arts and Sciences

Faculty—D. Flatt, J. Hanrahan, C. Holt, V. Howard, B.  
Jackson, J. Kleber, P. LeRoy, S. Sprague, G. Young

## Bachelor of Arts

The courses offered by the department are classified in three fields: American history, European history, non-Western history (African, Latin American, Middle Eastern, and Asian studies). No more than 12 hours of advanced history credit in any one field can be applied towards the major.

For students seeking teacher certification, HIS 375—The Teaching of Social Studies, is also required (applies to majors, minors, and area of concentration), preferably to be taken the semester prior to the professional semester.

### Major

	Sem. Hrs.
HIS 131—Intro. to Civilization I	3
HIS 132—Intro. to Civilization II	3
HIS 141—Intro. to Early American History	3
HIS 142—Intro. to Recent American History	3
Advanced credit in history	18
Minimum for a major	30

### Minor

	Sem. Hrs.
HIS 131—Intro. to Civilization I	3
HIS 132—Intro. to Civilization II	3
HIS 141—Intro. to Early American History	3
HIS 142—Intro. to Recent American History	3
Advanced credit in history	9
Minimum for a minor	21

## Home Economics

(606) 783-2966

100 Lloyd Cassity Building

Department of Home Economics

College of Applied Sciences and Technology

Faculty—J. Ellington, C. Flatt, N. Graham, M. Shaner  
(head), B. Woodard

## Bachelor of Science

### Area of Concentration in Vocational Home Economics

The broad-based program requires a balance in all areas of home economics and supporting courses in art, science, and

general education. This program is designed and approved for students to qualify to teach vocational home economics in junior and senior high school. In addition, the student must complete 1,000 hours of useful and gainful work experience in order to qualify for a vocational teaching certificate.

	Sem. Hrs.
Required courses in home economics	48
HEC 130—Elementary Foods	3
HEC 141—Basic Clothing Construction	3
HEC 240—Textiles	3
HEC 351—Housing	3
HEC 355—Child Development	3
HEC 356—Nursery School	3
HEC 362—Consumer Education	3
HEC 451—Home Furnishings	3
HEC 453—Marriage and Family Living	3
HEC 454—Supervised Home Management Experiences	4
HEC electives	14

Additional requirements	36
HEC 470—Methods of Teaching Home Economics	3
HEC 573—Curriculum Development in Home Economics	3
EDF 207—Foundations of Education	3
EDF 211—Human Growth and Development	3
EDF 311—Learning Theories in the Classroom	3
EDSE 312—Teaching Skills and Media	3
EDSP 332—Teaching the Exceptional Student	3

### Professional Semester\*

EDSE 415—Teacher in Today's School	3
EDSE 416—Student Teaching	12
1,000 hours work experience required for Vocational Teaching Certificate.	

\*The professional semester will immediately follow HEC 470 and HEC 573.

### Major in General Home Economics

Students who have an interest in all aspects of home economics with no interest in specialization will find meaning in this general program. Electives can serve to tailor the degree requirements to meet personal goals. Employment opportunities are dependent upon individual capabilities.

	Sem. Hrs.
Required courses	30
Approved elective	3
HEC 130—Elementary Foods	3
HEC 141—Basic Clothing Construction	3
HEC 251—Household Equipment or approved elective	3
HEC 355—Child Growth and Development	3
HEC 362—Consumer Education	3
HEC 453—Marriage and Family Living	3
HEC 471—Seminar	1
Approved home economics electives	8

### Minor in General Home Economics

The minor in general home economics is representative of the various subject matter areas in home economics. The program is helpful in providing skills to improve quality of life.

	Sem. Hrs.
Required courses	21
HEC 301—Principles of Nutrition	3
HEC 362—Consumer Education	3
HEC 453—Marriage and Family Living	3
HEC 141—Basic Clothing Construction	3
OR	
HEC 380—Clothing for Consumers	3
Approved home economics electives	6

## Horsemanship

(606) 783-2800

Derrickson Agricultural Complex

Department of Agriculture and Natural Resources

College of Applied Sciences and Technology

Faculty—G. Carswell, T. McMillan, J. Willard

## Minor

The student must complete a minimum of the 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

	Sem. Hrs.
Required courses in agriculture	21
AGR 121—Equitation	3
AGR 242—Light Horse Husbandry	3
AGR 316—Feeds and Feeding	3
AGR 332—Advanced Horsemanship	3
AGR 342—Horse Production	3
Approved agriculture electives	6

## Industrial Education

(606) 783-2013

210 Lloyd Cassity Building

Department of Industrial Education and Technology

College of Applied Science and Technology

Faculty—J. Van Hoose, R. Tucker, G. Baron

## Bachelor of Science

### Area of Concentration (Orientation/Exploration Level)

The student must complete a minimum of 52 semester hours in industrial education and 25 semester hours in professional teacher education.

### General Education Requirements

The following specific courses must be included in the 45 hour general education component (see general education requirements) (2 hrs. approved general electives):

	Sem. Hrs.
HLTH 150—Personal Health	2
PHED—Activity Class	1
PSY 154—Introduction to Psychology	3
	6

### Area Requirements

GCT—Technical Drawing	6
EET—Electricity-Electronics	6
GCT—Graphic Arts	6

MFT—Metals-Manufacturing	6
IET—Power and Fluids	6
IET—Woods-Construction	6
IET—Seminar	1
IET—Industrial Design	2
IET—Approved industrial education electives	10
IET—Supervised work experience	3
	52

## Teacher Education Requirements

IET 390—Principles of Industrial Education	3
IET 392—Technical Curriculum and Media Development	3
IET 475—Teaching Methods in Industrial Education— Orientation and Exploration Levels	3
EDF 211—Human Growth and Development	3
EDF 311—Learning Theories in classroom	3
IET 478—Supervised Teaching Practicum	
In Industrial Education—Orientation and Exploration Levels	12
IET 496—Organization and Management of the Laboratory	2
	29

## Major (Orientation/Exploration Level)

The student must complete a minimum of 36 semester hours in industrial education and 25 semester hours in professional teacher education.

## General Education Requirements

The following specific courses must be included in the 42 hour general education component (see general education requirements)

	Sem. Hrs.
HLTH 150—Personal Health	2
PHED—Activity class	1
PSY 154—Introduction to Psychology	3
	6

## Major Requirements

GCT—Technical Drawing	6
EET—Electricity Electronics	3
MFT—Metals-Manufacturing	6
IET—Power and Fluids	3
IET—Woods-Construction	6
IET—Seminar	1
IET—Industrial Design	2
IET—Supervised Work Experience	3
GCT—Graphic Arts	3
Technical elective	3

(Electives must be approved by the student's advisor with a maximum of nine semester hours in any one technical field.)

## Professional Teacher Education Requirements

IET 390—Principles of Industrial Education	3
IET 392—Technical Curriculum and Media Development	3
IET 475—Teaching Methods in Industrial Education— Orientation/Exploration levels	3
EDF 211—Human Growth and Development	3
EDF 311—Learning Theories in classroom	3
IET 478—Supervised Teaching Practicum in Industrial Education—Orientation and Exploration Levels	12
IET 496—Organization and Management of the Laboratory	2
	29

## Area of Concentration (Preparation Level)

The following specific courses must be included in the 42 hour general education component (see general education requirements)

	Sem. Hrs.
HLTH 150—Personal Health	2
PHED—Activity Class	1
PSY 154—Introduction to Psychology	3
	6

## Core Requirements

IET 100—World of Technology	3
IET 320—Supervisory Practices	3
IET 364—Career and Vocational Guidance	3
IET 391—Trade and Technical Analysis	2
IET 422—Industrial Safety Standards and Enforcement	3
Seminar in Industrial Education	1
	15

## Occupation Teaching Specialization

Vocational education-industrial education courses in the specific occupational area to be taught	24
	24

## Technical Electives

Technical electives in vocational education-industrial education selected from the following areas: broadcasting technology, construction, drafting and design, electricity, electronics, graphic arts, machine tool, metals, plastics, power and fluids, welding, woods, mining, robotics engineering technology

13

## Teacher Education

IET 390—Principles of Industrial Education	3
IET 392—Technical Curriculum and Media Development	3
IET 393—Methods in Industrial Education	3
EDF 211—Human Growth and Development	3
EDF 311—Learning Theories in classroom	3
IET 394—Student Teaching in Vocational Industrial Education or 401 Seminar	8
IET 496—Organization and Management of the Laboratory	2

## Supplemental Requirement (Work Experience)

The area of concentration at the preparation level shall include a work experience component consisting of a minimum of 2,000 hours of supervised work experience in the teachable industrial occupation.

## Industrial Supervision and Management Technology

(606) 783-2013  
210 Lloyd Cassity Building  
Department of Industrial Education and Technology  
College of Applied Sciences and Technology  
Faculty—W. Morella

## Associate of Applied Science (Two-Year Program)

### General Education Requirements

The following specific courses must be included in the general education component (see general education requirements):

	Sem. Hrs.
MATH 135—Mathematics for Technical Students	3
ENG 101—Composition I	3
ECON 101—Introduction to American Economy	3
ENG 192—Technical Composition	3
SPCH 370—Business and Professional Speech	3

## Core Requirements

IET 100—World of Technology	3
GCT 103—Technical Drawing I	3
MFT 186—Manufacturing and Fabrication	3
EET 140—Basic Electricity	3
IET 160—Introduction to Power and Fluids	3
CON 103—Materials Testing	3
IET 320—Supervisory Practices	3
IET 319—Quality Control	3
IET 317—Time and Motion Study	2
MFT 386—NC-CNC Manufacturing Technology	3
IET 422—Industrial Safety Standards and Enforcement	3
MFT 286—Machine Tool Process	3
MNGT 301—Principles of Management	3
IET 327—Applied Industrial Management	3
DATA 201—Introduction to Computers	3
Technical electives	5
	49

## Industrial Technology

(606) 783-2013  
210 Lloyd Cassity Building  
Department of Industrial Education and Technology  
College of Applied Sciences and Technology  
Faculty—R. Hayes, R. Jinbo, D. Karwatka, B. Kranc, L. McWard, W. Morella, J. Murphy, E. Nass, R. Newton (head), M. Roberts, P. Tyree

## Bachelor of Science

### Area of Concentration

The student must complete a minimum of 52 semester hours for the area of concentration to include a 21 semester hour option and a 15 semester hour emphasis.

### General Education Requirements

The following specific courses must be included in the 42 hour general education component (see general education requirements):

	Sem. Hrs.
MATH 152—College Algebra	3
ECON 101—Introduction to American Economy	3
SPCH 370—Business and Professional Speech	3
DATA 201—Introduction to Computers	3
	12

## Core Requirements

GCT 103—Technical Drawing I	3
IET 317—Time and Motion Study	2
IET 319—Quality Control	3
IET 320—Supervisory Practices	3
IET 330—Industrial Design	2
IET 472—Basic Industries Practicum	2
IET—Seminar	1
	16

## Options

Students must select one of the following options:

Sem. Hrs. Broadcast technology	21
Construction technology	21
Drafting and design technology	21



Electrical technology	21
Electronics technology	21
Graphic arts technology	21
Industrial supervision and management technology	21
Machine Tool Technology	21
Plastics technology	21
Power and fluids technology	21
Robotics engineering technology	21
Welding technology	21
Woods technology	21

### Emphasis

Select one of the following:

Approved electives in math and science	15
Approved electives in business and economics	15

### Major Requirements

The student must complete a minimum of 30 semester hours including a 16 semester hour technical option.

### General Education Requirements

The following specific courses must be included in the 42 hour general education component (see general education requirements):

	Sem. Hrs.
HLTH 203—Safety and First Aid	3
PSY 154—Introduction to Psychology	3
	6

### Core Courses

GCT 103—Technical Drawing I	3
IET 317—Time and Motion	2
IET 319—Quality Control	3
IET 320—Supervisory Practices	3
IET 330—Industrial Design	2
IET 571—Seminar	1
	14

### Options

Students must select one of the following options:

Broadcasting technology	16
Construction technology	16
Drafting and design technology	16
Electrical technology	16
Electronics technology	16
Graphic arts technology	16
Industrial Supervision and Management technology	16
Machine tool technology	16
Plastics technology	16
Power and fluids technology	16
Robotics engineering technology	16
Welding technology	16
Woods technology	16

### Integrated Science

(606) 783-2948

307 Lappin Hall

Department of Physical Sciences

College of Arts and Sciences

Faculty—M. Esham, W. Falls, R. Fiel, C. Ramey

### Minor (non-teaching)

	Sem. Hrs.
SCI 103—Introduction to Physical Sciences (or equivalent)	3
BIOL 105—Introduction to Biological Sciences (or equivalent)	3
BIOL 551—Plant Natural History (or equivalent)	3
BIOL 552—Animal Natural History (or equivalent)	3
Electives approved by the coordinator of the science education program	12
	24

### Interior Decoration

(606) 783-2966

100 Lloyd Cassity Building

Department of Home Economics

College of Applied Sciences and Technology

Faculty—M. Shaner (head)

### Associate of Applied Science (Two-Year Program)

The two-year associate degree program in interior decoration prepares students for pre-professional employment as assistants and technicians working in conjunction with experienced designers, or in retail sales.

### Course Requirements

	Sem. Hrs.
Required home economics courses	41
HEC 103—Interior Graphics I	3
HEC 104—Interior Graphics II	3
HEC 139/239—Cooperative Education	
OR	
HEC 332—Field Experience in Home Economics	4
HEC 240—Textiles	3
HEC 252—Problems in Interior Design	3
HEC 270—Materials, Techniques and Design	3
HEC 280—Introduction to Interior Design	3
HEC 343—Textiles for Interiors	3
HEC 350—Merchandise, Display and Promotion I	3
HEC 351—Housing	3
HEC 370—Residential Interior Design Studio I	3
HEC 381—History of Interiors I	3
HEC 382—History of Interiors II	3
HEC elective	1

Additional requirements	33
ENG 101—Composition I	3
ENG 192—Technical Composition	3
MATH 135—Mathematics for Technical Students	3
ART 101—Drawing I	3
ART 291—Color and Design	3
ART 365—Arts of the United States	3
DATA 201—Introduction to Computers	3
OADM 190—Office Accounting	3
OADM 321—Business Communications	3
MKT 350—Salesmanship	3
General elective	3

### Minor

A minor in interior decoration is offered to be combined with majors from many disciplines. It is particularly desirable for, but not limited to, majors in art, business, vocational home economics, and clothing and textiles.

	Sem. Hrs.
Required Courses	21
HEC 103—Interior Graphics I	3
HEC 240—Textiles	3
HEC 351—Housing	3
HEC 252—Problems in Interior Design	3
HEC 280—Introduction to Interior Design	3
HEC 382—History of Interiors II	3
HEC 370—Residential Interior Design Studio I	3

## Interior Design

(606) 783-2966

100 Lloyd Cassity Building

Department of Home Economics

College of Applied Sciences and Technology

Faculty—M. Shaner (head)

## Bachelor of Science

### Area of Concentration

Graduates of the interior design area will be prepared to work as contract, residential, or specialty designers in interior design studios, retail or office furnishings stores, architectural firms, industry, institutions, or self-owned businesses.

	Sem. Hrs.
Required courses in home economics	53
HEC 103—Interior Graphics I	3
HEC 104—Interior Graphics II	3
HEC 240—Textiles	3
HEC 252—Problems in Interior Design	3
HEC 270—Materials, Techniques and Design	3
HEC 280—Introduction to Interior Design	3
HEC 343—Textiles for Interiors	3
HEC 350—Merchandise Display and Promotion I	3
HEC 351—Housing	3
HEC 362—Consumer Education	3
HEC 370—Residential Interior Design, Studio I	3
HEC 375—Commercial Interior Design, Studio II	3
HEC 381—History of Interiors I	3
HEC 382—History of Interiors II	3
HEC 460—Merchandise Display and Promotion II	3
HEC 440—Interior Design Studio III	3
OR	
HEC 339—Cooperative Education	
OR	
HEC 332—Field Experience in Home Economics	3 or 4
HEC 445—Interior Design Studio IV	
OR	
HEC 439—Cooperative Education	
OR	
HEC 332—Field Experience in Home Economics	3 or 4
Additional requirements	31
ART 101—Drawing I	3
ART 291—Color and Design	3
ART 364—Modern and Contemporary Art	3
ART 365—Arts of the United States	3
HIS 131—Introduction to Civilization I	3
HIS 132—Introduction to Civilization II	3
MATH 135—Mathematics for Technical Students	3
PDI 100—Personal Development Institute	1
PHYS 250—Light, Color, Cameras, and Perception	3
OADM 321—Business Communication	3
MKT 350—Salesmanship	3

## Journalism

(606) 783-2694, (606) 783-2184 (department head)

330 Allie Young, 109 Breckinridge Hall (department head)

Department of Communications

College of Arts and Sciences

Faculty—W. Brown (coordinator), G. Burgess, L. Dales, R. Dandeneau, J. Sellers

## Bachelor of Arts

### Major

### Core Requirements

	Sem. Hrs.
JOUR 110—Introduction to Mass Communications	3
JOUR 201—News Writing and Reporting	3
JOUR 204—Copyreading and Editing	3
JOUR 285—Introduction to Photojournalism	3
JOUR 505—Law and Ethics of Press	3
COMM 347 or 447—Internship OR COMM 139, 239, 339, 439, or 539—Cooperative Study, in an approved field of journalism for 1 to 3 hours, as indicated in each emphasis listing below:	

(NOTE: Journalism students without typing skills are expected to take a typing course before taking 300-level journalism courses.)

### News-Editorial Emphasis

JOUR 301—Advanced Newswriting (3 hrs.); JOUR 304—Newspaper Production or JOUR 305—Typography and Design (3 hrs.); JOUR 465—Editorial Writing (3 hrs.); COMM Internship or Co-op (3 hrs.); and JOUR electives, 3 hrs.—total 30 hours.

### Teaching Emphasis

JOUR 304—Newspaper Production or JOUR 305—Typography and Design (3 hrs.); JOUR 382—Principles of Public Relations (3 hrs.); JOUR 383—Principles of Advertising (3 hrs.); JOUR 465—Editorial Writing (3 hrs.); JOUR 504—School Publications (3 hrs.); COMM Internship or Co-op (1 hr.)—total of 31 hours.

### Advertising-Public Relations Emphasis

JOUR 382—Principles of Public Relations (3 hrs.); JOUR 383—Principles of Advertising (3 hrs.); JOUR 482—Public Relations Practices or JOUR 483—Advertising Design or JOUR 583—Advertising Copywriting (3 hrs.); COMM Internship or Co-op (3 hrs.); and 3 hours of electives to be chosen from the following: JOUR 304, 305, 565, 584, or R-TV 240, or SPCH 567—total of 30 hours.

### Photojournalism Emphasis

JOUR 305—Typography and Design (3 hrs.); JOUR 386—Photo Essay and Editing (3 hrs.); JOUR 387—Advanced Photojournalism (3 hrs.); ART 283—Photo Design I (3 hrs.); COMM Internship or Co-op (1 hr.); and JOUR electives, 2 hrs.—total 30 hours.

### Community Newspaper Emphasis

JOUR 301—Advanced Newswriting or JOUR 364—Feature Writing (3 hrs.); JOUR 304—Newspaper Production (3 hrs.); JOUR 483—Advertising Design (3 hrs.); JOUR 506—Community Newspapering (3 hrs.); JOUR 465—Editorial Writing or JOUR 368—Sports Writing (3 hrs.); COMM Internship or Co-op (1 hr. each in three of these areas; reporting, photography, advertising and newspaper production, for total 3 hrs.); HIS 142—Recent American History, or MNGT 310—Small Business Organization, or GOVT 242—State and Local Government (3 hrs.), for a total of 36 hours.

## Minor Core Courses

	Sem. Hrs.
JOUR 110—Introduction to Mass Communications	3
JOUR 201—News Writing and Reporting	3
JOUR 204—Copyreading and Editing	3
JOUR 285—Introduction to Photojournalism	3
<i>(Typing skills required for 300-level and above journalism courses.)</i>	

### News-Editorial Emphasis

JOUR 301—Advanced news writing (3 hrs.); JOUR 465—Editorial Writing (3 hrs.); JOUR 505—Law and Ethics of the Press (3 hrs.); COMM Internship or Co-op (1 hr.), for a total 22 hours.

### Teaching Emphasis

JOUR 465—Editorial Writing (3 hrs.); JOUR 504—School Publications (3 hrs.); COMM Internship or Co-op (1 hr.), JOUR electives (2 hrs.), for a total 21 hours.

### Advertising-Public Relations Emphasis

JOUR 382—Principles of Public Relations (3 hrs.); JOUR 383—Principles of Advertising (3 hrs.); COMM Internship or Co-op (1 hr.); JOUR 482—Public Relations Practices, JOUR 483—Advertising Design, JOUR 565—Public Opinion and News Media, JOUR 583—Advertising Copywriting, or JOUR 584—Psychology of Advertising (3 hrs.), for a total of 22 hours.

### Photojournalism Emphasis

JOUR 386—Photo Essay and Editing (3 hrs.); JOUR 387—Advanced Photojournalism (3 hrs.); COMM Internship or Co-op (1 hr.) and JOUR electives (3 hrs.), for a total 22 hours.

### Community Newspaper Emphasis

JOUR 301—Advanced News Writing (3 hrs.); JOUR 304—Newspaper Production (3 hrs.); JOUR 483—Advertising Design (3 hrs.); JOUR 506—Community Newspapering (3 hrs.); COMM Internship or Co-op (1 hr. each in three of these areas: reporting, photography, advertising and newspaper production—3 hrs.), for total 27 hours.

## Associate of Applied Arts

	Sem. Hrs.
JOUR 110—Introduction to Mass Communications	3
JOUR 201—News Writing and Reporting	3
JOUR 204—Copyreading and Editing	3
JOUR 285—Introduction to Photojournalism	3
<i>(Typing skills are required for 300 and above level journalism courses.)</i>	
JOUR 344—Broadcast News and Public Affairs	3
JOUR 383—Principles of Advertising	3
COMM 347 or 447—Internship	1
SPCH 370—Business and Professional Speech	3
Approved communications electives	11
ENG 101—Composition I	3
ENG 102—Composition II	3
OADM 111—Beginning typing (or show proficiency)	3
FNA 160—Appreciation of Fine Arts	3
GEO 211—Economic Geography	3
Other general education requirement courses not listed here but appearing on catalog list for associate degree	3
Electives	14
	65

hrs.; JOUR 504—School Publications (3 hrs.); COMM Internship or Co-op (1 hr.)—total of 31 hours.

## Latin

(606) 783-2185  
103 Combs Building  
Department of English, Foreign Languages and Literature  
College of Arts and Sciences  
Faculty—D. Dillinger, M. Netherton

The Latin courses provide students in the arts and sciences with a firm background in classical culture, and students in pre-professional programs with a clear understanding of technical vocabulary. Latin 202 or the equivalent is prerequisite to courses numbered 300 or above.

Students with high school credit in Latin may be placed in a class more advanced than 101 to begin their studies.

## Minor

	Sem. Hrs.
LAT 101—Beginning Latin I	3
LAT 102—Beginning Latin II	3
LAT 201—Intermediate Latin I	3
LAT 202—Intermediate Latin II	3
Approved electives	9
	21

## Machine Tool Technology

(606) 783-2013  
210 Lloyd Cassity Building  
Department of Industrial Education and Technology  
College of Applied Sciences and Technology  
Faculty—B. Hayes, B. Kranc

## Associate of Applied Science (Two-Year Program)

### General Education Requirements

The following specific courses must be included in the general education component (see general education requirements):

	Sem. Hrs.
ENG 101—Composition I	3
MATH 135—Mathematics for Technical Students	3
ECON 101—Introduction to the American Economy	3
ENG 102—Technical Composition	3
SPCH 370—Business and Professional Speech	3
	15

## Core Requirements

GCT 103—Technical Drawing I	3
MFT 106—Thermoplastic Processing	3
MFT 186—Manufacturing and Fabrication	3
CON 103—Materials Testing	3
IET 160—Power and Fluids	3
MFT 286—Machine Tool Processes	3
EET 140—Basic Electricity	3
IET 319—Quality Control	3
IET 320—Supervisory Practices	3
WEL 386—Welding	3
MFT 386—NC-CNC Manufacturing Technology	3
GCT 301—Tool Layout and Design	3
MFT 306—Mold Design and Construction	3
IET 330—Industrial Design	2
MFT 486—Patternmaking and Foundry	2
MFT 488—Flexible Manufacturing Engineering Technology	3
ROB 170—Introduction to Robotics	3
	49

## Management

(606) 783-2164, 783-2174

313 Combs Building

Department of Business and Economics  
College of Professional Studies

Faculty—C. Caudill, E. Martin, R. Meadows, J. Peters,  
D. Turnipseed

## Bachelor of Business Administration Management Option

### General Education Requirements

The following specific courses must be included in the 42 hour general education component (see general education requirements):

	Sem. Hrs.
SPCH 370—Business and Professional Speech	3
MATH 160—Mathematics for Business and Economics	3
MATH 354—Business Statistics	3
ECON 201—Principles of Economics I	3
ECON 202—Principles of Economics II	3

### Core Requirements

ACCT 281—Principles of Accounting I	3
ACCT 282—Principles of Accounting II	3
DATA 201—Introduction to Computers	3
ECON 350—Microeconomic Theory	3
FIN 360—Business Finance	3
MKT 304—Marketing	3
MNGT 261—The Legal Environment of Business Organizations	3
MNGT 301—Principles of Management	3
MNGT 306—Production Management	3
MNGT 472—Business Policies and Problems	3
OADM 321—Business Communications	3
	33

### Program Requirements

	Sem. Hrs.
BBA Core	33
ACCT 300—Managerial Accounting	
OR	
ACCT 390—Cost Accounting I	3
MNGT 311—Personnel Management	3
MNGT 411—Labor Relations	3
Approved electives	12
	54

## Minor

Students selecting programs with business administration minor should first consult with advisors in their major areas.

### Course Requirements

	Sem. Hrs.
ACCT 281—Principles of Accounting I	3
ACCT 282—Principles of Accounting II	3
DATA 201—Introduction to Computers	3
FIN 360—Business Finance	3
MKT 304—Marketing	3
MNGT 261—The Legal Environment of Business Organizations	3
MNGT 301—Principles of Management	3
MNGT 306—Production Management	3
	24

In addition, students completing this minor are required to include ECON 201 and 202 as part of their general education courses.

## Marketing

(606) 783—2164, 783-2174

313 Combs Building

Department of Business and Economics  
College of Professional Studies

Faculty—R. Carlson, T. McGlone, B. Pierce, M. Robbins

## Bachelor of Business Administration Marketing Option

### General Education Requirements

The following specific courses must be included in the 42 hour general education component (see general education requirements):

	Sem. Hrs.
SPCH 370—Business and Professional Speech	3
MATH 160—Mathematics for Business and Economics	3
MATH 354—Business Statistics	3
ECON 201—Principles of Economics I	3
ECON 202—Principles of Economics II	3

### Core Requirements

ACCT 281—Principles of Accounting I	3
ACCT 282—Principles of Accounting II	3
DATA 201—Introduction to Computers	3
ECON 350—Microeconomic Theory	3
FIN 360—Business Finance	3
MKT 304—Marketing	3
MNGT 261—The Legal Environment of Business Organizations	3
MNGT 301—Principles of Management	3
MNGT 306—Production Management	3
MNGT 472—Business Policies and Problems	3
OADM 321—Business Communications	3
	33

### Program Requirements

	Sem. Hrs.
BBA Core	33
MKT 351—Sales Management	3
MKT 453—Marketing Policies	3
MKT 552—Marketing Research and Analysis	3
MKT 555—Advertising	3
Approved electives	9
	54



## Bachelor of Science

### Minor

Students selecting programs with marketing minor should first consult with advisors in their major areas.

### Course Requirements

	Sem. Hrs.
ACCT 281—Principles of Accounting I	3
DATA 201—Introduction to Computers	3
MKT 304—Marketing	3
MKT 453—Marketing Policies	3
MKT 552—Marketing Research and Analysis	3
<i>Nine hours of electives to be chosen from the following:</i>	
MKT 305—Purchasing	3
MKT 350—Salesmanship	3
MKT 351—Sales Management	3
MKT 450—Consumer Behavior	3
MKT 451—Retail Merchandising	3
MKT 555—Advertising	3
	24

## Mathematics

(606) 783-2939

112 Lappin Hall

Department of Mathematical Sciences

College of Arts and Sciences

Faculty—L. Cooper, B. Flora, J. Fryman, R. Hammons,  
G. Johnston (head), C. Jones, R. Lindahl, N. Mahaney,  
J. Mann, D. Moore, G. Nolen, T. Pack, J. Saxon

## Bachelor of Science

The Department of Mathematical Sciences is committed to the education of students who intend (1) to teach mathematics at any level, (2) to apply mathematics in industry or government, or (3) to use mathematical techniques and concepts in their chosen fields of endeavor.

### Major

	Sem. Hrs.
MATH 175—Analytic Geometry and Calculus I	4
MATH 275—Analytic Geometry and Calculus II	4
MATH 471—Seminar	1
Electives in mathematics above 170 except MATH 231, 232, 252, and 260	7
Electives in mathematics above 300 as approved by the head of the Department of Mathematical Sciences	14
	30
DATA 202—Computer Programming BASIC	3

### Major (Teaching)

MATH 175—Analytic Geometry and Calculus I	4
MATH 275—Analytic Geometry and Calculus II	4
MATH 301—Elementary Linear Algebra	3
MATH 304—Mathematical Logic and Set Theory	3
MATH 350—Introduction to Higher Algebra	3
MATH 353—Statistics	3
MATH 370—College Geometry I	3
MATH 371—College Geometry II	3
MATH 373—Principles and Techniques of Mathematics	3
MATH 471—Seminar	1
	30
DATA 202—Computer Programming BASIC	3

### Minor

	Sem. Hrs.
MATH 175—Analytic Geometry and Calculus I	4
MATH 275—Analytic Geometry and Calculus II	4
Electives in math above 170 except MATH 231, 232, 252, and 260	7
Electives in math above 300 as approved by the head of the Department of Mathematical Sciences	6
	21
DATA 202—Computer Programming BASIC	3

### Minor (Teaching)

MATH 175—Analytic Geometry and Calculus I	4
MATH 275—Analytic Geometry and Calculus II	4
MATH 301—Elementary Linear Algebra	3
MATH 353—Statistics	3
MATH 370—College Geometry I	3
MATH 373—Principles and Techniques of Mathematics	3
MATH 471—Seminar	1
	21
DATA 202—Computer Programming BASIC	3

### Minor in Statistics

A student should consult the head of the Department of Mathematical Sciences for approval of one of the following:

	Sem. Hrs.
OPTION I	
MATH 123—Introduction to Statistics	3
MATH 132—General Mathematics II	3
MATH 260—FORTRAN Programming	3
MATH 301—Elementary Linear Algebra	3
MATH 353—Statistics	3
MATH 553—Statistical Methods	3
MATH 555—Nonparametric Statistics	3
	21

OPTION II	
MATH 301—Elementary Linear Algebra	3
MATH 312—Numerical Analysis	3
MATH 353—Statistics	3
MATH 519—Probability	3
MATH 520—Mathematical Statistics	3
MATH 553—Statistical Methods	3
MATH 555—Nonparametric Statistics	3
	21

## Mathematics and Computer Programming

(606) 783-2939

112 Lappin Hall

Department of Mathematical Sciences

College of Arts and Sciences

Faculty—L. Cooper, B. Flora, J. Fryman, R. Hammons,  
G. Johnston (head), C. Jones, R. Lindahl, N. Mahaney,  
J. Mann, D. Moore, G. Nolen, T. Pack, J. Saxon

## Bachelor of Science

The Department of Mathematical Sciences is committed to the education of students who intend (1) to teach mathematics at any level, (2) to apply mathematics in industry or government, or (3) to use mathematical techniques and concepts in their chosen fields of endeavor.

### Area of Study

	Sem. Hrs.
MATH 175—Analytic Geometry and Calculus I	4
MATH 252—Boolean Algebra	3

MATH 275—Analytic Geometry and Calculus II	4
MATH 276—Analytic Geometry and Calculus III	4
MATH 301—Elementary Linear Algebra	3
MATH 304—Math Logic and Set Theory	3
MATH 312—Numerical Analysis	3
MATH 353—Statistics	3
MATH 363—Differential Equations	3
DATA 201—Introduction to Computers	3
DATA 202—Computer Programming BASIC	3
DATA 210—Computer Programming ASSEMBLER I	3
DATA 216—Programming in PL/1	3
DATA 260—FORTRAN Programming I	3
DATA 316—Advanced PL/1 Programming	3
DATA 320—Computerized Business Systems	3
DATA 526—Data Base Management Systems	3
Electives in physics, electronics, or advanced data processing courses	3
as approved by the head, Department of Mathematical Sciences	63

## Medical Technology

(606) 783-2962

415 Lappin Hall

Department of Biological and Environmental Sciences  
College of Arts and Sciences

Faculty—D. Brumagen, F. Busroe, G. DeMoss, R. Eversole, J. Howell (head), D. Magrane, D. McNeely, L. Meade, T. Pass, (coordinator), M. Pryor, D. Saxon, H. Setser, C. Van Bell

## Bachelor of Science

Medical technology is one of the newest and fastest-growing professions associated with modern advances in medical science. The medical technologist performs analytical tests on body fluids, cells, and products. The resulting information is used by the physician in diagnosing disease, selecting and monitoring treatment, and in counseling for prevention of disease.

Personal attributes necessary for success in this profession include aptitude for physical and biological sciences, dependability, a strong sense of responsibility, and capacity to work well under stress.

Approximately two-thirds of all medical technologists are employed in hospital laboratories. Most others are employed in physicians' offices; private laboratories; clinics; the armed forces; city, state, and federal agencies; industrial medical laboratories; pharmaceutical houses; and public and private research programs directed toward combating specific diseases.

Admission to an American Medical Association-approved clinical program of medical technology (see below) requires at least 92 semester hours of academic credit at Morehead State University, including appropriate course work in biology, chemistry, and mathematics. This curriculum culminates in a baccalaureate degree after the clinical year at an accredited school of medical technology has been completed. The professional hospital-based clinical program is 12 months long; it generally follows three academic years at MSU.

MSU is affiliated with the following accredited hospital schools of medical technology:

1. St. Elizabeth Medical Center  
Covington, Kentucky

2. Providence Hospital  
Cincinnati, Ohio
3. Cumberland School of Medical Technology  
Cookeville, Tennessee
4. Methodist Hospital of Kentucky  
Pikeville, Kentucky
5. Lourdes Hospital  
Paducah, Kentucky
6. University of Louisville  
Louisville, Kentucky

Students, with the assistance of their medical technology coordinator, usually begin to make applications to medical technology schools at the beginning of their junior year. Acceptance by an accredited school of medical technology for clinical study is competitive and is generally based on the applicant's academic record (minimum of 2.5 grade-point average), personal interviews, and letters 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 schools of medical technology.

Most affiliated hospitals charge a nominal fee 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 year of training. Grants and/or loans (B.E.O.G. and others) are available for eligible students through the university.

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.

Upon completion of the four-year program, students take a certifying examination in medical technology. MSU confers upon successful candidates the Bachelor of Science degree with an area in medical technology.

The medical technology curriculum is flexibly designed. A student deciding, for whatever reason, not to complete the "three plus one" program may still pursue and obtain a bachelor of science degree in biology through continued enrollment and acceptable performance at MSU.

## Area in Medical Technology

	Sem. Hrs.
BIOL 100—Orientation to Biological and Environmental Sciences Programs I	1
BIOL 206—Biological Etymology	2
BIOL 208—Invertebrate Zoology	3
BIOL 304—Genetics	3
BIOL 317—Principles of Microbiology	4
BIOL 331—Human Anatomy	3
BIOL 332—Human Physiology	3
BIOL 333—Human Physiology Lab	1
BIOL 380—Cell Biology	3
BIOL 518—Pathogenic Microbiology	3
BIOL 540—General Parasitology	3
CHEM 101 or 111—Survey or Principles of Chemistry I	3
CHEM 101A or 111A—Survey or Principles of Chemistry I Lab	1
CHEM 112—Principles of Chemistry I	3
CHEM 112A—Principles of Chemistry I Lab	1
CHEM 223—Quantitative Analysis	4
CHEM 326—Organic Chemistry I	3
CHEM 326A—Organic Chemistry I Lab	1
CHEM 460—Instrumental Analysis	4
DATA 201—Introduction to Computers	3
ENG 101—Composition I	3
ENG 102 or 192—Composition II	3
ENG—Literature 202, 211, or 212	3

GEN EDUC—social and behavioral sciences	3
GEN EDUC—communications and humanities elective	3
GEN EDUC—social and behavioral sciences elective	3
GEN EDUC—General elective	3
HLTH 150—Personal Health and PHED activity course	3
OR	
HLTH 203—Safety and First Aid	3
MATH 123—Introduction to Statistics or equivalent	3
MATH 152—College Algebra or equivalent	3
PSY 154—Introduction to Psychology	3
Science elective (see recommended electives below)	3
SPCH 110—Basic Speech	3

#### Recommended electives related to program:

BIOL 336—Pathophysiology	4
BIOL 520—Histology	3
BIOL 595—Biochemistry I	4
CHEM 327—Organic Chemistry II	3
CHEM 327A—Organic Chemistry II Lab	1
PHYS 202—Elementary Physics II	3
PHYS 202A—Elementary Physics II Lab	1

#### SENIOR YEAR (Clinical)

All students attending an accredited school of medical technology during their clinical program of professional study must be enrolled in BIOL 413, 414, 415, and 416, Medical Technology Clinical Practicum, 4 to 14 hours, at Morehead State University during the fall, spring, and summer sessions.

The student will receive a minimum of 36 semester hours of credit upon successfully completing one year of clinical training at an accredited school of medical technology. Credit awarded will be applicable toward a Bachelor of Science degree with an area of concentration in medical technology.

All the following courses, or their equivalents, must be satisfactorily completed (at least a 2.0 or C average) during the hospital-based clinical year in order to receive credit for Biology 413, 414, 415, and 416 and to obtain a recommendation for one of the certification examinations.

**Immunohematology.** Theory and performance of tests related to donor selection, storage of units, blood grouping, Rh titers, compatibility testing, antibody detection and identification, and blood component therapy. 58 hours lecture and 106 hours of laboratory.

**Medical Microbiology.** Cultural techniques and characteristics, metabolic demands and microscopic study of bacteria from patient cultures and unknowns; identification by culture, chemical, and serological techniques; drug susceptibility testing. Lecture topics include frequently and uncommonly encountered bacteria and viruses. 80 hours lecture and 180 hours laboratory.

**Medical Mycology.** Cultural characteristics and microscopic study of differentiating morphology are stressed in a workshop atmosphere; participants work on unknowns. Preliminary procedures and identification of tubercular organisms; 30 hours lecture and 33 hours laboratory.

**Serology and Immunology.** Theory and principles of the various serological tests; methods employed include precipitation, flocculation, hemolysis, and fluorescence. 40 hours lecture and 32 hours laboratory.

**Routine Analysis.** Chemical and microscopic laboratory methods used to study gastric, cerebrospinal, urine, pleural, and abdominal body fluids; related physiology and disease states. 40 hours lecture and 150 hours laboratory.

**Clinical Chemistry.** Quantitative chemical analyses performed for various constituents of blood: enzymes, electrolytes, carbohydrates, hormones, lipids, and nitrogen compounds. Precision manual techniques and a wide variety of instrumental methods are utilized; quality control is emphasized; a limited amount of toxicology is included. Lectures on principles of laboratory tests and physiological reactions in addition to correlation of laboratory findings with disease states. 114 lecture and 180 hours laboratory.

**Special Topics.** A three-part course in (1) orientation, including ethics, professional relationships, the institution and policies, the school program, venipuncture, patient approach, specimen identification, and basic calculation; (2) solutions, essentially a condensed elementary review of quantitative analysis, including gravimetric and volumetric procedures and associated calculations; and (3) management, a four-day workshop designed by the American Management Association to introduce basic management skills. 75 hours lecture, 33 hours laboratory, and 16 hours seminar.

**Medical Parasitology.** A workshop study of the geographical distribution, laboratory identification, modes of transmission, and effects of parasitic infestation on man. 25 hours lecture and 45 hours laboratory.

**Hematology.** Physical, chemical, and microscopic procedures are utilized to evaluate the qualitative and quantitative composition of blood and bone marrow. The function of factors governing the clotting mechanism. Advanced

hematology emphasizes correlation of laboratory test results and clinical findings. Collection of specimens and patient contacts are made from this area. 99 hours lecture and 180 hours laboratory.

**Seminar.** Various activities include: patient case studies to correlate laboratory results with disease states; literature search and preparation of review questions with team competition in answering; assigned classroom presentations. Sixteen hours discussion.

## Military Science

(606) 783-2050

Button Auditorium

Department of Military Science  
College of Professional Studies

Faculty—G. Adams, A. Baldwin (head), R. Cline, R. Estes, H. Exum, M. Fugate, T. Jones, F. Soward

The program affords both men and women the opportunity to be commissioned as officers in the United States Army Reserve, National Guard, or the active Army upon graduation.

## Minor

\*6 to 8 credit hours from the following MS courses denoted by an asterisk (\*). All other MS courses are required. 6-8

	Sem. Hrs.
*MS 101—Introduction to Military Science	2
*MS 102—U.S. Army: Its Evolution and Development	2
*MS 201—Leadership Principles and Techniques	2
*MS 202—Instructional Techniques and Survey of Army Career Fields	2
MS 301—Advanced Military Science I	3
MS 302—Advanced Military Science II	3
MS 401—Advanced Military Science I	3
MS 402—Advanced Military Science II	3
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 college level ROTC summer programs, and participants in high school level ROTC programs.

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 grade-point average of 2.0 or higher.
3. A grade-point average of 2.0 or better in the major field or area of concentration.
4. A grade-point average of 3.0 or better in military science.

The above standards may be waived, providing the cadet has a cumulative grade-point average of 2.25 or better, with the approval of a board consisting of the professor of military science, the vice president for academic affairs, and an MS IV cadet who has the rank of cadet major or above.



## Mining, Reclamation, and Energy Studies

(606) 783-2640

325 Reed Hall

Department of Agriculture and Natural Resources  
College of Applied Sciences and Technology

Faculty—W. Blakely

## Bachelor of Science

### Area of Concentration

The student must complete a minimum of 48 semester hours in the area of concentration in mining, reclamation, and energy studies, of which 24 semester hours are in the following core course requirements and 24 semester hours are within one of the following six options—mining technology, reclamation technology, energy industry administration, energy economics, industry technology, or safety and health. General course electives may also be taken in mining, reclamation, and related areas by students wishing greater depth in the mining, reclamation, and energy fields.

### Core Requirements

	Sem. Hrs.
Required courses in mining, reclamation, and energy studies	24
MIN 101—Introduction to Mining and Reclamation	3
RCL 301—Reclamation Laws and Regulations	3
MIN 302—Coal Analysis and Preparation	3
MIN 303—Mine Laws and Management	3
MIN 304—Mine Systems Technology	3
MIN 305—Surface Mining	3
MIN 306—Energy Conservation Technology	3
MIN 401—Coal Industry Economics	3

### Mining Technology Option

	Sem. Hrs.
Required courses	24
MIN 103—Mine Drafting	3
MIN 104—Underground Mine Safety	3
MIN 200—Mine Surveying	3
MIN 201—Mine Equipment	3
MIN 202—Mine Design, Ventilation, and Drainage	3
MIN 301—Mine Electrical Systems	3
GEOS 200—Coal Mine Geology	3
AGR 207—Land Conservation and Forest Management	3

### Reclamation Technology Option

	Sem. Hrs.
Required courses	26
RCL 302—Reclamation Management and Systems Planning I	4
RCL 303—Reclamation Management and Systems Planning II	4
CON 102—Surveying I	3
AGR 180—Elementary Field Crops	3
AGR 207—Land Conservation and Forest Management	3
AGR 211—Soils	3
AGR 311—Soil Conservation	3
AGR 312—Soil Fertility and Fertilizers	3

### Energy Industry Administration Option

	Sem. Hrs.
Required courses	24
ACCT 281—Principles of Accounting I	3
ACCT 282—Principles of Accounting II	3
DATA 200—Introduction to Data Processing	3
FIN 252—Mathematics of Finance	3
MNGT 301—Principles of Management	3
FIN 360—Business Finance	3
MNGT 461—Business Law I	3
MKT 304—Marketing	3

In addition, students completing this option are required to include ECON 201 and 202 as part of their general education courses.

### Energy Economics Option

	Sem. Hrs.
Required courses	24
ECON 201—Principles of Economics I	3
ECON 202—Principles of Economics II	3
FIN 342—Money and Banking	3
ECON 350—Microeconomic Theory	3
ECON 351—Macroeconomic Theory	3
ECON 302—Labor Economics	3
Economics electives	6

### Industry Technology Option

	Sem. Hrs.
Required courses	24
GCT 103—Technical Drawing I	3
IET 317—Time and Motion Studies	2
IET 319—Quality Control	3
IET 320—Supervisory Practices	3
IET 571—Seminar in Industrial Education	1
IET electives (approved by advisor)	12

The 12 hours of electives may be selected from one of the following program areas: construction technology, drafting and design technology, electrical technology, machine tool technology, power and fluids technology, and welding technology.

### Safety and Health Option

	Sem. Hrs.
Required courses	24
MIN 104—Underground Mine Safety	3
HLTH 203—Safety and First Aid	3
HLTH 519—Emergency Medical Techniques	6
IET 422—Industrial Safety Standards and Enforcement	3
General electives (approved by advisor)	9

### Minor

The student must complete a minimum of the 21 semester hours of mining and reclamation courses in the following required list, plus a major selected in another field. General course electives may also be taken in mining, reclamation and related areas by students wishing greater depth in mining, reclamation, and energy studies.

### Required Courses

	Sem. Hrs.
MIN 101—Introduction to Mining and Reclamation	3
RCL 301—Reclamation Laws and Regulations	3
MIN 303—Mine Laws and Management	3
MIN 304—Mine Systems Technology	3
MIN 305—Surface Mining	3
MIN 306—Energy Conservation Technology	3
MIN 401—Coal Industry Economics	3



## Mining Technology

(606) 783-2640

325 Reed Hall

Department of Agriculture and Natural Resources

College of Applied Sciences and Technology

Faculty—W. Blakely

## Associate of Applied Science (Two-Year Program)

The student must complete a minimum of the 49 semester hours of required courses in the following list. Additional course electives may also be taken in agriculture, mining, and related areas by students wishing greater depth in mining technology.

### Core Requirements

	Sem. Hrs.
Required courses	49
MIN 101—Introduction to Mining and Reclamation	3
MIN 103—Mine Drafting	3
MIN 104—Underground Mine Safety	3
MIN 200—Mine Surveying	3
MIN 201—Mine Equipment	3
MIN 202—Mine Design, Ventilation, and Drainage	3
MIN 301—Mine Electrical Systems	3
MIN 302—Coal Analysis and Preparation	3
MIN 303—Mine Laws and Management	3
MIN 304—Mine Systems Technology	3
AGR 207—Land Conservation and Forest Management	3
Approved electives	16

## Music

(606) 783-2473

106 Baird Music Hall

Department of Music

College of Arts and Sciences

Faculty—D. Anderson (coordinator of jazz studies), A. Beane, J. Beane (coordinator of choral activities and voice), W. Bigham, H. Blair, S. Blair, J. Bragg, J. Flippin, E. Fulbright, C. Gallaher (coordinator of music theory), J. Keenan, L. Keenan, M. Kuhn (coordinator of music education), E. Louder (coordinator of winds and strings), E. Malterer (coordinator of graduate studies), F. Mueller, E. Norden, F. Oddis, R. Pritchard, R. Ross, J. Stetler (coordinator of keyboard studies), V. Venetozzi

The Department of Music offers a Bachelor of Music Education degree for those preparing to teach music; a Bachelor of Music degree for those planning careers as performers, theorists, or composers; and a major and minor within the Bachelor of Arts curriculum. Musical training and performance opportunities are also provided for students who are not planning musical careers.

### General Requirements

Placement examinations and/or auditions are given in music theory, applied music (principal instrument or voice), and piano to all new music students during registration week of the fall and spring semesters. The results are used for advisement as to course and program enrollment.

Music students are required to register for student recital each semester. Regular attendance at student recital and other music programs presented on campus is expected of music students. Attendance records are kept by the head of the Department of Music.

All music students with principal applied areas other than keyboard instruments must complete four semesters of class piano (two semesters for music minors) or demonstrate proficiency by examination. The material for the examination includes the following:

1. Facility in scales, arpeggios, and cadences.
2. Performance of compositions of approximately third grade difficulty from the works of Clementi, Bach, Mozart, Bartok, etc.
3. Sight reading of easy piano music and instrumental and vocal accompaniments.
4. Playing of simple melodies by ear and improvising appropriate harmonizations.

A student wishing to change from one music curriculum to another, or to make a change of principal applied area, must receive departmental approval to do so. A committee of faculty representing the appropriate specialties will be appointed to make recommendations to the department head as to the suitability of the change and the applicability of credits already earned toward the new curriculum.

### Applied Music

#### Music Fees

Each half-hour private lesson per week, per semester	\$30.00
Junior recital (two hours credit)	\$30.00
Senior recital (two hours credit)	\$30.00
Senior recital (three hours credit)	\$60.00
Graduate recital	\$60.00
Composition Recital	\$60.00

*NOTE: Under certain conditions, beginning students in applied music may be assigned to an undergraduate assistant for instruction. In this event, the lesson fee is one-half that charged for lessons with members of the music faculty.*

### Private Applied Music

Each music student is required to designate a principal area of private music study and to enroll for credit in this area each semester except the professional semester. Credit may also be earned in secondary areas. A change in the designated principal area may be made with the approval of the music faculty.

With departmental permission, private instruction may be taken by students not following a music curriculum, in which case the course standards may be different from those expected of music students. Beginning instruction will be handled, whenever possible, as class applied study rather than private study.

Credit allowed for private applied music is variable, depending on the number of lessons per week and the program in which the student is enrolled. In a given area of private study, a student is expected to practice at least one hour per day for each hour of credit being earned.

### Recitals

Recitals may be presented for credit by students who have been given approval to do so by the music faculty. Approval

should be requested prior to the final private applied music examination preceding the semester in which the recital will be presented. Recital credit may be substituted for or earned in addition to private applied music credit.

### Ensembles

Each music student is required to participate in an ensemble representing his or her major performing medium each semester of residence except the student teaching semester. Ensemble assignments are determined by the department with consideration given to both student and departmental needs.

Marching band is required each fall semester for instrumental music education degree students whose principal area of private applied is a wind or percussion instrument. Instrumental majors are required to take at least two semesters of vocal ensemble.

Ensembles may be taken with or without credit. A maximum of eight hours of credit in ensembles may be applied toward fulfilling the requirements of music curricula. (Refer to the curricula requirements listed previously.)

## Bachelor of Music Education

This program is designed for students who are planning for careers as music teachers in the public schools. It includes the requirements for a twelve-grade music certificate in either vocal or instrumental music.

	Sem. Hrs.
1. APPLIED MUSIC	31-33
Principal applied area	14
Ensembles, at least two vocal	7-9
*Class Piano	4
Class voice and instruments	6
2. *MUSIC THEORY	16
Music Theory I-IV	10
Music Reading I-III	6
3. MUSIC HISTORY AND LITERATURE	10
Literature of Music I-II	4
History of Music I-II	6
4. CONDUCTING	4
Basic Conducting	2
Choral Conducting	
OR	
Instrumental Conducting	2
5. MUSIC EDUCATION	6
Introduction to Music Education	1
Elementary Materials and Methods	3
Vocal or Instrumental Materials and Methods	2
	60-69

\*Exemption or advanced placement possible.

## Bachelor of Music

This program is designed for students who are planning for professional careers in music either as performers or as private teachers. It does not meet the requirements for certification to teach in the public schools.

	Sem. Hrs.
1. MUSIC THEORY	18
Music Theory I-IV	10
Music Reading I-III	6
Form Analysis	2
2. MUSIC HISTORY AND LITERATURE	10
Literature of Music I-II	4
History of Music I-II	6
3. ENSEMBLES	8
4. CONDUCTING	4
Basic Conducting	2
Instrumental or Choral Conducting	2

NOTE: Jazz and studio music students should take basic conducting. To complete their conducting requirement, they will take Rehearsal Techniques for Jazz Ensembles (MUS 473).

In addition to the above courses, each Bachelor of Music degree student must complete the requirements for one of the following specializations:

1. VOICE	
Private Voice	19
Class Voice	1
Junior Recital	2
Senior Recital	3
Class and/or Private Piano	6
Languages (a minimum of six semester hours in each of two languages)	12
2. PIANO	
Private Piano	19
Private Organ and/or Harpsichord	7
Junior Recital	2
Senior Recital	3
Class Voice	1
Piano Literature	3
Piano Pedagogy	2
Electives	3
3. ORGAN OR HARPSICHORD	
Private Organ or Harpsichord	19
Class or Private Piano	7
Junior Recital	2
Senior Recital	3
Class Voice	1
Piano Pedagogy	2
Piano Literature	3
Electives	3
4. STRINGS	
Private Strings	19
Class Piano and/or Private Piano	7
Junior Recital	2
Senior Recital	3
Electives	8
Class Voice	1
5. WIND AND PERCUSSION INSTRUMENTS	
Private Lessons in Major Instrument	19
Junior Recital	2
Senior Recital	3
Class Piano and/or Private Piano	7
Class Voice	1
Arranging	4
Music electives	4
6. THEORY/COMPOSITION	
Composition	12
Arranging	4
Counterpoint	2
Recital of Original Compositions	3
Class and/or Private Keyboard	6
Electives	6
Private Lessons in Major Instrument or Voice	7
7. JAZZ AND STUDIO MUSIC	
Private Applied Music	12
Junior Recital	2
Senior Recital	3
Jazz Keyboard	2
Class Piano and/or Jazz Keyboard	4
Jazz History and Literature	3
Arranging for Jazz Ensembles	4
Studio Improvisation	7
Music electives	3
	80

## Bachelor of Arts

### Major

This program provides for the study of music within a liberal arts curriculum. Emphasis is upon the study and performance of musical literature. It is suitable for preparing students for careers in music other than performance and teaching music in the public schools.

Applied Music	22
Private Lessons	14
Ensembles	4
Class or Private Piano	4

Music Theory .....	16
Music Theory I-IV .....	10
Music Reading I-III .....	6
Music History and Literature .....	10
Literature of Music I and II .....	4
History of Music I and II .....	6
	48

## Minor

Applied Music .....	14
Private Lessons .....	8
Ensembles .....	4
Class or Private Piano .....	2
Music Theory .....	9
Music Theory I and II .....	6
Music Reading I and II .....	3
Music Literature I and II .....	4
	27

## Nursing

(606) 783-2632

234 Reed Hall

(606) 783-2631

238 Reed Hall

Department of Nursing and Allied Health Sciences  
College of Applied Sciences and Technology

Faculty—A. Blair, J. Brumagen (coordinator), K. Clark,  
J. Gross, B. Hensley, N. Joseph, S. Luchtefeld, B.  
Moore, P. Ramey, B. Tapp, B. Porter (head)

## Associate of Applied Science (Two-Year Program)

The associate degree Nursing Program (ADN) is approved by the Kentucky Board of Nursing and accredited by the National League for Nursing. The ADN program is designed to be completed within two consecutive academic years. The program prepares the graduates for first level nursing positions in a variety of health settings. Graduates of the program are eligible to write the state licensure examination to become registered nurses.

### Admission Requirements and Procedures

The ADN program has a selective admission procedure.

#### Application Procedure

1. Apply to Morehead State University through the university's Division of Admissions.
2. Submit required materials listed below to the Department of Nursing.
  - A. Completed application for Associate Degree Nursing Program.
  - B. Official American College Test Scores (ACT).
  - C. Unofficial copy of high school transcript.
  - D. Unofficial copy of transcripts from all colleges or universities.
3. A. Licensed practical nurse applicants—in addition to the above materials submit challenge exam scores and verification of current license.  
B. Nursing transfer applicants—in addition to the above materials, submit official catalog or bulletin and nursing course syllabus of the institution from which you wish to transfer credit.

4. Applicants reapplying to the associate degree Nursing Program must submit new application materials in order to be reconsidered for admission.

In order to be considered for admission to the associate degree Nursing Program, all materials must be submitted to the following address by March 1 if application is for the fall semester and by October 1 if application is for the spring semester:

Morehead State University  
Department of Nursing  
Box UPO 715  
Morehead, Kentucky 40351

The associate degree Nursing Program has a limited enrollment. Applicants to the associate program Nursing Program will be selected upon the following admission criteria:

1. American College Test (ACT)
  - A. Mandatory minimum composite score of 17.
  - B. Preference will be given to ACT minimum subscores in the following order:  
Natural science—20  
Social Science—17  
Math—16; English—18
2. Past performance in high school and/or college or university.
  - A. Must be in upper third of high school graduating class and have at least a B average. Preference will be given to applicants who have taken college preparatory track.
  - B. Must have a grade-point average (g.p.a.) of 2.5 on a scale of 4.0 if previously enrolled in an institution of higher education. A minimum of 9 semester hours of college credit in support courses relating to the associate degree Nursing Program must be earned in order for college g.p.a. to be considered. At least 3 of these 9 hours must be credits earned in a biological or natural science. Applicants with a GED will be considered on college performance as described. Applicants who have not yet completed 9 hours will be considered on high school credentials and on midterm college grades if currently enrolled in a college or university.
3. An interview by nursing faculty may be required for applicants who meet mandatory criteria but do not meet minimum preferred criteria.

Applicants may contact the Testing and Evaluation Center, Room 501 Ginger Hall at Morehead State University for information about the American College Test. LPN's may contact the Department of Nursing to obtain information regarding challenge exams for maternity and psychiatric nursing; and contact the Testing and Evaluation Center for information on Fundamentals of Nursing Challenge Exam.

#### Fees and Expenses

There are fees and expenses specific to the associate degree Nursing Program which are in addition to those required by the university. These are subject to change without prior notification. See the Fees section elsewhere in this catalog for general university fees and expenses. The following fees will be collected at registration. Standardized Test Fees—second semester, \$6; fourth semester, \$19.

Other expenses students are responsible for: *Required*—uniform; white hose; white clinical shoes; white lab coat; watch with second hand; cap ribbons and pins (third semester); annual lab tests; VDRL, PP; student liability insurance (annually, \$12.50); Board application fee (fourth



semester—\$103.50), *Optional*—School pin; senior pictures; graduation uniform.

### Transportation

Associate degree Nursing Program students are responsible for providing transportation to their clinical experience and field trips. Students who drive must show proof of current operator's license and automobile insurance coverage to the Department of Nursing and Allied Health Sciences.

### Required Course Sequence

	Sem. Hrs.
<b>FIRST SEMESTER</b> .....	16
NUR 200—Fundamentals of Nursing .....	7
PSY 154—Introduction to Psychology .....	3
PSY 156—Life-Span Developmental Psychology .....	3
BIOL 331—Human Anatomy .....	3
<b>SECOND SEMESTER</b> .....	18
NUR 201—Maternity Nursing (9 weeks) .....	4
NUR 202—Psychiatric Nursing (9 weeks) .....	4
BIOL 332—Human Physiology .....	3
CHEM 100, 100A—Basic Chemistry and Laboratory .....	4
SOC 101—General Sociology .....	3
<b>THIRD SEMESTER</b> .....	18
NUR 300—Child-Adult Nursing I .....	8
ENG 101—English Composition I .....	3
HEC 301—Elements of Nutrition .....	3
BIOL 217—Elementary Medical Microbiology .....	4
OR	
BIOL 317—Principles of Microbiology .....	4
<b>FOURTH SEMESTER</b> .....	18
NUR 301—Child-Adult Nursing II .....	10
NUR 310—Nursing Trends .....	2
ENG 102—English Composition II .....	3
General education requirement .....	3
	70

### Office Management

(606) 783-2154, 783-2174

320 Combs Building

Department of Business and Economics  
College of Professional Studies

Faculty—R. Bernardi, L. Hickman, S. Hunt, S. Luckey,  
H. Northcutt, G. Ousley

### Associate of Applied Business (Two-Year Program)

#### Course Requirements

	Sem. Hrs.
ACCT 281—Principles of Accounting I .....	3
DATA 201—Introduction to Computers .....	3
ECON 201—Principles of Economics I .....	3
ENG 101—Composition I .....	3
ENG 102—Composition II .....	3
MNGT 160—Introduction to Business .....	3
MNGT 301—Principles of Management .....	3
OADM—Typewriting .....	6

OADM 136—Business Calculations .....	3
OADM 190—Office Accounting .....	3
OADM 210—Word Processing I .....	3
OADM 220—Word Processing II .....	3
OADM 321—Business Communications .....	3
OADM 340—Simulated Office Education .....	3
OADM 363—Office Management .....	3
SPCH 370—Business and Professional Speech .....	3
Approved electives .....	13
	64

### Ornamental Horticulture

(606) 783-2662

322 Reed Hall

Department of Agriculture and Natural Resources  
College of Applied Sciences and Technology

Faculty—M. Norris, B. Rogers, R. Wolfe

### Associate of Applied Science (Two-Year Program)

The student must complete a minimum of the 68 semester hours of required courses in the following required course sequence. Additional course electives may also be taken in agriculture and related areas by students wishing greater depth in ornamental horticulture.

#### Required Course Sequence

	Sem. Hrs.
<b>First Semester</b> .....	16
BIOL 150—Introduction to Plant Science .....	3
ENG 101—Composition I .....	3
AGR 101—General Agriculture .....	1
AGR 212—Landscape Plants .....	3
GCT 103—Technical Drawing I .....	3
SPCH 110—Basic Speech .....	3
<b>Second Semester</b> .....	16
OADM 136—Business Calculations .....	3
AGR 213—Landscape Gardening .....	3
ECON 101—Introduction to American Economy .....	3
AGR 215—Horticulture .....	3
CHEM 101—Survey of General Chemistry .....	3
CHEM 101A—Survey of General Chemistry Lab .....	1
<b>Summer School</b> .....	6
AGR 235—Supervised Work Experience .....	6
<b>Third Semester</b> .....	15
AGR 325—Turf Management .....	3
AGR 321—Greenhouse Production I .....	3
AGR 211—Soils .....	3
ENG 192—Technical Composition .....	3
AGR 350—Farm Power and Machinery Management .....	3
<b>Fourth Semester</b> .....	15
AGR 322—Greenhouse Production II .....	3
AGR 314—Plant Propagation .....	3
AGR 326—Nursery Management .....	3
AGR 327—Advanced Landscape Design .....	3
AGR 317—Floral Design .....	3



## Para-Legal Studies

(606) 783-2090

350 Rader Hall

Department of Geography, Government, and History  
College of Arts and Sciences

Faculty—W. Green, K. Schafer

## Bachelor of Arts

The para-legal studies program prepares the student to work in a lawyer's office as a legal assistant. The demand for para-legals is growing in business as well as government, and certainly in the public and private practice of law. Under the supervision of a lawyer, the legal assistant performs legal research of various types, interviews clients, performs investigations, takes care of details in probate matters, and does real estate title searches and countless other duties in the law office.

### Major

	Sem. Hrs.
GOVT 141—Government of the United States	3
GOVT 242—State and Local Government	3
GOVT 290—Introduction to Paralegalism	3
GOVT 390—Legal Research and Writing	3
GOVT 490—Trial Practice and Preparation	3
GOVT 495—Legal Internship	6
ACCT 387—Income Tax	3
REAL 105—Principles of Real Estate	3
REAL 310—Real Estate Law	3
OADM 321—Business Communications	3
OADM 363—Office Management	3
	36

It is strongly recommended that the student minor in business administration.

## Philosophy

(606) 783-2185

103 Combs Building

Department of English, Foreign Languages  
and Philosophy  
College of Arts and Sciences

Faculty—B. Gurley, G. Luckey, F. Mangrum

## Bachelor of Arts

### Major

	Sem. Hrs.
PHIL 200—Introduction to Philosophy	3
PHIL 306—Logic	3

PHIL 505—History of Philosophy I	3
PHIL 506—History of Philosophy II	3
Additional credit in philosophy approved by the department	18
Minimum for a major	30

### Minor

	Sem. Hrs.
PHIL 200—Introduction to Philosophy	3
PHIL 306—Logic	3
PHIL 505—History of Philosophy I	3
PHIL 506—History of Philosophy II	3
Additional credit in philosophy approved by the department	9
Minimum for a minor	21

## Physical Education

(606) 783-2180

201 Laughlin Health Building

Department of Health, Physical Education and Recreation

College of Professional Studies

Faculty—P. Adkins, E. Bentley (head), M. Brown, B. Crager, E. Lucke, S. Lucke, M. Sabie, C. Thompson, L. Wilson

## Bachelor of Arts

### Major

	Sem. Hrs.
PHED 104—Gymnastics	1
PHED 120—Basic Rhythms	1
PHED 131—Intermediate Swimming	1
PHED 132—Life Saving	1
PHED 150—Introduction to Physical Education	2
PHED 422—Coaching Inter-Scholastic Athletics	3
PHED 301—Evaluation in Health, Physical Education, and Recreation	3
PHED 302—Athletic Injuries	2
PHED 303—Physical Education in the Secondary School	2
PHED 401—Organization and Administration of Physical Education	3
PHED 402—Kinesiology	3
PHED 432—Physiology of Exercise	3
PHED 475—Adapted Physical Education	2
PHED 222or PHED 223—Individual Sports	2
PHED 309, 319, 409, or 419—Team Sports	2
5 activities approved by chairman	5
	36

### K-12 Certification Requirements:

Students who elect K-12 Certification must take the following:

	Sem. Hrs.
PHED 206—Rhythmical Activities in the Elementary School	2
PHED 300—Physical Education in the Elementary School	2
PHED 311—Movement Exploration	3
PHED 312—Individual and Team Games for Elementary School	4
EDF 211—Human Growth and Development	3
EDEL 333—Fundamentals of Elementary Education	4
	18

## Physics

(606) 783-2914

206 Lappin Hall

Department of Physical Sciences

College of Arts and Sciences

Faculty—R. Brengelman, D. Cutts, C. Whidden

## Bachelor of Science

The physics program attempts: (1) to provide a complete undergraduate program which has enough flexibility to permit its graduates to pursue careers as professional physicists in industry or in public school teaching; (2) to enable students to pursue graduate degrees in pure and applied physics; or (3) to provide supportive courses for students in other programs such as applied sciences, biology, chemistry, geology, mathematics, and the pre-professional programs.

### Major

Those students who desire a major in physics for supportive purposes or for teacher certification must take the following:

	Sem. Hrs.
PHYS 231—Engineering Physics I*	4
PHYS 231A—Engineering Physics I Lab	1
PHYS 232—Engineering Physics II	4
PHYS 232A—Engineering Physics II Lab	1
PHYS 352—Concepts of Modern Physics	3
PHYS—elective approved by advisor	16
SCI 471—Seminar	1
	30

\*PHYS 201-201A, 202-202A, and 212 may be substituted for PHYS 231-231A and 232-232A. (Substitution is recommended only to students who decide to major in physics after completing PHYS 201-201A and 202-202A and is not recommended for pre-engineering students.)

The program above is suggested for students interested in physics as a preparation for a broad range of career opportunities in physics, applied mathematics, scientific computer applications, and other non-scientific fields. It is recommended for students interested in graduate studies in physics. With a double major in mathematics it prepares the student for graduate work in applied mathematics.

### Engineering or Applied Physics Emphasis

	Sem. Hrs.
PHYS 231—Engineering Physics I	4
PHYS 231A—Engineering Physics I Lab	1
PHYS 232—Engineering Physics II	4
PHYS 232A—Engineering Physics II Lab	1
PHYS 352—Concepts of Modern Physics	3
PHYS electives approved by advisor from PHYS 211, 221, 332, 340, 361, 381, 391, 410, 411, 412, 452, and 493	16
SCI 471—Seminar	1
	30

The program above is suggested for students interested in engineering or industrial physics. Physics majors are prepared for jobs in industrial physics at the B.S. degree level or for graduate engineering programs. Students following this program typically choose to enter graduate degree programs in electrical, mechanical, medical, or computer engineering. The curriculum provides the student with a background in basic physics, mathematics, and computer science which forms the basis of most engineering fields.

## Supplemental Requirements

	Sem. Hrs.
CHEM 111—Principles of Chemistry I	3
CHEM 111A—Principles of Chemistry I Lab	1
CHEM 112—Principles of Chemistry II	3
CHEM 112A—Principles of Chemistry II Lab	1
MATH—elective, 300-400 level, approved by advisor	3

## Minor

	Sem. Hrs.
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
OR	
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
PLUS	
PHYS 350—Nuclear Science	4
PHYS—electives, 300 or 400 level	7-9
	21

## Power and Fluids Technology

(606) 783-2013

210 Lloyd Cassity Building

Department of Industrial Education and Technology

College of Applied Sciences and Technology

Faculty—D. Karwatka

## Associate of Applied Science (Two-Year Program)

### General Education Requirements

The following specific courses must be included in the general education component (see general education requirements):

	Sem. Hrs.
ENG 101—Composition I	3
MATH 135—Math for Technical Students	3
ECON 101—Introduction to American Economy	3
SPCH 370—Business and Professional Speech	3
ENG 192—Technical Composition	3
	15

### Core Requirements

IET 160—Introduction to Power and Fluids Mechanics	3
IET 260—Hydraulics and Pneumatics	3
IET 261—Power Mechanics	3
IET 362—Fluid Power	3
GCT 103—Technical Drawing I	3
IET 317—Time and Motion Study	2
IET 360—Internal Combustion Engines I	3
IET 365—Instrumentation	3
EET 140—Basic Electricity	3
IET 319—Quality Control	3
IET 320—Supervisory Practices	3
General elective	1
IET 463—Heating, Ventilating, and Air Conditioning	3
IET 460—Internal Combustion Engines II	3
MFT 186—Manufacturing and Fabrication	3
IET 422—Industrial Safety	3
General elective	4

## Pre-Chiropractic

(606) 783-2959

327H Lappin Hall

Department of Biological and Environmental Sciences  
College of Arts and Sciences

Faculty—D. Brumagen (coordinator), F. Busroe, G. DeMoss, R. Eversole, J. Howell (head), D. Magrane, D. McNeely, L. Meade, T. Pass, M. Pryor, D. Saxon, H. Setser, C. Van Bell

The 1968 General Assembly of the Commonwealth of Kentucky passed legislation (H.B. No. 147) requiring a minimum of 60 semester hours of study in an accredited college or university as prerequisite to any person becoming eligible for licensure to practice any healing art (including chiropractic medicine). A student who desires to pursue this course of study should consult the catalog of the chiropractic school which he or she plans to attend.

### Requirements

Pre-chiropractic students generally follow the curriculum designed for the biology major and chemistry minor. However, certain complementary and specific general education courses are recommended. A suggested curriculum is available from the pre-chiropractic advisor.

## Pre-Dentistry

(606) 783-2959

327H Lappin Hall

Department of Biological and Environmental Sciences  
College of Arts and Sciences

Faculty—D. Brumagen (coordinator), F. Busroe, G. DeMoss, R. Eversole, J. Howell (head), D. Magrane, D. McNeely, L. Meade, T. Pass, M. Pryor, D. Saxon, H. Setser, C. Van Bell

The Council on Dental Education of the American Dental Association has established minimum requirements for admission to dental schools. Basic requirements are built around the successful completion of two full years of work in an accredited liberal arts and sciences college or university. Minimum course requirements include one year of study in each of the areas of English, biology, physics, general chemistry, and at least one semester of organic chemistry. It is important that all science classes include both lecture and laboratory instruction. Dental schools do not encourage students to apply with such minimal preparation, because the selection of applicants is also based on the demonstration of superior qualification in personal maturity and academic competence. Three, and preferably four, years of undergraduate preparation are necessary to provide students with those qualifications that will permit entry into dental schools. Pre-dental students should have a good background in sciences and mathematics beyond the minimum requirements and they should also cultivate in-

terests in literature, music, art, speech, languages, social sciences, and psychology. For purposes of scheduling, course selection, and complete preparation for professional school, the pre-dental student must work closely with the faculty advisor.

A student who follows a program that includes the requirements for graduation and enters dental school at the end of the junior year may, after successfully completing the first year at dental school, transfer credits to Morehead State University and receive the bachelor's degree, provided he or she lacks six hours or fewer general education requirements with not more than one course needed in any one of the four different general education areas.

### Requirements

Pre-dental students generally follow the curriculum designed for the biology major and chemistry minor. However, certain complementary and specific general education courses are recommended. An academic handbook and suggested curriculum are available from the pre-dental advisor.

## Pre-Engineering

(606) 783-2914

206 Lappin Hall

Department of Physical Sciences  
College of Arts and Sciences

Faculty—R. Brengelman, D. Cutts, C. Whidden

### Two-Two Program (Transfer)

The student spends two years of study in pre-engineering at Morehead State University. Elective courses are chosen to meet the requirements of the four-year engineering school to which the student plans to transfer to complete a baccalaureate degree in an engineering field.

This program is intended for the engineering student who wishes to complete a Bachelor of Science degree in engineering as quickly as possible. Students can also receive the Associate of Science degree in engineering science.

### Suggested Program

#### FIRST YEAR

	First Semester	Sem. Hrs.
ENG 101—Composition I	3	3
*MATH 175—Analytic Geometry and Calculus I	4	4
CHEM 111—Principles of Chemistry I	3	3
CHEM 111A—Principles of Chemistry I Laboratory	1	1
PSY 154—Introduction to Psychology	3	3
GEO 100—Fundamentals of Geography	3	3
		17

	Second Semester	
ENG 192—Technical Composition	3	
MATH 275—Analytic Geometry and Calculus II	4	
CHEM 112—Principles of Chemistry II	3	
CHEM 112A—Principles of Chemistry II Laboratory	1	
IET 103—Technical Drawing I	3	
DATA 260—FORTRAN Programming I	3	
		17

#### SECOND YEAR

	First Semester	
MATH 276—Analytic Geometry and Calculus III	4	
PHYS 231—Engineering Physics I	4	
PHYS 231A—Engineering Physics I Lab	1	
**ECON 201—Principles of Economics I	3	
ENG 202—Introduction to Literature	3	
		15

Second Semester	
MATH 363—Differential Equations	3
PHYS 232—Engineering Physics II	4
PHYS 232A—Engineering Physics II Lab	1
PHYS 221—Statics	3
ECON 202—Principles of Economics II	3
	14

\*Students who have not had one semester of trigonometry in high school may be required to take MATH 141—Trigonometry, before taking MATH 175.

\*\*ECON 201 is a required course for the University of Kentucky mechanical engineering major and not taken for general studies elective credit. ECON 202 is regarded as a general studies elective.

### Three-Two Program (Dual Degree)

The student completes three years of study in chemistry, mathematics, and physics at Morehead State University before transferring to the University of Kentucky or Auburn University to complete the final two years of engineering course work in a specific field of engineering. Upon completing work at both schools, the student receives dual degrees: a B.S. degree in physics and mathematics or the Bachelor of University Studies in physical sciences from Morehead State University and a Bachelor of Science degree in engineering from the University of Kentucky or Auburn University. All engineering specialties are available in this program.

This program is designed for the student desiring a stronger mathematics and science background before completing engineering studies. In addition, many potential employers are interested in students with strong liberal arts training to deal with the ethical and social impact of engineering activities.

### Pre-Forestry

(606) 783-2662

332 Reed Hall

Department of Agriculture and Natural Resources  
College of Applied Sciences and Technology

Faculty—R. Wolfe, B. Rogers

Students interested in forestry may take their first two years of course work at Morehead State University and then complete their studies at an accredited school 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 Morehead State University. The program may be modified to meet entrance requirements at any institution offering a forestry program.

### Required Course Sequence

	Sem.	Hrs.
First Semester		
ENG 101—Composition I	1	3
BIOL 150—Introduction of Plant Science	1	3
CHEM 101—Survey of General Chemistry	1	3
CHEM 101A—Survey of General Chemistry Laboratory	1	1
MATH 175—Analytic Geometry and Calculus I	1	4
PHED—activity course	1	1
General elective	1	2
Second Semester		
ENG 192—Technical Composition	2	3
AGR 180—Elementary Field Crops	2	3
CHEM 201—Survey of Organic Chemistry	2	3
CHEM 201A—Survey of Organic Chemistry Laboratory	2	1
MATH 353—Statistics	2	3
PHED—activity course	2	1
General elective	2	2

Third Semester	
SOC 170—Rural Sociology	3
PHYS 201, 201A—Elementary Physics I and Laboratory	4
BIOL 215—General Botany	4
CON 102—Surveying I	3
AGR 211—Soils	3

Fourth Semester	
HIS 141—Introduction to Early American History	3
SPCH 110—Basic Speech	3
ECON 201—Principles of Economics I	3
PSY 154—Introduction to Psychology	3
ENG—literature elective	3
	65

### Pre-Law

(606)783-2090

350 Rader Hall

Department of Geography, Government, and History  
College of Arts and Sciences

Faculty—J. Bizzel

The field of government is recommended as desirable training for pre-law students. While there is no officially prescribed pre-law curriculum, most law schools require the bachelor's degree for entrance; therefore it is recommended that preparatory studies be directed toward the goal. All general education requirements should be met, as well as a degree in some particular field.

### Pre-Medicine

(606) 783-2295

327A Lappin Hall

Department of Biological and Environmental Sciences  
College of Arts and Sciences

Faculty—D. Brumagen, F. Busroe, G. DeMoss, R. Eversole, J. Howell (head), D. Magrane, D. McNeely, L. Meade, T. Pass, M. Pryor, D. Saxon (coordinator), H. Setser, C. Van Bell

Most medical schools require a minimum number of specific science courses. Applicants must have completed the following courses prior to entrance: one year each of biology, physics, general chemistry, and organic chemistry. Additional requirements include one year of English and at least one semester of algebra, trigonometry, and psychology. These specific courses and the successful completion of a baccalaureate degree represent basic requirements for entrance to medical schools, and it is highly recommended that these requirements be supplemented by additional study in a variety of subject areas. It is desirable that the pre-medical student take advanced courses in chemistry, mathematics, and biology. It is most important that the pre-medical student balance a scientific education with courses selected from the arts, humanities, and social sciences. For purposes of scheduling, courses selection, and complete preparation for professional school, the pre-medical student must work closely with the faculty advisor.



Since specific requirements vary among medical schools, it is essential that the student investigate the requirements of the medical school of his or her choice during the first two years of the preparatory program.

### Requirements

Pre-medical students generally follow the curriculum designed for the biology major and chemistry minor. However, certain complementary and specific general education courses are recommended. An academic handbook and suggested curriculum are available from the pre-medical advisor.

### Pre-Optometry

(606) 783-2914

206 Lappin Hall

Department of Physical Sciences

College of Arts and Sciences

Faculty—R. Brengelman, D. Cutts, C. Whidden

The Pre-Optometry Program is basically a two- to three-year preparatory program designed to meet the entrance requirements of most optometry schools. However, many pre-optometry students elect to pursue a four-year degree program in the biological or physical sciences. Before seeking admission to an optometry school, students must take the Optometry College Admission Test. 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 Optometry School, or the University of Houston School of Optometry.

### Suggested Program

#### FIRST YEAR

##### First Semester

	Sem. Hrs.
ENG 101—Composition I	3
CHEM 111—Principles of Chemistry I	3
CHEM 111A—Principles of Chemistry I Laboratory	1
MATH 152—College Algebra	3
BIOL 208—Invertebrate Zoology	3
PSY 152—General Psychology	3
	16

##### Second Semester

ENG 102—Composition II	3
CHEM 112—Principles of Chemistry II	3
CHEM 112A—Principles of Chemistry II Laboratory	1
*MATH 141—Plane Trigonometry	3
BIOL 209—Vertebrate Zoology	3
GOVT 100—Introduction to Government	3
	16

#### SECOND YEAR

##### First Semester

SPCH 110—Basic Speech	3
PHYS 201—Elementary Physics I	3
PHYS 201A—Elementary Physics I Laboratory	1
MATH 175—Analytic Geometry and Calculus I	4
CHEM 326—Organic Chemistry I	3
CHEM 326A—Organic Chemistry I Laboratory	1
	15

##### Second Semester

PHYS 202—Elementary Physics II	3
PHYS 202A—Elementary Physics II Laboratory	1
MATH 275—Analytic Geometry and Calculus II	4
CHEM 327—Organic Chemistry II	3

CHEM 327A—Organic Chemistry II Laboratory	1
BIOL 317—Principles of Microbiology	4
	16

\*Not necessary if student is eligible for MATH 175.

### Pre-Pharmacy

(606) 783-2951

316 Lappin Hall

Department of Biological and Environmental Sciences  
College of Arts and Sciences

Faculty—D. Brumagen, F. Busroe (coordinator), G. DeMoss, R. Eversole, J. Howell (head), D. Magrane, D. McNeely, L. Meade, T. Pass, M. Pryor, D. Saxon, H. Setser, C. Van Bell

The suggested program of pre-pharmacy study at MSU will meet the general requirements for most pharmacy schools. It can be modified to satisfy the needs of the individual student.

Admission to a school of pharmacy may be obtained after completion of a two-year pre-pharmacy program, although it often takes three years. Three additional years are required to complete pharmacy school.

### Requirements

Pre-pharmacy students generally follow the curriculum designed for the biology major and chemistry minor. However, certain complementary and specific general education courses are recommended. An academic handbook and suggested curriculum are available from the pre-pharmacy advisor.

### Pre-Physical Therapy

(606) 783-2954, (606) 783-2944

327C Lappin Hall

Department of Biological and Environmental Sciences  
College of Arts and Sciences

Faculty—D. Brumagen, F. Busroe, G. DeMoss, R. Eversole, J. Howell (head), D. Magrane (coordinator), D. McNeely, L. Meade, T. Pass, M. Pryor, D. Saxon, H. Setser, C. Van Bell

Students who plan to complete a degree in physical therapy should consult the catalog of the school of physical therapy they plan to attend to be certain they fulfill the requirements of the chosen school. Most schools of physical therapy require 60 to 65 hours of course work in a pre-physical therapy program.

The suggested curriculum may be varied according to individual preferences.

### Requirements

Pre-physical therapy students generally follow the curriculum designed for the biology major and chemistry minor. However, certain complementary and specific general educa-

tion courses are recommended. An academic handbook and suggested curriculum are available from the pre-physical therapy advisor.

## Pre-Veterinary Medicine

(606) 783-2662

332 Reed Hall

Department of Agriculture and Natural Resources  
College of Applied Sciences and Technology

Faculty—J. Willard

Students interested in becoming veterinarians may enroll in the Department of Agriculture and Natural Resources at Morehead State University and complete their requirements for admission to veterinary school.

The state of Kentucky is a participating member in the Southern Regional Education Board's plan under which legal Kentucky residents may attend schools of veterinary medicine at Auburn University and Tuskegee Institute. In this program, the students accepted to those universities are exempt from out-of-state tuition and would pay only the in-state tuition of that university. Ohio residents may complete the requirements for admission to the veterinary school at Ohio State University.

A minimum of 80 to 90 semester hours of specified course work is required for application to a school of veterinary medicine. A grade of D in required courses will not be accepted by these universities. The final selection is made by the admissions committee of the respective school of veterinary medicine.

The following curriculum is designed to meet the requirements of Auburn and Tuskegee Institute. Three years are normally required for completion.

### Required Course Sequence

	Sem. Hrs.
<b>FRESHMAN YEAR</b>	
First Semester	17
ENG 101—Composition I	3
CHEM 111—Principles of Chemistry I	3
CHEM 111A—Principles of Chemistry I Lab	1
AGR 133—Farm Livestock Production	3
BIOL 208—Invertebrate Zoology	3
HIS 131—Introduction to Civilization I	3
PE—Activity Course	1
Second Semester	17
ENG 102—Composition II	3
CHEM 112—Principles of Chemistry II	3
CHEM 112A—Principles of Chemistry II Lab	1
HIS 132—Introduction to Civilization II	3
MATH 152—College Algebra*	3
BIOL 209—Vertebrate Zoology	3
PE—Activity course	1
<b>SOPHOMORE YEAR</b>	
First Semester	17
GOVT 141—Government of the U.S.	3
MATH 141—Plane Trigonometry*	3
BIOL 215—Botany or BIOL 150—Introduction to Plant Science	4
CHEM 326, 326A—Organic Chemistry I and Laboratory	4
HUM elective	3
Second Semester	17
PHYS 201, 201A—Elementary Physics I and Laboratory	4
CHEM 327, 327A—Organic Chemistry II and Laboratory	4

BIOL 317—Principles of Microbiology	4
HLTH 150—Personal Health	2
Social science elective	3

### JUNIOR YEAR

First Semester	17
PHYS 202—Elementary Physics II	4
BIOL 304—Genetics	4
AGR 316—Feeds and Feeding	3
AGR—Electives**	4
Social Science or Humanities Elective	3

Second Semester	15
MATH 175—Analytic Geometry and Calculus I	4
ALH 302—Medical Terminology	2
AGR 515—Animal Nutrition	3
AGR electives**	6

\*Students may by-pass MATH 141 and 152 through the mathematics placement examination.

\*\*These courses are not required in the pre-veterinary curriculum but are highly recommended for the students who plan to earn a bachelor of science degree from the Department of Agriculture and Natural Resources.

## Production Management

(606) 783-2776, 783,2174

314 Combs Building

Department of Business and Economics  
College of Professional Studies

Faculty—B. Davis (head)

## Bachelor of Business Administration

### Production Management Option

#### General Education Requirements

The following specific courses must be included in the 42 hour general education component (see general education requirements)

	Sem. Hrs.
SPCH 370—Business and Professional Speech	3
MATH 160—Mathematics for Business and Economics	3
MATH 354—Business Statistics	3
ECON 201—Principles of Economics I	3
ECON 202—Principles of Economics II	3

#### Core Requirements

ACCT 281—Principles of Accounting I	3
ACCT 282—Principles of Accounting II	3
DATA 201—Introduction to Computers	3
ECON 350—Microeconomic Theory	3
FIN 360—Business Finance	3
MKT 304—Marketing	3
MNGT 261—The Legal Environment of Business Organizations	3
MNGT 301—Principles of Management	3
MNGT 306—Production Management	3
MNGT 472—Business Policies and Problems	3
OADM 321—Business Communications	3
	33

### Program Requirements

	Sem. Hrs.
BBA Core	33
ACCT 390—Cost Accounting I	3
MNGT 311—Personnel Management	3
MNGT 411—Labor Relations	3
MNGT 506—Operations Analysis	3
At least 11 hours from:	
IET 103—Technical Drawing I	3
IET 286—General Metals II	3

IET 317—Time and Motion Study	3
IET 319—Quality Control	3
IET 422—Industrial Safety	3
IET 472—Basic Industries Practicum	3
	56

## Psychology

(606) 783-2981

601 Ginger Hall

Department of Psychology

College of Professional Studies

Faculty—L. Clough, A. Demaree, J. Gotsick, B. Mattingly, C. Morgan, F. Osborne, R. Radenhausen, G. Tapp (head)

## Bachelor of Arts

Psychology majors seeking teacher certification must also present a teaching minor. See "Teacher Education Program" and "Professional Laboratory Experiences" requirements.

### Major

	Sem. Hrs.
PSY 154—Introduction to Psychology	3
PSY 381—Experimental Psychology I	3
PSY 585—Systems and Theories	3
MATH 353—Statistics	
OR	
EDSP 581—Educational Statistics	3
Selected from the following categories:	
Biopsychology	3
PSY 521—Physiological Psychology	
OR	
PSY 583—Sensory Psychology	
Developmental	3
PSY 156—Life-span Developmental Psychology	
OR	
PSY 557—Seminar in Developmental Research	
Experimental	3
PSY 554—Seminar in Social Psychology	
OR	
PSY 582—Experimental Psychology II	
OR	
PSY 548—Perception	
Learning and Motivation	3
PSY 559—Behavior Modification	
OR	
PSY 586—Motivation	
OR	
PSY 589—Psychology of Learning	
Social and Personality	3
PSY 354—Introduction to Social Psychology	
OR	
PSY 390—Psychology of Personality	
OR	
PSY 555—Environmental Psychology	
OR	
PSY 556—Introduction to Clinical Psychology	
OR	
PSY 590—Abnormal Psychology	

Elective (selected from courses not used as required courses, or from the following courses)

PSY 157—Psychology of Adjustment	3
PSY 199—Workshop	1-3
PSY 276—Independent Study	1-3
PSY 353—Industrial Psychology	3
PSY 422—Comparative Psychology	3
PSY 470—Research Problems	3
PSY 558—Psychological Testing	3
PSY 575—Selected Topics	1-3
PSY 599—Workshop	1-3
	36

Additionally, for teacher certification:

EDF 207—Foundations of Education	3
EDF 211—Human Growth and Development	3
EDF 311—Learning Theories in the Classroom	3
EDSE 312—Teaching Skills and Media	3
EDSP 332—Teaching the Exceptional Student	2
Professional semester:	
EDSE 415—Teacher in Today's Schools	3
EDSE 416—Student Teaching	12
	29

### Minor

	Sem. Hrs.
PSY 154—Introduction to Psychology	3
MATH 353—Statistics	
OR	
EDSP 581—Educational Statistics	3
Psychology electives	18
	24

## Radio-Television

(606) 783-2602, (606) 783-2184 (department head)

211 Breckinridge Hall, 109 Breckinridge Hall

Department of Communications

College of Arts and Sciences

Faculty—Michael Biel, David Collins, Dale Greer, Thomas Yancy, (coordinator)

## Bachelor of Arts

Because typing is very important in broadcasting work, and because it is required in some courses, students in radio-television are encouraged to develop typing skills before entering the program. Some may want to take a typing course during their first semester.

### Major (Non-Teaching)

	Sem. Hrs.
R-TV 150—Intro. to Broadcasting	3
R-TV 151—Intro. to Broadcast Techniques	2
R-TV 240—Writing for Broadcast	3
R-TV 250—Audio Production and Direction	4
R-TV 338—Radio Operating Practices	1
R-TV 340—Video Production and Direction I	3
OR	
R-TV 450—Broadcast Management	3
R-TV 459—Broadcast Law and Regulations	3
SPCH 100—Voice and Articulation	3
Electives	11
	36

### Minor (Non-Teaching)

R-TV 150—Intro. to Broadcasting	3
R-TV 151—Intro. to Broadcast Techniques	2
R-TV 240—Writing for Broadcast	3
SPCH 100—Voice and Articulation	3
Electives	10
	21

## Associate of Applied Arts

### Broadcasting

	Sem. Hrs.
R-TV 150 Introduction to Broadcasting	3
R-TV 151—Introduction Broadcast Techniques	2
R-TV 240—Writing for Broadcast	3
R-TV 250—Audio Production and Direction I	4
R-TV 283—Photographic Design	3
R-TV 338—Radio Operating Practices	1
R-TV 340—Video Production and Direction I	3
R-TV 344—Broadcast News and Public Affairs	3



R-TV 440—Video Production and Direction II	4
OR	
R-TV 451—Professional Audio Practices*	3
R-TV 450—Broadcast Management	3
JOUR 201—News Writing and Reporting	3
JOUR 382—Principles of Public Relations	3
JOUR 383—Principles of Advertising	3
SPCH 100—Voice and Articulation	3
SPCH 110—Basic Speech	3
COMM Internship (R-TV)	3
*Since R-TV 440 is a 4-hour course, those who elect to take 451 must take an additional elective hour in R-TV.	

An additional 17 hours must be taken as specified under the general education requirements for an associate degree

## Broadcast Operations

	Sem. Hrs.
R-TV 150—Introduction to Broadcasting	3
R-TV 151—Introduction to Broadcast Techniques	2
R-TV 240—Writing for Broadcast	3
R-TV 250—Audio Production and Direction I	4
R-TV 320—Broadcast Advertising and Sales	3
R-TV 340—Video Production and Direction I	3
R-TV 344—Broadcast News and Public Affairs	3
R-TV 450—Broadcast Management	3
R-TV 459—Broadcast Law and Regulations	3
IET 240—Basic Electricity	3
IET 241—Basic Electronics	3
IET 338—Radio Operating Practices	3
IET 341—Transistors and Semiconductors	3
IET 342—Communications Electronics	3
IET 345—Television Electronics	4
IET 346—Transmitter Electronics	4
MATH 152—College Algebra	3
MATH 141—Plane Trigonometry	3
SPEH 100—Voice and Articulation	3

An additional 15 hours must be taken as specified under the general education requirements for an associate degree.

## Radiologic Technology

(606) 783-2647, (606) 783-2632  
 410 Reed Hall, 234 Reed Hall  
 Department of Nursing and Allied Health Sciences  
 (head) B. Porter  
 College of Applied Sciences and Technology  
 Faculty—B. Crisp, J. Darling, R. Smith (coordinator)

## Associate of Applied Science (Two-Year Program)

The Joint Review Committee on Education in Radiologic Technology accredited associate degree Radiologic Technology Program (R.T.) is designed to prepare individuals for entry into the health care profession of radiologic technology.

Students accepted into the program must spend a minimum of 24 months enrolled in the (R.T.) Program. The R.T. students spend 50% of their time fulfilling clinical education requirements and gaining "hands on" clinical experience in three different hospitals associated with the program. The R.T. Program is currently affiliated with the following nine hospitals: Harlan Appalachian Regional Hospital in Harlan, Ky.; Hazard Appalachian Regional Hospital in Hazard, Ky.; Highlands Regional Medical Center in Prestonsburg, Ky.; Humana Hospital of Lake Cumberland in Somerset, Ky.; Mary Chiles Hospital in Mount Sterling, Ky.; Meadowview Regional Hospital in Maysville, Ky.;

Methodist Hospital of Kentucky in Pikeville, Ky.; Morgan County Appalachian Regional Hospital in West Liberty, Ky.; and Saint Claire Medical Center in Morehead, Ky.

Graduates of the R.T. program are eligible to sit for the American Registry of Radiologic Technology national certification examination.

## Admission Requirements and Procedures for Radiologic Technology Program

The R.T. Program has a selective admission policy which is separate, and in addition to, the university's admission procedures. The selection of students for the R.T. Program is based on a weighted point rating scale. The admission procedure and the requirements for R.T. admission are outlined as follows:

### Application Procedure:

1. Apply to Morehead State University through the university's office of Admissions.
2. Submit required materials listed below to the Radiologic Technology Program.
  - a. Completed application for associate degree program in R.T.
  - b. Copy of American College Test Scores (ACT).
  - c. Copy of Nelson-Denny Reading Test Scores, Form E or F.
  - d. Official copy of high school transcript or GED scores, and if applicable, college transcripts.
  - e. Completed physician's statement of applicant's health and physical capabilities status.
  - f. Three personal reference information sheets.
3. Applicants reapplying to associate degree R.T. Program must submit new application materials for reconsideration of program admission.
4. In order to be considered for admission to the associate degree R.T. Program, all materials must be submitted to the following address during the acceptance period, which is January 15 to May 15 of each year (or until class is filled):

Radiologic Technology Program  
 Morehead State University  
 UPO Box 784, Reed Hall  
 Morehead, Kentucky 40351

ATTENTION: R.T. Selection Committee

Applicants may contact the MSU Testing and Evaluation Center, Room 501, Ginger Hall at (606) 783-2526 for information about the American College Test (ACT) and the Nelson-Denny Reading Test availability.

### Admission Requirements:

The Radiologic Technology Program has a limited enrollment of 31 students per year. In order to be admitted to the R.T. Program, the applicant must meet the following requirements:

1. Be admitted to Morehead State University.
2. Be a high school graduate or have obtained a GED.
3. Be 18 years of age or show evidence that the applicant will be 18 years old before the beginning of the second semester of the program. (The state and federal radiation regulations require that minors receive no more than 10% of the accumulated dose of radiation for workers in radiologic health occupations.)
4. Present documentation of meeting health and physical capability requirements as verified by a licensed physician upon completion of a thorough physical examination.
5. Achieve a minimum of 103 cumulative points for both components considered in the R.T. point rating scale. The two major areas evaluated are as follows:



- a. Academic ability component, 69.5 points required, equates to 67.5% points required, equates to 67.5% of R.T. admission point requirements. The component is determined by evaluation of high school cumulative grade-point average and the math grade average, or GED scores; ACT scores; Nelson-Denny Reading Test scores; and if applicable, previous certifications, degrees, and/or academic credits.
- b. Personal characteristics component, 33.5 points desired, equates to 32.5% of the R.T. admission point requirement. The rating points for this component are obtained by evaluating the three personal reference information documents, and by rating applicant responses and the information obtained during the two required personal interview sessions. (One interview is held on the MSU campus with an R.T. faculty member, and the second interview is conducted by a registered technologist in one of the nine hospitals affiliated with the program.)

### Fees and Expenses:

Fees and expenses specific to the Radiologic Technology Program are in addition to those required by the university. These are subject to change without prior notification. The following fees to be paid by the student, will be collected by the department:

1st Semester—\$5.00 Radiologic film markers fee; \$1.00 dosimeter set-up fee; \$8.16 dosimeter service fee; \$12.50 liability insurance fee; \$5.00 CPR fee.

2nd Semester—\$8.16 dosimeter service fee.

3rd Semester—\$8.16 dosimeter service fee; \$12.50 liability insurance fee.

4th Semester—\$5.00 CPR fee; \$8.16 dosimeter service fee; \$11.00 class picture fee.

Other expenses students are responsible for: the purchase of white uniform, white hose (if applicable), white clinical shoes, white lab coat, program patches for each uniform and an identification name pin (the latter is available from the University Store); and all housing and transportation expenses incurred during clinical internship assignments. Also, the national certification examination, given by the American Registry for Radiologic Technologists following graduation from the R.T. Program, requires a \$35.00 application fee, and any student dosimeters lost or damaged require a \$2.00 replacement fee. Optional fees include: the purchase of a school pin upon graduation and additional graduation announcements.

### Program Requirements

All RAD courses must be taken in sequence as listed. AHS 302 and BIO 331 must be taken prior to entry into the second semester of the program.

	Sem. Hrs.
<b>FIRST SEMESTER</b>	16
RAD 110—Radiographic Anatomy and Positioning I	4
RAD 120—Radiologic Technology I	4
AHS 302—Medical Terminology	2
MATH 135—Mathematics for Technical Students	3
BIOL 331—Human Anatomy	3
<b>SECOND SEMESTER</b>	12
RAD 130—Clinical Internship I	10
RAD 131—Special Problems—Nursing Procedures	2

<b>FIRST SUMMER SESSION</b>	6
RAD 210—Radiographic Anatomy and Positioning II	3
ENG 101—Composition I	3

<b>SECOND SUMMER SESSION</b>	6
RAD 220—Radiographic Anatomy and Positioning III	3
RAD 260—Advanced Radiographic Procedures	3

<b>THIRD SEMESTER</b>	12
RAD 230—Clinical Internship II	10
RAD 231—Special Problems—Radiographic Quality	2

<b>FOURTH SEMESTER</b>	18
RAD 240—Radiologic Technology II	3
RAD 250—Radiation Physics and Electronics	3
BIOL 332—Human Physiology	3
ENG 192—Technical Composition	3
PSY 154—Introduction to Psychology	3
RAD 320—Radiographic Pathology and Biology	3

<b>FIRST SUMMER SESSION</b>	4
RAD 330—Clinical Internship III	4

<b>SECOND SUMMER SESSION</b>	4
RAD 340—Clinical Internship IV	4
	78

## Real Estate

(606) 783-2776, 783-2174

314 Combs Building

Department of Business and Economics  
College of Professional Studies

Faculty—B. Davis (head)

## Bachelor of Business Administration

### Real Estate Option

#### General Education Requirements

The following specific courses must be included in the 42 hour general education component (see general education requirements)

	Sem. Hrs.
SPCH 370—Business and Professional Speech	3
MATH 160—Mathematics for Business and Economics	3
MATH 354—Business Statistics	3
ECON 201—Principles of Economics I	3
ECON 202—Principles of Economics II	3

#### Core Requirements

	Sem. Hrs.
ACCT 281—Principles of Accounting I	3
ACCT 282—Principles of Accounting II	3
DATA 201—Introduction to Computers	3
ECON 350—Microeconomic Theory	3
FIN 360—Business Finance	3
MKT 304—Marketing	3
MNGT 261—The Legal Environment of Business Organizations	3
MNGT 301—Principles of Management	3
MNGT 306—Production Management	3
MNGT 472—Business Policies and Problems	3
OADM 321—Business Communications	3
	33

### Program Requirements

	Sem. Hrs.
BBA Core	33
REAL 105—Principles of Real Estate	3
REAL 310—Real Estate Law	3
REAL 320—Real Estate Marketing	3
REAL 325—Appraisal of Residential Property	3
REAL 331—Real Estate Finance	3
Approved real estate electives	6
	54

## Bachelor of Science

### Minor

Students selecting programs with real estate minor should first consult with advisors in their major areas.

### Course Requirements

	Sem. Hrs.
REAL 105—Principles of Real Estate	3
REAL 310—Real Estate Law	3
REAL 320—Real Estate Marketing	3
REAL 325—Appraisal of Residential Property	3
REAL 331—Real Estate Finance	3
Approved real estate electives	9
	24

## Associate of Applied Business

### Course Requirements

Sem. Hrs.	
ACCT 281—Principles of Accounting I	3
ACCT 282—Principles of Accounting II	3
DATA 201—Introduction to Computers	3
ECON 201—Principles of Economics I	3
ECON 202—Principles of Economics II	3
ENG 101—Composition I	3
ENG 102—Composition II	3
FIN 252—Mathematics of Finance	3
FIN 407—Principles of Insurance	3
OADM 321—Business Communications	3
REAL 105—Principles of Real Estate	3
REAL 310—Real Estate Law	3
REAL 320—Real Estate Marketing	3
REAL 325—Appraisal of Residential Property	3
REAL 331—Real Estate Finance	3
REAL 400—Real Estate Brokerage	3
Real estate elective	3
SOC 101—General Sociology	3
Approved electives	10
	64

## Reclamation Technology

(606) 783-2640

325 Reed Hall

Department of Agriculture and Natural Resources  
College of Applied Sciences and Technology

Faculty—W. Blakely, B. Rogers

## Associate of Applied Science (Two-Year Program)

The student must complete a minimum of the 49 semester hours of required courses in the following list. Additional course electives may also be taken in agriculture, mining, and reclamation technology.

### Core Requirements

	Sem. Hrs.
Required courses	49
RCL 301—Reclamation Laws and Regulations	3
RCL 302—Reclamation Management and Systems Planning I	4
RCL 303—Reclamation Management and Systems Planning II	4
MIN 101—Introduction to Mining and Reclamation	3
MIN 103—Mining Drafting	3
MIN 303—Mining Laws and Management	3
AGR 207—Land Conservation and Forest Management	3
AGR 211—Soils	3
Approved electives	23

### Minor

The student must complete a minimum of the 21 semester hours of courses in the following required list, plus a major

selected in another field. General course electives may also be taken in agriculture, mining, and related areas by students wishing greater depth in reclamation technology.

	Sem. Hrs.
Required courses in reclamation technology	21
RCL 301—Reclamation Laws and Regulations	3
RCL 302—Reclamation Management and Systems Planning I	4
RCL 303—Reclamation Management and Systems Planning II	4
CON 102—Surveying I	3
MIN 103—Mining Drafting	3
Approved electives	4

## Recreation

(606) 783-2180

201 Laughlin Health Building

Department of Health, Physical Education,  
and Recreation

Faculty—E. Bentley (head), R. Chaney, H. Nesbitt,  
R. Wells

## Bachelor of Arts

### Major

	Sem. Hrs.
REC 201—Outdoor Recreation	3
REC 209—Recreational Sports	2
REC 285—Community Recreation	2
REC 286—Recreational Leadership	2
REC 288—Recreational Arts and Crafts	2
REC 290—Field Experience I	1
REC 305—Social Recreation	2
REC 310—Youth Organization	2
REC 375—Creative Dramatics	3
REC 388—Community Centers and Playgrounds	3
REC 390—Field Experience II	1
REC 471—Seminar	1
REC 475—Therapeutic Recreation	3
REC 477—Recreation Internship	8
REC 580—Outdoor Interpretation	3
	38

### Minor

The minor requires 21 hours approved by the department head.

## Religious Studies

(606) 783-2185

103 Combs Building

Department of English, Foreign Languages,  
and Philosophy

Faculty—G. Luckey, F. Mangrum, M.K. Thomas

## Bachelor of Arts

### Major

	Sem. Hrs.
REL 221—World Religions I	3
REL 222—World Religions II	3
PHIL 200—Introduction to Philosophy	3
PHIL 307—Philosophy of Religion	3
Additional credit in religious studies approved by the Department of Philosophy	18
Minimum for a major	30

**Minor**

	Sem. Hrs.
REL 221—World Religions I	3
REL 222—World Religions II	3
PHIL 200—Introduction to Philosophy	3
PHIL 307—Philosophy of Religion	3
Additional credit in religious studies approved by the Department of Philosophy	9
Minimum for a minor	21

*NOTE: Courses which may be selected, with the approval of the Department of English, Foreign Languages, and Philosophy, to complete the major or minor in religious studies are the following:*

	Sem Hrs.
REL 321—Early and Medieval Christian Thought	3
REL 322—Modern Christian Thought	3
REL 323—Twentieth-Century Christian Thought	3
REL 476—Special Problems	1-3
ENG 325—Religious Literature of the World	3
ENG 367—Old Testament Literature	3
ENG 368—New Testament Literature	3
HIS 332—Christianity and Its World	3
HIS 350—Religion in American History	3

**Russian**

(606) 783-2185  
103 Combs Building  
Department of English, Foreign Languages, and  
Philosophy.  
College of Arts and Sciences  
Faculty—M. Pryor

There are no academic programs in Russian, but courses are available. Please refer to the course description section for course offerings.

**Safety Education**

(606) 783-2180  
201 Laughlin Health Building  
Department of Health, Physical Education, and  
Recreation  
College of Professional Studies  
Faculty—E. Bentley (head), B. Crager, E. Lucke, C. Thompson

**Minor**

	Sem. Hrs.
HLTH 203—Safety and First Aid	3
HLTH 200—Introduction to Driver Education	3
HLTH 201—Administration of Driver and Traffic Education	3
HLTH 202—Supervision of Safety Education	3
HLTH 306—Methods of Teaching Driver Education	3
HLTH 307—Intermediate Driver Education	3
HLTH 400—Advanced Driver Education	3
	21

**Secondary Science**

(606) 783-2948  
307 Lappin Hall  
Department of Physical Sciences  
College of Arts and Sciences  
Faculty—M. Esham, W. Falls, R. Fiel, C. Ramey

**Area of Concentration (Teaching)**

A student can become certified as a secondary science teacher by completing a Bachelor of Science degree with an area of concentration in science. The student is required to complete the core of courses listed in part A as well as an emphasis in biology, chemistry, earth science, or physics as presented in part B. In addition, the student will be expected to complete the mathematics curriculum listed in part C. The student must also complete the Teacher Education Program discussed elsewhere in this catalog. The student is certified in the emphasis chosen as well as in general science and interdisciplinary sciences. Further certification is obtained by the completion of additional emphases.

**Part A—The Core**

	Sem. Hrs.
<b>Biology</b>	
BIOL 208—Invertebrate Zoology	3
BIOL 215—Botany	4
<b>Chemistry</b>	
CHEM 101—Survey of General Chemistry	3
CHEM 101A—Survey of General Chemistry Laboratory	1
CHEM 201—Survey of Organic Chemistry	3
CHEM 201A—Survey of Organic Chemistry Laboratory	1
OR	
CHEM 111—Principles of Chemistry I	3
CHEM 111A—Principles of Chemistry I Laboratory	1
CHEM 112—Principles of Chemistry II	3
CHEM 112A—Principles of Chemistry II Laboratory	1
<b>Earth Science</b>	
GEOS 100—Physical Geology	1
GEOS 107—Introduction to Geoscience	3
GEOS 201—Historical Geology	
OR	
GEOS 410—Geological History of Plants and Animals	3
<b>Physics</b>	
PHYS 201—Elementary Physics I	
PHYS 201A—Elementary Physics I Lab	4-5
OR	
PHYS 231—Engineering Physics I	
PHYS 231A—Engineering Physics I Lab	
PHYS 202—Elementary Physics II	
PHYS 202A—Elementary Physics II Lab	4-5
OR	
PHYS 232—Engineering Physics II	
PHYS 232A—Engineering Physics II Lab	
<b>Science</b>	
SCI 592—Science for the Secondary Teacher	3
	33-35

**Part B—Choice of Emphasis**

	Sem. Hrs.
<b>Biology (32 sem. hrs.)</b>	
BIOL 100—Orientation to Biological and Environmental Sciences	1
BIOL 206—Biological Etymology	2
BIOL 209—Vertebrate Zoology	3
BIOL 304—Genetics	3
BIOL 317—Principles of Microbiology	4
BIOL 380—Cell Biology	3
BIOL 471—Seminar in Biological Sciences	1
BIOL 561—Ecology	3
Biology electives (300 level or above)	6
Elect one of the following:	
BIOL 337—Comparative Anatomy	3



BIOL 338—Developmental Biology	3
BIOL 550—Plant Anatomy	3
BIOL 555—Plant Morphology	3
Elect one of the following:	
BIOL 513—Plant Physiology	3
BIOL 525—Animal Physiology	3
	32

**Chemistry (15 sem. hrs.)**

15 additional semester hours in chemistry approved by department head (cannot include BIOL 595 or SCI 476).

**Earth Science (15 sem. hrs.)**

15 additional semester hours in geology approved by advisor and department head (cannot include SCI 476).

**Physics (15 sem. hrs.)**

15 additional semester hours in physics approved by advisor and department head (must include PHYS 350; cannot include SCI 476).

**Part C—Supplemental Requirements in Mathematics**

Students who seek certification with an area of concentration in science will be required to complete the following mathematics requirement:

One course from the following:	Sem. Hrs.
MATH 152—College Algebra	3
MATH 173—Pre-Calculus I	3
MATH 175—Analytic Geometry and Calculus I	3-4

Also one course from the following:

MATH 141—Plane Trigonometry	3
MATH 174—Pre-Calculus II	3
MATH 275—Analytic Geometry and Calculus II	4
MATH 353—Statistics	3-4

**Majors (Teaching)**

A student can receive certification by completing a Bachelor of Science degree with a major in biology, chemistry, earth science, mathematics, or physics. With the exception of mathematics, certification is no longer granted with a minor in this list of disciplines unless a major in one of the other natural science disciplines is completed. Further certification can also be obtained through the completion of a second major from the list or through other majors or minors as suggested by an advisor. In addition, the student must complete the requirements listed under the Teacher Education Program.

**Biology**

BIOL 100—Orientation to Biological and Environmental Sciences Programs	1
BIOL 206—Biological Etymology	2
BIOL 208—Invertebrate Zoology	3
BIOL 209—Vertebrate Zoology	3
BIOL 215—General Botany	4
BIOL 304—Genetics	3
BIOL 317—Principles of Microbiology	4
BIOL 337—Comparative Anatomy	
OR	
BIOL 555—Plant Morphology	3
BIOL 380—Cell Biology	3
BIOL 471—Seminar in Biological Science	1
Biology field course	3
Approved biology electives	6
	36

In addition, supplemental courses in chemistry, earth science, mathematics, and physics are required for the biology major. Consult your advisor.

**Chemistry**

Students who wish to become certified in chemistry must complete a minimum of 32 semester hours in chemistry as approved by an advisor including CHEM 111, 111A, 112, 112A, 223 or 460, 326, 326A, 441, and SCI 471.

**Earth Science**

GEOS 100—Physical Geology	1
GEOS 107—Introduction to Geoscience	3
GEOS 201—Historical Geology	3
GEOS 250—Minerals and Rocks (OR GEOS 262—Mineralogy)	3-4
GEOS 276—Geologic Methods	3
GEOS 410—Geological History of Plants & Animals	3
SCI 471—Seminar	1
AGR 211—Soils	3
GEO 390—Weather and Climate	3
GEOS—Electives approved by advisor	5-6
	32

Students who wish to be certified to teach earth science must also complete supplemental courses in biology, chemistry, mathematics, and physics, as approved by advisor.

**Mathematics**

MATH 175 Analytic Geometry and Calculus I	4
MATH 275—Analytic Geometry and Calculus II	4
MATH 471—Seminar	1
Electives in mathematics above 170, except Math 231, 232, 252, and 260	7
Electives in mathematics above 300 as approved by the head of the Dept. of Mathematical Sciences	14
DATA 202—Computer Programming BASIC	3
	33

Students who major in mathematics must also complete supportive courses in other science disciplines. Consult your advisor.

**Physics**

PHYS 231—Engineering Physics I	4
PHYS 231A—Engineering Physics I Lab	1
PHYS 232—Engineering Physics II	4
PHYS 232A—Engineering Physics II Lab	1
PHYS 332—Electricity and Magnetism	4
PHYS 340—Experimental Physics	3
PHYS 352—Concepts of Modern Physics	3
PHYS 391—Dynamics	3
PHYS 493—Quantum Mechanics	3
SCI 471—Seminar	1
Physics electives, 400 level, approved by advisor	5
	32

Students who seek certification in physics are also required to complete supplemental courses in mathematics. Consult your advisor.

**Minors (Teaching)**

A student can receive a certifiable teaching minor in biology, chemistry, earth science, mathematics, and physics. With the exception of mathematics, the minor must be complemented by a major in a natural science. As stated under Area of Concentration and Teaching Majors above, the student must also complete the requirements of the Teacher Education Program listed elsewhere in this catalog.

**Biology**

BIOL 206—Biological Etymology	2
BIOL 208—Invertebrate Zoology	3
BIOL 209—Vertebrate Zoology	3
BIOL 215—General Botany	4
BIOL—electives approved by advisor	10
	22

In addition, supplemental courses in chemistry are required. Consult your advisor.

**Chemistry**

CHEM 101—Survey of General Chemistry	3
CHEM 101A—Survey of General Chemistry Laboratory	1
CHEM 201—Survey of Organic Chemistry	3
CHEM 201A—Survey of Organic Chemistry Lab	1
OR	
CHEM 111—Principles of Chemistry I	3
CHEM 111A—Principles of Chemistry I Laboratory	1



CHEM 112—Principles of Chemistry II	3
CHEM 112A—Principles of Chemistry II Laboratory	1
PLUS	
CHEM—electives approved by advisor	15
	23

## Secretarial Studies

(606) 783-2154, 783-2174

320 Combs Building

Department of Business and Economics

College of Professional Studies

Faculty—R. Bernardi, L. Hickman, S. Hunt, S. Luckey,  
H. Northcutt, G. Ousley

## Bachelor of Business Administration Secretarial Studies Option

Students wishing to teach in the secretarial programs or clerical programs on the secondary level should select the secretarial studies option. This curriculum will satisfy certification requirements for teaching typewriting, shorthand, and related secretarial and clerical courses.

### General Education Requirements

The following specific courses must be included in the 42 hour general education component (see general education requirements)

	Sem. Hrs.
SPCH 370—Business and Professional Speech	3
MATH 160—Mathematics for Business and Economics	3
MATH 354—Business Statistics	3
ECON 201—Principles of Economics I	3
ECON 202—Principles of Economics II	3

### Core for Teacher Education Programs

	Sem. Hrs.
ACCT 281—Principles of Accounting I	3
ACCT 282—Principles of Accounting II	3
DATA 201—Introduction to Computers	3
FIN 360—Business Finance	3
MKT 304—Marketing	3
MNGT 261—The Legal Environment of Business Organizations	3
MNGT 301—Principles of Management	3
OADM 136—Business Calculations	3
OADM 321—Business Communications	3
	27

### Program Requirements

	Sem. Hrs.
BBA—Teacher education core	28
OADM 112—Intermediate Typing	3
OADM 210—Word Processing I	3
OADM 213—Advanced Typewriting	3
OADM 220—Word Processing II	3
OADM 232—Shorthand II	3
OADM 331—Shorthand III	3
OADM 340—Simulated Office Education	3
OADM 363—Office Management	3
OADM 475—Methods of Teaching Business Subjects	4
	55

## Bachelor of Science

### Minor

For students who have a major in another discipline and who do not desire teacher certification in business education.

### Course Requirements

	Sem. Hrs.
OADM 136—Business Calculations	3
OADM 190—Office Accounting	3
OADM—Typewriting	6
OADM—Shorthand	6
OADM 210—Word Processing I	3
	21

## Associate of Applied Business

This program is designed to prepare graduates for positions as stenographers or secretaries in business, industry, government, legal, or medical fields.

### Course Requirements

	Sem. Hrs.
DATA 201—Introduction to Computers	3
ENG 101—Composition I	3
ENG 102—Composition II	3
OADM 112—Intermediate Typewriting	3
OADM 131—Shorthand I	3
OADM 136—Business Calculations	3
OADM 190—Office Accounting	3
OADM 210—Word Processing I	3
OADM 213—Advanced Typewriting	3
OADM 220—Word Processing II	3
OADM 321—Business Communications	3
OADM 340—Simulated Office Education	3
OADM 363—Office Management	3
PDI 100—Personal Development	1
SPCH 370—Business and Professional Speech	3
*Approved electives	21
	64

\*Electives may be applied for emphasis in specific areas as follows:

<b>Executive Secretary</b>	
DATA 202—Computer Programming BASIC	3
ECON 201—Principles of Economics I	3
OADM 232—Shorthand II	3

<b>Legal Secretary</b>	
GOVT 141—American Government	3
GOVT 380—American Courts and Civil Rights	3
MNGT 261—The Legal Environment of Business Organizations	3
OADM 234—Specialized Office Procedures	3
OADM 398—Supervised Field Experience	3

<b>Medical Secretary</b>	
AHS 302—Medical Terminology	2
OADM 234—Specialized Office Procedures	3
OADM 398—Supervised Field Experience	3
PSY 154—Introduction to Psychology	3

## Certificate

	Sem. Hrs.
DATA 201—Introduction to Computers	3
ENG 101—Composition I	3
OADM—Typewriting	6
OADM 136—Business Calculations	3
OADM 190—Office Accounting	3
OADM 210—Word Processing I	3
OADM—Shorthand	6
OADM 321—Business Communications	3
OADM 340—Simulated Office Education	3
OR	
OADM 363—Office Management	3
	33

## Small Business Management

(606) 783-2174

222 Combs Building

Department of Business and Economics

College of Professional Studies

Faculty—J. Alcorn, J. Osborne

## Associate of Applied Business

The two-year program in small business management is recommended for students who desire to organize or own a small business firm, as well as those who are presently employed as managers or who desire to become managers. The program is designed to meet the specific needs of small business organizations and to help students acquire the knowledge to fill these needs.

### Course Requirements

	Sem. Hrs.
ACCT 281—Principles of Accounting I	3
ACCT 282—Principles of Accounting II	3
DATA 201—Introduction to Computers	3
ECON 101—Introduction to the American Economy	3
ENG 101—Composition I	3
ENG 102—Composition II	3
FIN 252—Mathematics of Finance	3
MKT 304—Marketing	3
MKT 305—Purchasing	3
MNGT 261—The Legal Environment of Business Organizations	3
MNGT 310—Small Business Organization	3
MNGT 311—Personnel Management	3
OADM 136—Business Calculations	3
OADM 321—Business Communications	3
OADM 363—Office Management	3
SPCH 110—Basic Speech	3
OR	
SPCH 370—Business and Professional Speech	3
Approved electives	16
	64

## Social Science

(606) 783-2090

350 Rader Hall

Department of Geography, Government, and History

College of Arts and Sciences

Faculty—D. Flatt

## Bachelor of Arts

An area of concentration in the social sciences is recommended for students desiring to teach in the public schools. Preparation shall be distributed among the subjects of United States history, geography, government, economics, and sociology.

### Area of Concentration

	Sem. Hrs.
A. A minimum of 18 hrs. in history	18
B. 12 hours each field in any three:	36
Economics	
Geography	
Government and Public Affairs	
Sociology	
C. 6 hrs. in the fourth field	6
	60

	Sem. Hrs.
ECON 201—Principles I	3
ECON 202—Principles II	3
ECON 350—Microeconomic Theory	3
ECON 351—Macroeconomic Theory	3
GEO 100—Fundamentals	3
GEO 211—Economic Geography	3
GEO 300—World Geography	3
GEO—advanced elective	3
GOVT 141—Government of the U.S.	3
GOVT 242—State and Local Government	3
GOVT 330—Parliamentary Democracies	3
GOVT—advanced elective in international governments	3
HIS 131—Introduction to Civilization I	3
HIS 132—Introduction to Civilization II	3
HIS 141—Introduction to Early American History	3
HIS 143—Introduction to Recent American History	3
HIS—advanced electives (3 hrs. must be American)	3
SOC 101—General Sociology	3
SOC 505—Sociological Theory	3
SOC—advanced electives	6

## Social Work

(606) 783-2090

350 Rader Hall

Department of Sociology, Social Work and Corrections

College of Professional Studies

Faculty—L. Crosthwaite, T. Marshall, J. Seelig, P. Whitson

## Bachelor of Social Work

	Sem. Hrs.
SWK 210—Orientation to Social Welfare	4
SWK 230—Social Work Values and Policy	3
SWK 322—Human Behavior in the Social Environment	3
SWK 325—Social Work Practice I	3
SWK 425—Social Work Practice II	3
SWK 450—Research Methodology	3
SWK 490—Senior Seminar	1
SWK 510—Practicum in Social Work	8
SWK 525—Social Work Practice III	3
SWK 530—Social Policy and Planning	3
SWK—electives	6
SOC 101—General Sociology	3
SOC 203—Contemporary Social Problems	3
SOC 305—Cultural Anthropology	3
SOC 354—The Individual and Society	3
SOC 374—American Minority Relations	3
SOC 405—Sociological Theory	3
ENG 591 or 592—Technical Writing	3
ECON 101—Introduction to the American Economy	3
GOVT 380—American Courts and Civil Rights	3
GOVT 242—State and Local Government	3
PHIL 200—Introduction to Philosophy	3
PSY 154—Introduction to Psychology	3
PSY 590—Abnormal Psychology	3
General education requirements and electives	49
	128

## Associate of Applied Arts (Two-Year Program)

	Sem. Hrs.
SWK 210—Orientation to Social Welfare	4
SWK 230—Social Work Values and Policy	3
SWK 310—Field Experience in Social Work	3
SWK 315—Child Welfare Services	3
SWK 322—Human Behavior in the Social Environment	3
SWK 325—Social Work Practice I	3
SOC 101—General Sociology	3
SOC 203—Contemporary Social Problems	3

SOC 354—The Individual and Society	3
ECON 101—Introduction to the American Economy	3
ENG 101—Composition I	3
ENG 102—Composition II	3
OR	
ENG 192—Technical Composition	3
PHIL 200—Introduction to Philosophy	3
GOVT 242—State and Local Government	3
PSY 154—Introduction to Psychology	3
HLTH 150—Personal Health	2
MATH—elective	3
Approved electives	14
	65

## Sociology

(606) 783-2090

350 Rader Hall

Department of Sociology, Social Work and Corrections  
College of Professional Studies

Faculty—R. Bylund, L. Crosthwaite, T. Marshall, T. Munson, M. Patton, E. Reeves, D. Rudy, J. Seeling, A. Wheeler, M. Whitson, P. Whitson

Sociology majors seeking teacher certification must also present a teaching minor. See "Teacher Education Program" and "Professional Laboratory Experiences" requirements.

## Bachelor of Arts

### Major

	Sem. Hrs.
SOC 101—General Sociology	3
SOC 305—Cultural Anthropology	3
SOC 405—Sociological Theory	3
SOC 450—Research Methodology	3
SOC—electives of which 12 sem. hrs. must be on the 300 level or above	18
	30

### Emphasis in Corrections

	Sem. Hrs.
SOC 101—General Sociology	3
SOC 203—Contemporary Social Problems	3
SOC 354—The Individual and Society	3
SOC 374—American Minority Relations	3
SOC 405—Sociological Theory	3
SOC 450—Research Methodology	3
COR 201—Sociology of Corrections	3
COR 320—Probation and Parole	3
COR 420—Seminar in Criminal Behavior	3
COR 590—Practicum in Corrections	3
COR—elective	3
	36

### Minor

	Sem. Hrs.
SOC 101—General Sociology	3
SOC 203—Contemporary Social Problems	3
SOC 405—Sociological Theory	3
SOC 450—Research Methodology	3
SOC—electives 300 level or above	9
	21

## Spanish

(606) 783-2185

103 Combs Building

Department of English, Foreign Languages, and  
Philosophy

College of Arts and Sciences

Faculty—B. Hamilton, R. Howard

The Spanish curriculum at Morehead State University teaches the language and literature of Spain, whereby students will perceive areas of thought and action different from their own. More specifically, it surveys Spanish civilization through its history, geography, fine arts, and political and social institutions. It helps students attain a comfortable proficiency in speaking, reading, and writing Spanish. Finally, it trains prospective teachers in techniques of foreign language teaching.

*NOTE: SPA 202 or the equivalent is prerequisite to courses numbered 300 or above.*

### Minor

	Sem. Hrs.
SPA 101—Beginning Spanish I	3
SPA 102—Beginning Spanish II	3
SPA 201—Intermediate Spanish	3
SPA 202—Advanced Conversation	3
SPA 301—Spanish Literature	3
SPA 302—Spanish American Literature	3
Approved electives	3
	21

Students with high school credit in Spanish may be placed in a course more advanced than 101 to begin their studies.

It is strongly recommended that Spanish be started in the freshman year and that the courses be taken without interruption.

Students who expect to teach Spanish should choose SPA 405 as one of their electives.

## Special Education

(606) 783-2859

401 Ginger Hall

Department of Education

College of Professional Studies

Faculty—D. Edinger, C. Georges, B. Russell,  
P. Turnipseed

## Bachelor of Arts

### Learning and Behavior Disorders

This program provides certification for teaching children who have learning disabilities or who are educable mentally



handicapped. Certification is available in learning and behavior disorders grades K-12 and elementary grades 1-8 (Kentucky certification).

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

## Area of Concentration

### Area and General Education Requirements

	Sem. Hrs.
<b>SPECIAL EDUCATION</b>	33
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 435—Supervised Teaching Practicum—LBD	6
EDSP 537—Educational Assessments of Exceptional Children	3
EDSP 550—Characteristics of Individuals with Learning Disabilities and Behavior Disorders	3
EDSP 551—Curriculum for Pre-School Exceptional Child	3
EDSP 553—Language Arts for Exceptional Students	3
EDSP 555—Prescriptive Teaching for Children with Learning and Behavior Problems	3
EDSP 557—Content Areas and Career Preparation for Exceptional Students	3
<b>EDUCATION</b>	35
EDF 207—Foundation of Education	3
EDF 211—Human Growth and Development	3
EDEL 228—Literature and Materials for Children	3
EDEL 301—Media Strategies	2
EDEL 321—Teaching of Arithmetic	3
EDEL 322—Teaching Social Studies in the Elementary School	3
EDEL 323—Language Arts for the Elementary School	3
EDEL 336—Foundations of Reading	3
EDEL 337—Reading Strategies for the Elementary Teacher	3
EDEL 425—Supervised Teaching Practicum—Elementary	6
EDUC 582—Discipline and Classroom Management	3
<b>GENERAL EDUCATION</b>	45
ENG 101 or 103	3
ENG 192—Technical Composition	3
ENG 202, 211, or 212	3
SPCH 110 or 370	3
BIOL 331—Human Anatomy	3
SCI 103 or higher	3
MATH 231—Mathematics for the Elementary Teacher I	3
MATH 232—Mathematics for the Elementary Teacher II	3
Elective—Creative Expression	3
HIST 130—A History of Mankind	3
HIST 140—The Progress of American Democracy	3
PSY 154—Introduction to Psychology	3
SOC 101—General Sociology	3
Elective—GOVT 141, 242, 310, GEO 100, 211, 241, or 300	3
Elective PHED activity course	1
HLTH 150—Personal Health	2
<b>RELATED STUDIES</b>	14
ART 121 or 221	3
MUST 100—Rudiments of Music	2
MUSE 221—Music for the Elementary Teacher	2
HLTH 300—Health in the Elementary School	2
PHED 300—Physical Education in the Elementary School	2
SCI 490—Science for the Elementary Teacher	3
<b>ELECTIVES</b>	1
	128

### Trainable Mentally Handicapped

This program provides teacher certification for teaching children who are moderately or severely mentally handicapped. Certification is available in trainable mentally handicapped grades K-12 and elementary grades 1-8 (Kentucky certification).

The general education, related studies, and elementary education requirements for an area of concentration in trainable mentally handicapped and learning and behavior disorders are identical. The special education component has two courses that are different, and students in the trainable program must also take EDSP 231. Each program requires a separate practicum experience. Students should consider completing the requirements for both programs since opportunities for employment are enhanced.

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

## Area of Concentration

### Area and General Education Requirements

	Sem. Hrs.
<b>SPECIAL EDUCATION</b>	36
EDSP 230—Education of Exceptional Children	3
EDSP 231—Trainable Mentally Handicapped Field Experience	3
EDSP 320—Introduction to Corrective Speech	3
EDSP 350—Characteristics of Individuals with Mental Retardation and Orthopedic Handicaps	3
EDSP 436—Supervised Teaching Practicum—TMH	6
EDSP 547—The Trainable Mentally Handicapped	3
EDSP 550—Characteristics of Individuals with Learning Disabilities and Behavior Disorders	3
EDSP 551—Curriculum for Pre-School Exceptional Children	3
EDSP 553—Language Arts for Exceptional Students	3
EDSP 556—Teaching the Trainable Mentally Handicapped	3
EDSP 557—Content Areas and Career Preparation for Exceptional Students	3
<b>EDUCATION</b>	35
EDF 207—Foundation of Education	3
EDF 211—Human Growth and Development	3
EDEL 228—Literature and Materials for Children	3
EDEL 301—Media Strategies	2
EDEL 321—Teaching of Arithmetic	3
EDEL 322—Teaching Social Studies in the Elementary School	3
EDEL 323—Language Arts for the Elementary School	3
EDEL 336—Foundations of Reading	3
EDEL 337—Reading Strategies for the Elementary Teacher	3
EDEL 425—Supervised Teaching Practicum—Elementary	6
EDUC 582—Discipline and Classroom Management	3
<b>GENERAL EDUCATION</b>	45
ENG 101 or 103	3
ENG 192—Technical Composition	3
ENG 202, 211, or 212	3
SPCH 110 or 370	3
BIOL 331—Human Anatomy	3
SCI 103 or higher	3
MATH 231—Mathematics for the Elementary Teacher I	3
MATH 232—Mathematics for the Elementary Teacher II	3
Elective—Creative Expression	3
HIST 130—A History of Mankind	3
HIST 140—The Progress of American Democracy	3
PSY 154—Introduction to Psychology	3
SOC 101—General Sociology	3
Elective—GOVT 141, 242, 310, GEO 100, 211, 241, or 300	3
Elective PHED activity course	1
HLTH 150—Personal Health	2
<b>RELATED STUDIES</b>	14
ART 121 or 221	3
MUST 100—Rudiments of Music	2
MUSE 221—Music for the Elementary Teacher	2
HLTH 300—Health in the Elementary School	2
PHED 300—Physical Education in the Elementary School	2
SCI 490—Science for the Elementary Teacher	3
<b>ELECTIVES</b>	1
	130

The general education, related studies, and elementary education requirements for an area of concentration in trainable mentally handicapped and learning and behavior disorders are identical. The special education component has two courses that are different, and students in the trainable program must also take EDSP 231. Each program requires a separate practicum experience. Students should consider completing the requirements for both programs since opportunities for employment are enhanced.

### Non-teaching Major and Minor

The department offers a non-teaching 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 non-public settings.



**Major (Non-Teaching)**

	Sem. Hrs.
EDSP 230—Education of Exceptional Children .....	3
EDSP 350—Characteristics of Individuals with Mental Retardation and Orthopedic Handicaps .....	3
EDSP 550—Characteristics of Individuals with Learning Disabilities and Behavior Disorders .....	3
EDSP 537—Educational Assessment of Exceptional Children .....	3
OR	
EDSP 547—The Trainable Mentally Handicapped .....	3
EDSP 555—Prescriptive Teaching for Children with Learning and Behavior Problems .....	3
OR	
EDSP 556—Teaching the Trainable Mentally Handicapped .....	3
EDEL 336—Foundations of Reading .....	3
EDSP 320—Introduction to Corrective Speech .....	3
OR	
SPCH 320—Introduction to Corrective Speech .....	3
PSY 559—Behavior Modification .....	3
Electives (approved by advisor) .....	6
Laboratory experience EDSP 435 or EDSP 436 .....	4
	34

**Minor (Non-teaching)**

	Sem. Hrs.
EDSP 230—Education of Exceptional Children .....	3
EDSP 350—Characteristics of Individuals with Mental Retardation and Orthopedic Handicaps .....	3
EDSP 550—Characteristics of Individuals with Learning Disabilities and Behavior Disorders .....	3
EDSP 537—Educational Assessment of Exceptional Children .....	3
OR	
EDSP 547—The Trainable Mentally Handicapped .....	3
EDSP 555—Prescriptive Teaching for Children with Learning and Behavior Problems .....	3
OR	
EDSP 556—Teaching the Trainable Mentally Handicapped .....	3
EDEL 336—Foundations of Reading .....	3
PSY 559—Behavior Modification .....	3
Laboratory Experience EDSP 435 or EDSP 436 .....	4
	25

**Speech**

(606)783-2712

215 Breckinridge Hall

Department of Communications  
College of Arts and SciencesFaculty—G. Balfantz, N. Batra, H. Hamm (coordinator),  
P. Martin, R. Paige, J. Quisenberry, T. Scott, J.  
Whiting, J. Wilson**Bachelor of Arts****Major**

	Sem. Hrs.
SPCH 100—Voice and Articulation .....	3
SPCH 110—Basic Speech .....	3
SPCH 200—Oral Interpretation .....	3
SPCH 220—Introduction to Communication Theory .....	3
SPCH 382—Argumentation and Debate .....	3
OR	
SPCH 385—Persuasion .....	3

Teacher education majors have the following additional requirements: SPCH 595 and 15 hours of speech electives, as approved by the advisor, for a total of 36 hours. SPCH 597 is strongly recommended for all majors entering the field of education.

Non-teacher education majors are required 18 hours of speech electives, as approved by the advisor and in addition to the above program requirements, for a total of 36 hours.

For those interested in college level teaching SPCH 595, SPCH 597, and THEA 300 are strongly recommended.

**Minor**

	Sem. Hrs.
SPCH 100—Voice and Articulation .....	3
SPCH 110—Basic Speech .....	3
SPCH 200—Oral Interpretation .....	3
SPCH 382—Argumentation and Debate .....	3
OR	
SPCH 383—Group Discussion .....	3
*SPCH 595—Administering the Communications Program .....	3
electives in speech, approved by the advisor .....	6-9
	21

\*Required only for the minors entering the field of education. (SPCH 597 is strongly recommended for all minors entering the field of education.)

**Speech/Theatre**

(606) 783-2184 (department head)

109 Breckinridge Hall

Department of Communications  
College of Arts and SciencesFaculty—G. Balfantz, N. Batra, C. Grimsley, C. Hamilton,  
H. Hamm, S. Layne, T. Lockhart, P. Martin, R. Paige,  
J. Quisenberry, T. Scott, J. Whiting, J. Wilson (head)**Bachelor of Arts****Major**

	Sem. Hrs.
SPCH 110—Basic Speech .....	3
SPCH 382—Argumentation and Debate .....	3
OR	
SPCH 383—Group Discussion .....	3
THEA 100—Fundamentals of the Theatre .....	3
THEA 200—Introduction to Dramatic Literature .....	3

Teacher education majors have the following additional requirements: SPCH 100, SPCH 595, THEA 284, and THEA 380. In addition, teacher education majors must complete 9 hours of electives approved by the advisor for a total of a 36 hour major.

Non-teacher education majors will complete 18 hours of electives as approved by the advisor, in addition to the above program requirements.

**Theatre**

(606) 783-2167

118 Combs Building

Department of Communications  
College of Arts and SciencesFaculty—C. Grimsley, C. Hamilton, S. Layne, T.  
Lockhart, coordinator**Bachelor of Arts****Major (Non-Teaching)**

THEA 100—Fundamentals of the Theatre .....	3
THEA 200—Introduction to Dramatic Literature .....	3

THEA 210—Technical Production .....	3
THEA 284—Acting Techniques .....	3
THEA 315—Stage Make-up .....	3
THEA 320—Scenographic and Drawing Techniques .....	3
THEA 322—Scene Design .....	3
THEA 354—Theatre History .....	3
THEA 380—Play Directing .....	3
SPCH 100—Voice and Articulation I .....	3
Theatre electives .....	6
	36

## Minor (Teaching and Non-Teaching)

	Sem. Hrs.
THEA100—Fundamentals of the Theatre .....	3
THEA 200—Introduction to Dramatic Literature .....	3
THEA 210—Technical Production .....	3
THEA 284—Acting Technique .....	3
THEA 320—Scenographic and Drawing Techniques .....	3
THEA 322—Scene Design .....	3
THEA 380—Play Directing .....	3
	21

## University Studies

(606) 783-2140  
212 Rader Hall  
College of Arts and Sciences  
Faculty—B. Burns (dean)

## Bachelor of University Studies

### Degree Requirements

You do not have to complete a major, minor, or area of concentration for the Bachelor of University Studies degree. You may take a wide variety of subjects or concentrate all studies beyond the general education requirements in a single discipline. For more information, see your advisor or the Dean, College of Arts and Sciences.

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 grade-point average 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.

## Associate of University Studies

### Degree Requirements

Except for the general education requirements, no prescribed program for study is required for this degree. You may take a wide variety of subjects or concentrate all studies beyond the general education requirements in a single discipline. All other associate degree requirements must be met. (See associate degree requirements.) For more information, see your advisor or the Dean, College of Arts and Sciences

## Veterinary Technology

(606) 783-2326

Derrickson Agricultural Complex, MSU Farm  
Department of Agriculture and Natural Resources  
College of Applied Sciences and Technology

Faculty—D. Applegate (coordinator), S. Rundell, B. Krakoff, V. Trent

## Associate of Applied Science (Two-Year Program)

The MSU Veterinary Technology 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 Animal Technician.

### Admission Requirements

1. Acceptance to MSU
2. Acceptance to Veterinary Technology Program is based on the following requirements:
  - a. Application to Veterinary Technology program by March 1 prior to fall semester entry.
  - b. Satisfactory American College Test (ACT) scores with minimum ACT composite score of 15.
  - c. Preference is given to applicants who have completed High School College Preparatory Tract with a 3.0 g.p.a. or college g.p.a. of 2.5 on a 4.0 scale.
  - d. Minimum of 3 months' work experience in animal-related occupations.
  - e. Personal interview by the Veterinary Technology acceptance committee.

### Required Course Sequence

	Sem. Hrs.
First Semester .....	18
VET 102—Intro. to Veterinary Technology .....	3
VET 106—Animal Science and Breeds Identification .....	3
VET 105—Anatomy of Domestic Animals .....	3
VET 107—Laboratory Techniques I .....	3
ENG 101—English Composition I .....	3
MATH 131—General Math I .....	3
Second Semester .....	16
VET 215—Clinical Practices I .....	2
VET 208—Laboratory Techniques II .....	3
VET 206—Physiology of Domestic Animals .....	3
VET 340—Radiology .....	3
VET 220—Clinic Rotation I .....	1
CHEM 100—Survey of General Chemistry .....	3
CHEM 100A—Survey of General Chemistry Lab .....	1
Summer I .....	6
VET 350—Laboratory Animal Medicine .....	2
VET 308—Laboratory Techniques III .....	3
VET 221—Clinic Rotation II .....	1
Summer II .....	6
VET 339—Pharmacology .....	3
VET 210—Parasitology .....	2
PHED elective .....	1

Third Semester	17
VET 315—Clinical Practices II	2
VET 346—Large Animal Diseases and Nutrition	3
VET 333—Small Animal Diseases and Nutrition	2
ENG 192—Technical Composition	3
SPCH 110—Basic Speech	3
BIOL 208—Invertebrate Zoology	3
Fourth Semester	10
VET 360—Preceptorship	10

## Vocational Agriculture Education

(606) 783-2662

332 Reed Hall

Department of Agriculture and Natural Resources  
College of Applied Sciences and Technology

Faculty—J. Bendixen, C. Derrickson

## Bachelor of Science

### Area of Concentration

The student must complete a minimum of 50 semester hours credit in technical agriculture which includes at least 6 semester hours in each of the fields listed below. This area of concentration is designed and approved for students who wish to teach vocational agriculture in the public schools of Kentucky.

### Core Requirements

Required courses in technical agriculture	50
AGR Agricultural Economics	6
AGR Agricultural Mechanics	6
AGR Animal Science	6
AGR Horticultural and Plant Science	6
AGR Soil Science	6
AGR—approved agriculture electives	20

Required courses in agriculture education	18
AGR 580—Methods of Teaching Vocational Agriculture	4
AGR 582—Adult and Young Farmer Education	3
AGR 584—Teaching Vocational Agriculture	8
AGR 586—Planning Program in Vocational Agriculture	3

### Teacher Certification

Students seeking teacher certification must apply for and be admitted to the teacher education program.

Students must have an overall standing of 2.50 in the 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.

## Vocational Trade and Industrial Education

(606) 783-2013

210 Lloyd Cassity Building

Department of Industrial Education and Technology  
College of Applied Sciences and Technology

Faculty—Van Hoose, Tucker

### General Education Requirements

The following specific courses must be included in the general education component (see general education requirements):

	Sem. Hrs.
ENG 101—Composition I	3
MATH 135—Mathematics for Technical Students	3
PSY 154 Introduction to Psychology	3
ENG 192—Technical Composition	3
SPCH 370—Business and Professional Speech	3
BIO 105—Introduction to Biology	3
Approved math or science elective	2
HLTH 150—Personal Health	2
PE—Approved activity class	1
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### Core Requirements

IET 390—Principles of Industrial Education	3
IET 392—Technical Curriculum and Media Development	3
IET 393—Methods in Industrial Education	3
IET 364—Career and Vocational Guidance	3
IET 211—Human Growth and Development	3
IET 497—Seminar in Vocational Education	
OR	
IET 401—Seminar	4
OR	
IET 394—Student Teaching in Industrial Education	20

### Options

Students must select one of the following options:

Broadcast technology	24
Construction technology	24
Drafting and design technology	24
Electrical technology	24
Electronics technology	24
Graphic arts technology	24
Industrial Supervision and Management Technology	24
Machine tool technology	24
Power and fluids technology	24
Industrial Education Vocational Technology	24
Welding Technology	24

In addition to specific course requirements, a work experience component which consists of a minimum of 2,000 clock hours of supervised work experience is required in the teachable occupation.

## Welding Technology

(606) 783-2013

210 Lloyd Cassity Building

Department of Industrial Education and Technology

College of Applied Sciences and Technology

Faculty—Tyree, Murphy

### General Education Requirements

The following specific courses must be included in the general education component (see general education requirements):

	Sem. Hrs.
MATH 135—Mathematics for Technical Students	3
ENG 101—Composition I	3

DATA 201—Introduction to computers	3
ENG 192—Technical Composition	3
SPCH 370—Business and Professional Speech	3
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### Core Requirements

WEL 101—Oxyacetylene Welding	3
WEL 101A—Oxyacetylene Welding Laboratory	3
GCT 103—Technical Drawing I	3
MFT 186—Manufacturing and Fabrication	3
WEL 102—Arc Welding	3
WEL 102A—Arc Welding Laboratory	3
EET 140—Basic Electricity	3
Approved technical elective	2
WEL 201—Inert Gas Welding	3
WEL 201A—Inert Gas Welding Laboratory	3
WEL 205—Welding Metallurgy	3
IET 319—Quality Control	3
IET 317—Time and Motion Study	2
WEL 202—Weld Joint Design and Testing	3
WEL 307—Automated Welding Technology	3
WEL 204—Welding Codes and Blueprint Reading	3
IET 320—Supervisory Practices	3



## Description of Courses

**NOTE:** (3-0-3) following a course title means 3 hours class, no laboratory, 3 hours credit. Roman numerals I, II, and III following the credit hour allowance indicate the term in which the course is normally scheduled: I—fall, II—spring, III—summer.

### ACCOUNTING

**ACCT 139. Cooperative Study I.** (1 to 8 hrs.); on demand. Work experience in a field relevant to the student's career objectives and academic preparation. Experience is usually analogous to a freshman level course.

**ACCT 199. Selected Workshop Topics.** (1 to 4 hrs.); on demand. Periodic workshops on various accounting subjects are designed to supplement the basic course offerings in accounting. Credit toward degree programs must be approved by the student's advisor.

**ACCT 239. Cooperative Study II.** (1 to 8 hrs.); on demand. Work experience with an extension of exposure gained in ACCT 139 or of a nature similar to a sophomore status course.

**ACCT 281. Principles of Accounting I.** (3-0-3); I, II, III. Meaning and purpose of accounting; the balance sheet, the income statement, books of original entry, special journals, adjusting and closing entries, controlling accounts, notes, interest, inventory, accounts receivable, fixed assets.

**ACCT 282. Principles of Accounting II.** (3-0-3); I, II, III. Prerequisite: ACCT 281. Payroll; corporate accounts, ownership equity, and earnings; financial reporting; manufacturing accounting; funds flow analysis; interpretation of financial statements; managerial analysis.

**ACCT 300. Managerial Accounting.** (3-0-3); I, II. Prerequisite: ACCT 282. Analysis of cost data; manufacturing and cost analysis, budgets, managerial decision-making analysis. Not available for option credit for accounting majors.

**ACCT 339. Cooperative Study 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.

**ACCT 384. Intermediate Accounting I.** (3-0-3); I, II. Prerequisite: ACCT 282. Fundamental accounting procedures, the accounting procedures, the accounting cycle, financial position, measurement of costs, revenues, and expenses, analysis of cash, temporary investments receivables, inventory, investments, plant and equipment, intangibles.

**ACCT 385. Intermediate Accounting II.** (3-0-3); I, II. Prerequisite: ACCT 384. Accounting theory and practice applicable to corporate net worth accounts and liabilities; appropriations and reserves; income determination, funds flow analysis, special problems of analysis, presentation, and interpretation of financial data.

**ACCT 386. Internship of Accounting.** (1 to 4 hrs.); I, II, III. Prerequisites: ACCT 385 and consent of department. On-the-job professional experience in accounting arranged through cooperating public accounting firms, industrial firms, and governmental agencies.

**ACCT 387. Income Tax.** (3-0-3); I, II. Prerequisite: ACCT 282 or consent of instructor. Income tax legislation, federal and state; returns for individuals; gross income; basis for gains and losses; capital gains and losses; dividends; deductions; withholding. Also brief survey of taxation of partnerships, corporations, estates, trusts, and gifts.

**ACCT 390. Cost Accounting I.** (3-0-3); I, II. Prerequisite: ACCT 282. Control and classification of manufacturing costs, job order and process cost analysis; materials, labor, and overhead analysis; joint and by-product costing.

**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.

**ACCT 439. Cooperative Study 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.

**ACCT 476. Special Problems in Accounting.** (1 to 3 hrs.); I, II, III. Prerequisite: senior standing in accounting and permission of head of department. Provides accounting students opportunity to complete independent advanced work in an accounting area of special interest.

**ACCT 482. Advanced Accounting.** (3-0-3); I. Prerequisite: ACCT 385. 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); I. Prerequisite: ACCT 385. 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 506. Theory of Accounts.** (3-0-3); on demand. Prerequisite: ACCT 385. Study of development of accounting theory, application of theory to income measurement valuation and equities, review of current literature in the field of FASB, CASB, SEC, AICPA, and AAA pronouncements affecting theory.

**ACCT 528. Governmental Accounting.** (3-0-3); II. Prerequisite: ACCT 282 or permission of instructor. 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 539. Cooperative Study V.** (1 to 8 hrs.); on demand. Work experience providing advanced specialized exposure in a career-related position. Available to upper division undergraduate and graduate students.

**ACCT 575. Controllership.** (3-0-3); on demand. Prerequisites: ACCT 281 and 282 or equivalent. 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 584. C.P.A. Problems.** (3-0-3); on demand. Prerequisites: 20 hrs. of accounting and senior standing. Application of generally accepted accounting principles to CPA examination problems. Covers four sections of exam (practice, theory, auditing, and business law) with emphasis on problems and theory.

**ACCT 587. Advanced Tax Accounting.** (3-0-3); II. Prerequisite: ACCT 387. 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 590. Cost Accounting II.** (3-0-3); on demand. Prerequisite: ACCT 390. Cost analysis for planning, evaluation, and control. Standard costs, direct costing, budgets, cost and profit analysis, alternative choice decisions, linear programming, capital budgeting.

**ACCT 599. Selected Workshop Topics.** (1 to 4 hrs.); on demand. Workshops on various accounting subjects will be presented periodically to supplement the basic course offerings in accounting. Credit toward degree programs must be approved by the student's advisor.

### AGRICULTURE

**AGR 101. General Agriculture.** (1-0-1); I. The importance of agriculture in the community, state, nation, and world.

**AGR 108. Elementary Horsemanship (Stockseat).** (0-2-1); I, II. Includes riding basics in relation to stockseat, 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; and general overall knowledge of horses.

**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 (Stockseat).** (0-2-1); I, II. Prerequisite: AGR 108, 109, 110 or consent of instructor. Includes review of elementary horsemanship (stockseat) techniques; handling horses properly from the ground; grooming and tacking-up; more advanced riding skills such as rein and leg aids; correct body position; halts, turns, and figurework; 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. Prerequisite: AGR 109, AGR 110, or consent of instructor. Includes review of elementary horsemanship (saddle seat) techniques; handling horse properly from ground; grooming, tacking-up; more advanced riding skills such as leg aids, rein aids, and canter leads; detailed study of gaits, equipment, and dress; trail riding and showing horses, parts of the horse, bridle, and saddle.

**AGR 120. Intermediate Horsemanship (Hunt Seat).** (0-2-1); I, II. Prerequisite: AGR 109, AGR 110, or consent of instructor. Includes review of elementary horsemanship (hunt seat) techniques; handling horse properly from ground; grooming, tacking-up; more advanced riding skills such as leg aids, rein aids, and canter leads; detailed study of gaits, equipment, and dress; trail riding and showing horses, parts of the horse, bridle, and saddle.

**AGR 121. Equitation.** (1-4-3); I, II. Grooming, saddling, bridling, mounting, seat and hands. Basic equitation for students with no previous experience.

**AGR 133. Farm Livestock Production.** (2-2-3); I, II. Fundamental genetics, nutrition, and physiology of beef and dairy cattle, swine, and sheep.

**AGR 180. Elementary Field Crops.** (2-2-3); II. Prerequisite: BIOL 150. A study of the fundamentals of crop production, current practices in grain, pasture, forage, and medicinal crop production; seed production and quality; morphology of crops.

**AGR 203. Agricultural Economics.** (3-0-3); I, II. Economic organization of the farm productive unit; concentration on principles of production economics, supply and demand schedules.

**AGR 205. Farm Records.** (3-0-3); II. 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 207. Land Conservation and Forest Management.** (2-2-3); II. Principles of land resource conservation. Special emphasis on land and water conservation by reforestation of areas denuded by strip mining.

**AGR 211. Soils.** (2-2-3); I. Prerequisite: CHEM 101 and 101A. Study of origin, formation, composition, and classification of soils; the physical, chemical, and

biological properties of the soil in relation to plant growth; the principles of soil management, conservation, and land use.

**AGR 212. Landscape Plants.** (2-2-3); I. A study of ornamental trees, shrubs, and vines commonly used in landscaping. Emphasis is placed on identification, characteristics, adaptability, and maintenance.

**AGR 213. Landscape Gardening.** (2-2-3); II. Prerequisite: AGR 212. An introduction to landscape gardening with emphasis on design, construction, planting, and maintenance of the home grounds.

**AGR 215. Horticulture.** (2-2-3); I, II. Prerequisite: BIOL 150. A study of the basic principles underlying horticultural practices in fruit growing, vegetable gardening, landscape gardening, and floriculture.

**AGR 216. Floriculture.** (1-2-2); on demand. The elementary principles of selection, identification, culture, and use of foliage plants.

**AGR 231. Livestock Judging.** (1-4-3); II. A study of the types of purebred and commercial beef cattle, sheep, horses, and swine. Studies will be made on evaluating market, breeding, and performance classes.

**AGR 235. Supervised Work Experience.** (1 to 6 hrs.); I, II, III. A supervised work experience program for students planning careers in agriculture upon completion of the associate degree program.

**AGR 242. Light Horse Husbandry.** (2-2-3); I, II. A study of horse care, including first aid, feeding, grooming, stable vices, health requirements, diseases, disease control, and building and fence construction. Students will also gain practical experience by working at the barn.

**AGR 245. Horseshoeing.** (2-2-3); II. 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 Agriculture Mechanics.** (2-2-3); I. 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 301. Farm Management.** (3-0-3); I, II. Prerequisite: AGR 203. 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); I. 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); II. Prerequisites: AGR 203 and 211. 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); I. 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 Control.** (2-2-3); I. Prerequisites: AGR 180, 211, CHEM 112, 112A. Identification and classification of weedy species, methods of reproduction, and growth characteristics. Effects on crop and livestock yield.

**AGR 311. Soil Conservation.** (2-2-3); I. Prerequisite: AGR 211. Agricultural land resources, capabilities, and uses; extent of erosion, causes of erosion and its effect; the soil and its classification; mapping; aims and principles of soil conservation; economics of soil conservation; conservation practices, including contouring, terracing, strip farming, and sodded waterways.

**AGR 312. Soil Fertility and Fertilizers.** (3-0-3); II. Prerequisite: AGR 211. The source and methods of manufacture of fertilizer materials; profitable use of fertilizers and lime in soil management.

**AGR 314. Plant Propagation.** (2-2-3); II. Prerequisite: AGR 215 or consent of instructor. A study of the principles and practices of the propagation of horticultural plants. Includes seeding, layering, cutting, division, grafting, and budding; use of root stimulants, types of facilities and equipment required, and other cultural practices.

**AGR 315. Fruit Production.** (2-2-3); on demand. Prerequisite: AGR 215 or consent of instructor. Tree fruits, nuts, and small fruits; varieties, fruiting sites, soils, pruning, pest control, planting, and commercial marketing.

**AGR 316. Feeds and Feeding.** (2-2-3); I, II. Prerequisites: CHEM 201, 201A, and AGR 133. Feeds and formulation of rations; fats, carbohydrates, proteins, and their digestion; 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 320. Principles of Vegetable Production.** (2-2-3); on demand. Prerequisite: AGR 215 or consent of instructor. 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 321. Greenhouse Production I.** (2-2-3); I. Prerequisite: AGR 215 or consent of the instructor. Factors involved in locating, constructing, and equipping a greenhouse. Studies soil, soil fertilization, sterilization, watering, cooling, ventilating and heating systems and other developments in greenhouse mechanization; types of structures, materials, and methods of construction.

**AGR 322. Greenhouse Production II.** (2-2-3); II. Prerequisite: AGR 215 and 321 or consent of instructor. Continuation of 321 in selection of type of crop; producing, harvesting, storing, and marketing of bedding plants, greenhouse vegetables, cut plants, and potted plants; plant growth and reproduction.

**AGR 325. Turf Management.** (2-2-3); I. Prerequisite: BIOL 150 and AGR 215 or consent of instructor. Turf grass varieties, basic principles of production and their practical application to establishment, maintenance, renovation, and pest control on lawns, playgrounds, and similar turf areas.

**AGR 326. Nursery Management.** (2-2-3); II. Prerequisite: AGR 215, 314, or consent of instructor. Selection, systems of culture, harvesting and management of ornamental trees, shrubs, and vines.

**AGR 327. Advanced Landscape Design.** (2-2-3); II. Prerequisite: AGR 212, 213, or consent of instructor. Selection and location of ornamental plants for large properties such as schools, playgrounds, estates, apartment complexes, and factories. Preparing specifications and bids.

**AGR 330. Livestock Improvement.** (2-2-3); II. Study of the principles, practices, and procedures of animal breeding, selection and mating systems and their application for farm livestock production and improvement.

**AGR 331. Advanced Livestock Judging.** (2-2-3); II. Prerequisite: AGR 231. Continuation of AGR 231. Primarily for judging team candidates.

**AGR 332. Advanced Horsemanship.** (1-4-3); I, II. Prerequisite: AGR 121 or equivalent. The skills of performance equitation. Specific skills needed in training of horses. Emphasis will be on the horseman's role in extracting performance.

**AGR 335. Equitation Teaching.** (2-2-3); II. Prerequisite: AGR 332. The techniques of horsemanship and methods of equitation instruction.

**AGR 336. Dairy Production.** (2-2-3); on demand. Prerequisites: AGR 133, and AGR 316. 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); on demand. Prerequisites: AGR 133 and AGR 316 or consent of instructor. Principles of poultry production including common breeds of chickens, incubation, breeding, housing, nutrition, diseases, and general management practices.

**AGR 341. Apiculture.** (2-2-3); on demand. Establishing and managing honeybee colonies, prevention and control of pests, and handling the honey crop.

**AGR 342. Horse Production.** (2-2-3); I. Prerequisite: AGR 242. A general study of the anatomy and physiology of the horse, the relationship of form to function, horse selection, horse breeding, feeding, and genetics.

**AGR 343. Beef Production.** (2-2-3); II. Prerequisites: AGR 133 and 316 or approval of the department. 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. Prerequisites: AGR 133 and 316 or approval of the department. 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); on demand. Prerequisites: AGR 133 and 316 or approval of the department. 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 384. Forage Crops.** (2-2-3); II. Prerequisites: AGR 180 and 211. The distribution of various forage crops and their adaptations to soil and climate; seeding rates and mixtures; productivity; and pest control.

**AGR 385. Agribusiness Management.** (3-0-3); II even years or on demand. Prerequisite: AGR 203. Management of the agribusiness functions, responsibilities, and operational characteristics unique to an agriculturally related business, particularly cooperatives.

**AGR 386. Introductory Agricultural Policy.** (3-0-3); II in odd years or 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 471. Seminar.** (1-0-1); I, II. Prerequisite: second semester junior standing. Identification of problems and issues reflected in the current professional agricultural literature.

**AGR 476. Special Problems.** (1 to 3 hrs.); I, II, III. Prerequisite: upper division standing. Permits a student to do advanced work as a continuation of an earlier experience or to work in an area of special interest. Topic for investigation must be selected and approved by advisor prior to registration.

**AGR 480. Equine Breeding and Reproduction.** (1-4-3); II. Prerequisites: AGR 342 and AGR 332 or equivalent. 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 recordkeeping.

**AGR 505. Farm Business Analysis.** (2-2-3); on demand. Prerequisite: consent of instructor. 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 512. Conservation Workshop.** (2-2-3); on demand. Prerequisite: consent of instructor. Development of the conservation movement with broad treatment of the basic natural resources, including land, water, air, minerals, forests, and wildlife.

**AGR 515. Animal Nutrition.** (2-2-3); II. Prerequisite: AGR 316. Chemistry, metabolism, and physiological functions of nutrients; digestibility, nutritional balances, and measures of food energy.



**AGR 580. Methods of Teaching Vocational Agriculture.** (4-0-4); II. The principles of methods applied to teaching vocational agriculture to high school students. Course organization, farming programs, and Future Farmers of America activities.

**AGR 582. Adult and Young Farmer Education.** (3-0-3); II. The principles and techniques method in organizing and program planning in post high school vocational agriculture and conducting young farmer and adult farmer classes.

**AGR 584. Teaching Vocational Agriculture.** (8-0-8); II. Supervised teaching in centers selected by the state agriculture education staff and members of the teaching staff. Teacher experiences with in-school and out-of-school groups.

**AGR 585. Teaching Agricultural Mechanics.** (3-0-3); I. Objectives and methods, equipment and management of the shop, organization of facilities for high school and vocational technical programs.

**AGR 586. Planning Programs in Vocational Agriculture.** (3-0-3); II. Organization and analysis of the program of vocational agriculture. Departmental program of activities, summer programs, advisory committees, and Future Farmers of America activities.

**AGR 588. Curriculum Development and Content Selections.** (3-0-3); III. Each student prepares the content for a four-year program in vocational agriculture.

**AGR 592. Supervision in Agriculture.** (3-0-3); I, II. The principles and techniques needed in individual group supervision of vocational agricultural programs.

## ALLIED HEALTH SCIENCES

**AHS 100. Orientation to Allied Health.** (1-0-1); I, II. A review of the history of the health occupations, the ethics of health care, and professional conduct. The various health careers will be identified, their functions described, and the way in which they articulate into the health care team is studied.

**AHS 202. Basic Pharmacology.** (2-0-2); I, II. This course is to assist the student in the health field to understand responsibility in the administration of medicine and to appreciate the need for accuracy. Basic information concerning the main effects, uses, and doses of the common drugs, including weights, measurements, and abbreviations commonly used in medicine. Review of mathematics related to calculating and translation of dosage.

**AHS 301. Seminar.** (1 to 3 hrs.); II. Lecture and discussion of problems related to major area and/or health field. Readings in current literature.

**AHS 302. Medical Terminology.** (2-0-2); I, II. A word-study course of medical terminology. The vocabulary will be taught from a word aspect; a knowledge of medicine or related disciplines is not necessary.

**AHS 303. Interpersonal Relations.** (3-0-3); I, II. The personality formation of oneself and the "other person." Verbal and non-verbal communications; life forces; coping patterns and values, attitudes, and beliefs are examined. Visual methods and therapeutic methods of communicating with individuals and groups. Some prevalent barriers to communication are discussed. Emphasis is on the health worker's preparation for communication with patients and clients.

**AHS 304. Medical Law and Ethics.** (2-0-2); II. Designed to acquaint the student with the basic principles of medical law as they apply to the medical assistant, especially considering the basic legal and ethical relationships between the physician, medical assistant, and patient. Coverage includes: contract creation and termination, including implied and informed consent, professional liability, invasion of privacy, malpractice tort liability, breach of contract, and medical practice acts. Emphasis given to professional attitudes and behavior, history of medicine, and different types of medical practice.

**AHS 351. Practicum.** (1 to 3 hrs.); on demand. Corequisite: to be correlated with a course in major area in Department of Allied Health Sciences. Supervised clinical learning experience in an appropriate agency or facilities through which the students acquire understanding and skill in their major or area of concentration. The student learns to deal with the patient's physical, mental, and social problems; accepts responsibility as a participating team member; learns to work with other professional and non-professional personnel.

**AHS 398. Supervised Field Experience.** (1 to 6 hrs.); on demand. Prerequisite: consent of advisor. Designed to provide experience in occupational area as student works under supervision in an approved position. Credit commensurate with time worked, type of work, variety of work experiences, periodic evaluation by major department, faculty, and cooperating organization.

## ART

**ART 101. Two-Dimensional Foundation.** (2-2-3); I, II, III. An introduction to drawing and design concepts including shape, line, value, perspective, and composition. A variety of basic drawing materials are used. Theory, skill, and perceptual development are emphasized.

**ART 102. Three Dimensional Foundation.** (2-2-3); I, II, III. An introduction to three dimensional design, special theory, and concepts are taught employing a variety of methods and materials such as paper, wire, styrofoam, and plaster.

**ART 103. Color Foundation.** (2-2-3); I, II, III. The study of color and its application to color and light, pigment blending, and process printing through lecture and class projects.

**ART 121. School Art I.** (3-0-3); I, II, III. 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. Introduction to objective and subjective drawing using various graphic media.

**ART 205. Graphic Design I.** (2-2-3); I, II. Prerequisite: 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); Prerequisites: ART 101, 102, and 103 or permission of department. 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.** (3-0-3); I, II, III. 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. Introduction to Ancient Art.** (3-0-3); I. The history of Western painting, sculpture, and architecture from the prehistoric times until the beginning of the Christian era.

**ART 264. Introduction to Medieval and Renaissance Art.** (3-0-3); II. The history of Western painting, sculpture, and architecture from the beginning of the Christian era until about 1600.

**ART 283. Basic Black and White Photography.** (2-2-3); I, II. Practical introduction to the basic camera and darkroom techniques of black and white photography. Areas covered include camera operation, film exposure and development, enlarging, and print presentation.

**ART 294. Sculpture I.** (2-2-3); I, II. Creative experiences in the techniques, media, and tools of sculpture, work in stone, wood, metal, clay, and plaster.

**ART 300. Elementary Materials and Methods.** (3-0-3); II. Prerequisite: acceptance into the teacher education program. Background and philosophy of elementary art in education.

**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. Prerequisite: ART 205. A study of three-dimensional design with emphasis on product and package design.

**ART 314. Painting Techniques II.** (2-2-3); I, II, III. Prerequisite: ART 214. Painting from still life and landscape with emphasis on creative interpretation and expression.

**ART 321. Materials and Methods for Secondary Art.** (3-0-3); I. Prerequisite: acceptance into teacher education program. Presentation of the background, philosophy, and techniques for the teaching of art in the secondary school.

**ART 341. Fibers I.** (2-2-3); I, II. Introduction to fiber processes, including spinning and dyeing, coiling, twining, wrapping, tapestry, and loom weaving.

**ART 342. Surface Design for Fabric I.** (2-2-3); I, II. An introduction to surface design including stamping, tiling, repeat design, and screen printing on fabric.

**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 or permission of the department. 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 or permission of the department. 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); I. 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); II (alternate years). 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); I (alternate years). The history of European painting, sculpture, and architecture from c. 1300 until c. 1525.

**ART 364. Mannerist and Baroque Art.** (3-0-3); II (alternate years). The history of European painting, sculpture, and architecture from c. 1525 until c. 1750.

**ART 383. High Contrast Photography.** (2-2-3); I, II. Prerequisite: ART 282. Creative use of a variety of darkroom techniques utilizing high contrast films and papers. Techniques covered include drop-out, bas-relief, and tone-line printing; solarization; stripping; and paste-up.

**ART 384. Color Photography.** (2-2-3); I, II. Prerequisite: ART 283. Introduction to materials and processes utilizing color films and papers.

**ART 385. Alternative Photographic Printing Processes.** (2-2-3); I, II. Prerequisite: ART 283. Preparation and use of hand-coated photo-sensitive papers. Printing processes include cyanotype, Van Dyke, kallitype, platinotype, palladium, and gum-biochrome.

**ART 386. Studio Photography.** (2-2-3); I, II. Prerequisite: ART 283 or permission of instructor. Study of studio photography, including use of view camera, artificial lighting, and other studio equipment, as an element of commercial design.

**ART 394. Sculpture II.** (2-2-3); I, II. Prerequisite: ART 294. Studio problems involving the manipulation of various sculpture media.

**ART 400. Apprenticeship.** (3 to 16 credits); I, II, III. Prerequisite: 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); I, II. Prerequisite: ART 406. 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. May be repeated. Prerequisite: ART 407. The continuation of studies in the area of commercial illustration. A more comprehensive study of different media and illustration techniques.

**ART 414. Painting Techniques III.** (2-2-3); I, II, III. Further exploration of different mediums and direction towards an individual approach. Painting from a variety of subjects; technical investigation and creative interpretation emphasized.

**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 451. Intaglio Printmaking Studio.** (2-2-3); I, II. May be repeated. Prerequisite: ART 351. Advanced studio in intaglio printmaking. Techniques include engraving, mezzotint, color intaglio, photo-etching and color monotype.

**ART 452. Lithographic Printmaking Studio.** (2-2-3); I, II. May be repeated. Prerequisite: ART 352. Advanced studio in lithographic printmaking. Techniques include color lithography, reversal, chine colle, and multi-plate registration.

**ART 461. Modern Art.** (3-0-3); I (alternate years). The history of European and American Art painting, sculpture, and architecture from c. 1750 until c. 1900.

**ART 462. Contemporary Art.** (3-0-3); II (alternate years). The painting, sculpture, and architecture of the twentieth century.

**ART 463. Art of the United States.** (3-0-3); I (alternate years). 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); II (alternate years). A survey of the painting, sculpture, and architecture of Spain, Portugal, and Latin America.

**ART 504. Drawing IV.** (2-2-3); I, II. Repeatable up to 6 hours. Prerequisite: ART 404. Advanced studio in figure drawing. Further exploration of figure drawing concepts and media with emphasis on creative interpretation and expression.

**ART 555. Advanced Art Problems.** (1 to 6 hrs.); I, II, III. Prerequisite: permission of the department required. A studio course involving research in an art area of the student's choice.

**ART 594. 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.

## BIOLOGY

\*Indicates field course.

**BIOL 100. Orientation to Biological and Environmental Sciences Programs.** (1-0-1); I. Prerequisite: enrollment or interest in programs in the Department of Biological and Environmental Sciences. The importance of the academic advisor, the structure of departmental programs, student career-oriented organizations, career selection, program requirements, and applications to professional/graduate schools. Required of all departmental freshmen and new departmental major and area students. K credit.

**BIOL 105. Introduction to Biological Sciences.** (3-0-3); I, II, III. Fundamental life processes: photosynthesis, respiration, reproduction, growth, and evolution. Emphasis on man. NOT acceptable for biology majors.

**BIOL 150. Introductory Plant Science.** (2-2-3); I. Structure, growth, reproduction, and ecology of plants. Emphasis on cultivated plants and agriculture applications. (Course will NOT be accepted for biology majors and minors.)

**BIOL 199. Selected Workshop Topics.** (1 to 4 hrs.); on demand. Prerequisites: variable. 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 student's advisor.

**BIOL 206. Biological Etymology.** (2-0-2); I, II. Root-concepts of terms necessary for a better understanding of the biological sciences.

**BIOL 207. Biological Illustration.** (3-0-3); II. Techniques of representation with pen and ink, blackboard, and photography; illustrative procedure for classroom and publication.

**BIOL 208. Invertebrate Zoology.** (2-2-3); I, III. Basic principles: morphology, physiology, embryology, composition, and metabolism; general characteristics, life histories, taxonomy, ecology, and evolution of the invertebrates.

**BIOL 209. Vertebrate Zoology.** (2-2-3); II, III. Prerequisite: BIOL 208. General characteristics, anatomy, physiology, taxonomy, ecology, and evolution of the vertebrates.

**BIOL 215. General Botany.** (2-4-4); II, III. 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); II, III. An elementary microbiology course for students interested in understanding the characteristics and activities of microorganisms and their relationship to health and disease. Course will NOT be accepted as credit for biology majors.

**BIOL 301. Survey of Biochemistry.** (3-0-3); I in alternate years. Prerequisite: CHEM 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.). Primarily for students in applied sciences and not for majors or minors in chemistry or biology. See CHEM 301.

**BIOL 301A. Survey of Biochemistry Laboratory.** (0-2-1); I in alternate years. Corequisite: BIOL 301. Laboratory for BIOL 301. See CHEM 301A.

**BIOL 304. Genetics.** (2-2-3); I, II. Prerequisites: BIOL 209 and 215. Mendelism, chromosomes and heredity, gene theory, cytological and physiological analyses, and population genetics.

**BIOL 313. Economic Botany.** (3 hours credit). 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. (Correspondence only.)

**BIOL 317. Principles of Microbiology.** (2-4-4); I, II, III. Prerequisites: BIOL 208 and CHEM 112-112-A. Fundamental and applied aspects of microbiology. Morphology, metabolism, genetics, taxonomy, and immunology emphasized. Medical and environmental microbiology laboratory techniques stressed.

**BIOL 318. Local Flora.** (1-4-3); I\*. Prerequisite: BIOL 215. Identification and classification of plants native to the area. Collection and herbarium techniques.

**BIOL 319. Immunology and Serology.** (2-2-3); II. Prerequisite: BIOL 317. Lecture material provides a basic, yet thorough, understanding of immunological and serological principles. The laboratory enhances student abilities in serological techniques.

**BIOL 320. Basic Microtechniques.** (0-4-2); on demand. Prerequisites: BIOL 209 and CHEM 111-111-A. Techniques for preparing plant and animal tissues for microscopic study; preparation of microscopic slides.

**BIOL 331. Human Anatomy.** (3-0-3); I, II, III. Prerequisite: BIOL 105 or equivalent or consent of instructor. Human organism with emphasis on gross morphology. Course will NOT be accepted as credit for biology majors.

**BIOL 332. Human Physiology.** (3-0-3); I, II, III. Prerequisite: BIOL 331 or equivalent. Physiology of the various systems of the human body as particularly related to health. Course will NOT be accepted as credit for biology majors.

**BIOL 333. Laboratory for Human Physiology.** (0-2-1); I, II, III. Prerequisites: BIOL 332 or equivalent (may be taken concurrently). Fundamental physiological principles with an emphasis on laboratory technique, equipment usage, and clinical applications. Course will NOT be accepted as credit for biology majors.

**BIOL 334. Entomology.** (2-2-3); II\*. Prerequisite: BIOL 208. General structure of insects, life histories, common orders and families; insects in relation to man. Insect collection required.

**BIOL 336. Pathophysiology.** (4-0-4); II. Prerequisites: BIOL 217, 332, and CHEM 201-201A or equivalents. Dynamic aspects of disease and disruption of normal physiology. Correlates anatomy, physiology, and biochemistry and their application to clinical practice.

**BIOL 337. Comparative Anatomy.** (2-2-3); II. Prerequisite: BIOL 209. Vertebrate structure based on the recognition of morphological deviation in body plans.

**BIOL 338. Developmental Biology.** (2-2-3); I. Prerequisite: BIOL 209. 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: BIOL 105 or equivalent. Evolutionary processes and intricacies of genetic transmission. Evolution in human thought, experience, and affairs.

**BIOL 355. Population, Resources, and Environment.** (3-0-3); I, II, III. Human ecology with special emphasis on the relationships between man, his resources, and his environment.

**BIOL 356. Environmental Biology.** (3-0-3); II, III. Prerequisite: BIOL 355 or consent of instructor. Basic ecological principles, population and community ecology as they apply to current environmental problems. BIOL 357 is a companion course, although either may be taken separately.

**BIOL 357. Environmental Testing Methods.** (1-4-3); II. Prerequisite: consent of instructor. Methods used in determining water quality and air and noise pollution levels. Techniques of animal and plant population estimation. BIOL 356 is a companion course, although either may be taken separately.



**BIOL 380. Cell Biology.** (2-2-3); I, II. Prerequisites: BIOL 209 and CHEM 12-112-A. 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: variable. 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 student's advisor.

**BIOL 413. Medical Technology Clinical Practicum.** (4); III. See Medical Technology Curriculum.

**BIOL 414. Medical Technology Clinical Practicum.** (4); III. See Medical Technology Curriculum.

**BIOL 415. Medical Technology Clinical Practicum.** (14); I. See Medical Technology Curriculum.

**BIOL 416. Medical Technology Clinical Practicum.** (14); II. See Medical Technology Curriculum.

**BIOL 471. Seminar in Biological Science.** (1-0-1); I, II. Prerequisite: senior standing. Introduction to research and literature in the biological sciences.

**BIOL 472. Seminar in Environmental Science.** (1-0-1); I, II. Prerequisite: senior standing. Introduction to research and literature in the environmental sciences.

**BIOL 476. Special Problems.** (1 to 6 hrs.); I, II, III. Independent topics and research in the biological and environmental sciences. Topic must be approved prior to registration.

**BIOL 510. Limnology.** (2-2-3); I\*. Prerequisites: BIOL 209, BIOL 215, MATH 152 or higher, eight hours of college chemistry. Ecology and Biota of inland waters. Some all-day field trips required.

**BIOL 513. Plant Physiology.** (2-2-3); on demand. Prerequisites: BIOL 215 and CHEM 112 and 112-A or equivalent. Diffusion, osmosis, cell wall and membrane structure, mineral nutrition, photosynthesis, respiration, macromolecules, photoperiodism, and other aspects of plant growth and development.

**BIOL 514. Plant Pathology.** (1-4-3); on demand. Prerequisite: BIOL 215. Plant diseases; classification of fungi; diseases caused by rusts, smuts, fleshy fungi, bacteria, and viruses; physiogenic diseases; principles and procedures in the control of plant diseases; resistant varieties and culture control.

**BIOL 515. Food Microbiology.** (1-4-3); on demand. Prerequisite: BIOL 217 or 17. Microbiology of food production, food spoilage, and food-borne diseases.

**BIOL 518. Pathogenic Microbiology.** (2-2-3); I. Prerequisite: BIOL 217 or 317. Medically important microorganisms; bacteria and fungi emphasized. The isolation, cultivation, and identification of pathogenic microorganisms from clinical specimens stressed. Antimicrobial susceptibility tests, serological methods, and quality control introduced.

**BIOL 519. Virology.** (2-2-3); on demand. Prerequisite: BIOL 317 or consent of instructor. Morphology and chemistry of the virus particle; symptoms, identification, and control of more common virus diseases of plants and animals; host-virus relationships; and research methods concerned with viruses.

**BIOL 520. Histology.** (2-2-3); I. Prerequisite: BIOL 209. Characteristics of tissues and organs of vertebrates.

**BIOL 525. Animal Physiology.** (2-2-3); I. Prerequisite: CHEM 112 and 112-A or equivalent. Comparison of fundamental physiological processes in representative invertebrate and vertebrate animals. Emphasis placed on comparative energetics and physiological adaptations of organisms to their environment.

**BIOL 530. Ichthyology.** (1-4-3); II in even years\*. Prerequisite: BIOL 209. The anatomy, physiology, taxonomy, ecology, distribution, natural history, and evolution of fish. Emphasis on collection, identification, and classification of those fresh water fish native to eastern North America. Common marine fish of the Atlantic and Gulf coasts.

**BIOL 531. Herpetology.** (1-4-3); II in odd years\*. Prerequisite: BIOL 209. The anatomy, physiology, taxonomy, ecology, distribution, natural history, and evolution of amphibians and reptiles. Emphasis on collection, identification, and classification of those herpetiles found in eastern North America.

**BIOL 535. Mammalogy.** (1-4-3); I\*. Prerequisite: BIOL 209. Mammals of eastern North America with emphasis on mammals of southeastern North America. Taxonomy, adaptation, natural history, and methods of skin preparation.

**BIOL 537. Ornithology.** (1-4-3); II\*. Prerequisite: BIOL 209. Anatomy, physiology, classification, and identification of birds; life histories, habits, migration, and economic importance of native species.

**BIOL 540. General Parasitology.** (2-2-3); I. Prerequisite: BIOL 209. Protozoan, helminth, and arthropod parasites of man and domestic animals; emphasis on etiology, epidemiology, diagnosis, control, and general life histories of parasites.

**BIOL 545. Medical Entomology.** (2-2-3); I. Prerequisite: BIOL 334 or consent of instructor. Arthropod vectors of diseases; special emphasis on insects of medical importance. Anatomy, physiology, identification, ecology, and control measures.

**BIOL 550. Plant Anatomy.** (2-2-3); I. Prerequisite: BIOL 215. Gross and microscopic studies of internal and external structures of vascular plants. The leaf, meristem, cambium, primary body, xylem and phloem; roots, stems, and leaves; flowers and fruits; ecological anatomy.

**BIOL 551. Plant Natural History.** (3-0-3); on demand. Prerequisite: BIOL 105 or equivalent. A survey of major taxonomic groups; emphasis on the natural history of local plants.

**BIOL 552. Animal Natural History.** (3-0-3); on demand. Prerequisite: BIOL 105 or equivalent. A survey of major taxonomic groups; with emphasis on the natural history of local animals.

**BIOL 553. Environmental Education.** (2-2-3); III\*. Prerequisite: consent of instructor. 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. (Especially designed for in-service and pre-service teachers.)

**BIOL 555. Plant Morphology.** (2-2-3); II. Prerequisite: BIOL 215. Fossil and living non-vascular plants (except bacteria) and vascular plants; emphasis on ecology, morphology, and evolution.

**BIOL 561. Ecology.** (2-2-3); II\*. Prerequisites: BIOL 209, BIOL 215, MATH 152 or higher, eight hours of college chemistry. Interrelations of organisms and environment. Some all-day field trips required.

**BIOL 574. Experimental Courses.** (1 to 4 hrs.); on demand. Prerequisite: variable. These courses are always innovative, perhaps non-traditional, and often specialized offerings designed to enhance programs in the biological and environmental sciences and other disciplines. If successful, individual courses may be assigned a standard number.

**BIOL 575. Scanning Electron Microscopy.** (1-2-2); II. Brief description of the theory of the electron gun, the magnetic control of the electron pathways, and variations in electron microscope construction. The major portion concerned with preparation of specimens and actual application of the scanning electron microscope.

**BIOL 580. History of Science.** (3-0-3); III. See SCI 580.

**BIOL 595. Biochemistry I.** (2-4-4); I. Prerequisite: CHEM 326 and 326A or consent of instructor. Carbohydrates, lipids, and proteins; intermediary metabolism; protein synthesis; enzymology; blood chemistry; bioenergetics; fluid electrolyte balance; and vitamin and steroid chemistry.

**BIOL 596. Biochemistry II.** (2-4-4); II. Prerequisite: BIOL 595. Continuation of Biochemistry I. Intermediary metabolism of carbohydrates, lipids, proteins, and nucleic acids; function and mechanism of action of enzymes; energetics of living systems; and regulation of life processes.

**BIOL 599. Selected Workshop Topics.** (1 to 4 hrs.); on demand. Prerequisites: variable. 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 student's advisor.

## CHEMISTRY

**CHEM 100. Basic Chemistry.** (3-0-3); I, II, III. A survey of chemistry with emphasis on health and life processes.

**CHEM 100A. Basic Chemistry Laboratory.** (0-2-1); I, II, III. Must take concurrently with CHEM 100. Laboratory for CHEM 100.

**CHEM 101. Survey of General Chemistry.** (3-0-3); I, II, III. Atomic theory, oxygen, hydrogen, metals, non-metals, acids, bases, salts, and periodic arrangement of the elements. Primarily for students in the applied sciences.

**CHEM 101A. Survey of General Chemistry Laboratory.** (0-2-1); I, II, III. Prerequisite or corequisite: CHEM 101. Laboratory for CHEM 101.

**CHEM 111. Principles of Chemistry I.** (3-0-3); I, II. Prerequisite: MATH 152 (or equivalent) or ACT mathematics score over 15. Stoichiometry and chemical equations, electronic structure of atoms and molecules, periodic relations, gas laws, phases of pure substances and phase equilibria, and properties of solutions. Primarily for natural science and pre-professional students.

**CHEM 111A. Principles of Chemistry Laboratory.** (0-2-1); I, II. Prerequisite or corequisite: CHEM 111. Laboratory for CHEM 111.

**CHEM 112. Principles of Chemistry II.** (3-0-3); I, II. Prerequisite: CHEM 111. Continuation of CHEM 111. Kinetics, equilibria, electrochemistry, and descriptive chemistry of selected groups of elements. Primarily for natural science and pre-professional students.

**CHEM 112A. Principles of Chemistry II Laboratory.** (0-2-1); I, II. Prerequisite or corequisite: CHEM 112. Laboratory for CHEM 112.

**CHEM 201. Survey of Organic Chemistry.** (3-0-3); I, II, III. Prerequisite: CHEM 101. Major emphasis on introduction to organic chemistry and topics relating to foods, nutrition, and textiles. Primarily for students in the applied sciences.

**CHEM 199. Selected Topics.** (1 to 6 hrs.); on demand.

**CHEM 201A. Survey of Organic Chemistry Laboratory.** (0-2-1); I, II, III. Prerequisites: CHEM 101 and 101A. Laboratory for CHEM 201.

**CHEM 223. Quantitative Analysis.** (1-6-4); I, II. Prerequisites: CHEM 112 and 112A or consent of instructor. Principles and practice of gravimetric and volumetric analysis. Introduction to potentiometric, coulometric, and colorimetric methods of analysis.

**CHEM 299. Selected Topics.** (1 to 6 hrs.); on demand.

**CHEM 301. Survey of Biochemistry.** (3-0-3); I in alternate years. Prerequisite: CHEM 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.). Primarily for students in applied sciences and not for majors or minors in chemistry or biology. See BIOL 301.

**CHEM 301A. Survey of Biochemistry Laboratory.** (0-2-1); I in alternate years. Corequisite: CHEM 301. Laboratory for CHEM 301. See BIOL 301A.

CHEM 326. Organic Chemistry I. (3-0-3); I, II. Prerequisite: CHEM 201 and 201A or 112 and 112A. Homologous series of alkanes, alkenes, alkynes, alicyclic compounds, benzenoid compounds, alcohols, phenols, and molecular structure.

CHEM 326A. Organic Chemistry I Laboratory. (0-2-1); I, II. Must take concurrently with CHEM 326. Laboratory for CHEM 326.

CHEM 327. Organic Chemistry II. (3-0-3); I, II. Prerequisite: CHEM 326. Continuation of CHEM 326. Aldehydes, ketones, acids, and compounds of biological interest.

CHEM 327A. Organic Chemistry II Laboratory. (0-2-1); I, II. Must take concurrently with CHEM 327. Laboratory for CHEM 327.

CHEM 328. Organic Chemistry III. (3-0-3); II in alternate years. Prerequisite: CHEM 327. Special topics of organic chemistry; molecular rearrangements, orbital symmetry, heterocyclics, carbanion reactions, and macromolecules.

CHEM 328A. Organic Chemistry III Laboratory. (0-4-2); II. Must take concurrently with CHEM 328. Laboratory for CHEM 328.

CHEM 350. Inorganic Chemistry. (3-0-3); I in alternate years. Prerequisite: CHEM 112 and 112A. Electronic structure and bonding in inorganic compounds. Physical properties related to structure and acid-base theories.

CHEM 399. Selected Topics (1 to 6 hrs.); on demand.

CHEM 410. Spectral Interpretation in Chemical Analysis. (2-0-2); on demand. Prerequisite: CHEM 326. Methods used in the interpretation of nuclear magnetic resonance spectra, mass spectra, infrared and ultraviolet spectra of inorganic and organic molecules.

CHEM 441. Physical Chemistry I. (3-0-3); I in alternate years. Prerequisites: CHEM 223 or 327; MATH 175; PHYS 202 or 232. Introduction to physical chemistry; thermodynamics, chemical kinetics, and quantum chemistry.

CHEM 442. Physical Chemistry II. (3-2-4); II in alternate years. Prerequisite: CHEM 441; corequisite: MATH 276. Advanced discussion of selected topics from thermodynamics, chemical kinetics, and quantum chemistry.

CHEM 450. Qualitative Organic Analysis. (2-4-4); II in alternate years. Prerequisite: CHEM 327. Qualitative analysis of organic compounds; physical and chemical methods.

CHEM 460. Instrumental Analysis. (2-4-4); I. Prerequisites: CHEM 223 and 326. Theory and practice of infrared, ultra-violet, visible, mass, and nuclear magnetic resonance spectroscopy. Atomic absorption and emission spectroscopy, chromatography, and electrochemical methods of analysis.

CHEM 499. Selected Topics (1 to 6 hrs.); on demand.

## COMMUNICATIONS (GENERAL)

COMM 139-539. Cooperative Study. I, II, III. The Department of Communications offers a series of cooperative study courses—COMM 139, 239, 339, 439 and 539—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. Prior application necessary. See restrictions applying to all programs in communications.

COMM 347. Internship. (1 to 3 hrs.); I, II, III. Competency-based practical experience aimed at increasing the proficiency of the student in assigned positions. Prior application necessary. May be repeated. See restrictions applying to all programs in communications.

COMM 447. Internship. (1 to 3 hrs.); I, II, III. Competency-based practical experience aimed at increasing proficiency of the student in the assigned positions. Prior application necessary. May be repeated. See restrictions applying to all programs in communications.

COMM 476. Special Problems. (1 to 3 hrs.); I, II, III. (By prior arrangement with instructor only.) Research on an original project with appropriate written report, within a subject area. May be repeated. See restrictions applying to all programs in communications.

## CONSTRUCTION TECHNOLOGY

CON 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.

CON 102. Surveying I. (1-4-3); II. Basic introduction to surveying methods plus introduction to surveying equipment.

CON 103. Materials Testing. (2-2-3); II. An investigation of materials science including typical physical destructive and nondestructive testing procedures. Reviews of ASTM and other standard agencies.

CON 104. Surveying II. (1-4-3); I. An extension of Surveying I with more in-depth field experience.

CON 201. Properties of Construction Materials. (2-2-3); I. An extension of materials testing with emphasis on heavy and highway construction materials, control standards, and properties expected.

CON 202. Structural Design. (2-2-3); I. Review of typical structural design methods with applied calculation using free body diagrams and other static load methods.

CON 203. Construction Methods and Equipment. (2-2-3); I. An investigation of various construction and building techniques, including traditional and modified methods. Laboratory will include model and prototype development.

CON 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.

CON 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.

CON 206. Construction Management. (3-0-3); II. Supervisory and administrative procedures typical of the construction industries. Personnel requirements and labor arrangements necessary for building contractors.

## CORRECTIONS

COR 201. Sociology of Corrections. (3-0-3); I, II. An analysis of the theoretical and philosophical foundations of the American correctional system and an examination of its role in society. Contemporary treatment methods for adult and juvenile offenders will be surveyed.

COR 306. Juvenile Delinquency. (3-0-3); I, II. (See SOC 306.)

COR 310. The Sociology of Deviance. (3-0-3); I. (See SOC 310.)

COR 320. Probation and Parole. (3-0-3); II. An analysis of community treatment in the process of corrections. Emphasis is placed upon the development, organization, administration, operation, and results of probation and parole.

COR 388. History of Corrections. (3-0-3); II. 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.

COR 390. Field Experience in Corrections. (0-0-3); I, II, III. Field experience in a jail, detention home, juvenile or adult correctional institution, juvenile or adult probation or parole agency. Required for associate degree only.

COR 401. Criminology. (3-0-3); on demand. (See SOC 401.)

COR 420. Seminar in Criminal Behavior. (3-0-3); II. Specific problems and issues concerning criminal behavior examined in depth. Includes analysis of the causes of particular kinds of behavior, examination of methods of control, and consideration of current approaches to rehabilitation.

COR 450. Research Methodology. (3-0-3); I, II, III. (See SOC 450.)

COR 476. Special Problems. (1 to 3 hrs.); I, II, III. Prerequisite: Consent of instructor and department head. Arranged with the department to study some particular aspect of the field of corrections.

COR 510. Law of Corrections. (3-0-3); I. An analysis of civil law in the United States related to the protection of society, the accused and adjudicated offender, and the administration of justice.

COR 515. Correctional Counseling. (3-0-3); II. The basic concepts and principles involved in interviewing, counseling, and group therapy which are employed in correctional facilities.

COR 590. Practicum in Corrections. (0-0-6); I, II, III. The course consists of practical experience in a jail, detention home, juvenile or adult correctional institution, juvenile or adult probation and parole agency, or other related agency. A minimum of 20 hours per week will be spent at the assigned agency.

## DATA PROCESSING

DATA 199. Selected Workshop Topics. (1 to 4 hrs.); on demand. Workshops on various data processing subjects will be presented periodically to supplement the basic course offerings in data processing. Credit toward degree programs must be approved by the student's advisor.

DATA 201. Introduction to Computers. (3-0-3); I, II, III. Survey of computer systems, including hardware and software features. Machine and program logic. Flow-charting techniques, use of decision tables. Survey of computer languages.

DATA 202. Computer Programming BASIC. (3-0-3); I, II, III. Pre- or co-requisite: DATA 201. Programming the computer using the BASIC language. No prior knowledge is assumed. Emphasis on problem solving and interactive mode programming.

DATA 203. Pascal Programming for Business and Science. (3-0-3); II. Prerequisite: DATA 201. Structured approach to business and scientific programming for beginners. Programming techniques for students wishing to pursue careers in business or science.

DATA 210. Computer Programming ASSEMBLER I. (3-0-3); I, II, III. Prerequisite: DATA 202. Programming stored program computer using ASSEMBLER language. Interpretation of machine code and memory dumps in hexadecimal rotation. The binary instruction set, condition code, mask and branching, looping, and subroutines.

DATA 215. Computer Programming COBOL I. (3-0-3); I. Prerequisite: DATA 210. Practical business applications programming using COBOL language. Card input and printer output used.

DATA 216. Programming in PL/I. (3-0-3); I. Prerequisite: DATA 210. Fundamentals of programming in PL/I computer language. Practical business and scientific applications emphasized in programming assignments.

DATA 260. FORTRAN Programming I. (3-0-3); I, II. Prerequisite: DATA 202. Introduction to FORTRAN programming language. Application of mathematical techniques to problems in programming business, engineering, management, and modeling. Examples employed to provide comprehensive knowledge of the language.

DATA 301. Microcomputers. (3-0-3); I, III. Prerequisite: DATA 202 or equivalent programming course. Hardware and software of microprocessor and its impact on business, industry, education, and home.

DATA 315. Computer Programming COBOL II. (3-0-3); II. Prerequisite:



**DATA 215.** Advanced computer programming using COBOL. Tape and disk file structures and processing emphasized.

**DATA 316.** Advanced PL/1 Programming. (3-0-3); II. Prerequisite: DATA 216. Advanced computer programming using PL/1. Data structures, tape, and disk file structures and processing will be emphasized using business and scientific applications.

**DATA 320.** Computerized Business Systems. (3-0-3); I. Prerequisite: DATA 215 or 216. Hardware and software specifications, operating systems, programming systems, information theory, development, and use of computerized business applications.

**DATA 399.** Selected Workshop Topics. (1 to 4 hrs.); on demand. Workshops on various data processing subjects will be presented periodically to supplement the basic course offerings in data processing. Credit toward degree programs must be approved by the student's advisor.

**DATA 405.** Systems Analysis and Design. (3-0-3); II. Prerequisite: DATA 215. Systems analysis, feasibility studies, economic cost comparisons, systems implementation, the tools of systems analysis.

**DATA 476.** Special Problems in Data Processing. (1 to 3 hrs.); I, II, III. Prerequisite: open to majors and minors in data processing with prior consent of the advisor. This course is an independent study of data processing 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.

**DATA 515.** Data Processing Field Project. (3-0-3); II. Prerequisites: DATA 215 or 216 and permission of instructor. Experience in actual data processing situations outside the classroom; students assigned in University's data processing center and other approved computer facilities.

**DATA 516.** Educational Data Processing. (3-0-3); III. Basic concepts pertaining to computers. Application in education, research, and administration. Designed primarily for students without previous data processing instruction.

**DATA 526.** Data Base Management Systems. (3-0-3); II, III. Prerequisite: DATA 320. Data base structures, creation, modification, processing, and physical representation.

**DATA 599.** Selected Workshop Topics. (1 to 4 hrs.); on demand. Workshops on various data processing subjects will be presented periodically to supplement the basic course offerings in data processing. Credit toward degree programs must be approved by the student's advisor.

## ECONOMICS

**ECON 101.** Introduction to the American Economy. (3-0-3); I, II. Introduction to fundamental concepts and principles of economics with emphasis on institutions basic to the American economic system. (Cannot be used to satisfy the requirements for the economics major, minor, or option; not open to those who have had ECON 201 or equivalent.)

**ECON 139.** Cooperative Study I. (1 to 8 hrs.); on demand. Work experience in a field relevant to the student's career objectives and academic preparation. Experience is usually analogous to a freshman level course.

**ECON 199.** 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.

**ECON 201.** Principles of Economics I. (3-0-3); I, II, III. Theories of income, employment, monetary policy, fiscal policy, the price level, and economic growth.

**ECON 202.** Principles of Economics II. (3-0-3); I, II, III. Prerequisite: ECON 201. A continuation of ECON 201 with emphasis on the theory of the firm, resource allocation, and international economics.

**ECON 239.** Cooperative Study II. (1 to 8 hrs.); on demand. Work experience with an extension of exposure gained in ECON 139 or of a nature similar to a sophomore status course.

**ECON 302.** Labor Economics. (3-0-3); I, II. Prerequisite: ECON 201 or junior standing. 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. Prerequisites: ECON 201 and 202. A study of influential theories of the major economic systems: Capitalism, Marxism, and Communism. Descriptive analysis of the operation of the corresponding economies.

**ECON 339.** Cooperative Study 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 course.

**ECON 350.** Microeconomic Theory. (3-0-3); I, II, III. Prerequisites: MATH 160, ECON 201 and 202. 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 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.

**ECON 439.** Cooperative Study 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.

**ECON 476.** Special Problems in Economics. (1 to 3 hrs.); I, II, III. Prerequisites: open to majors or minors in economics with prior consent of the instructor. 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 500.** Mathematical Economics. (3-0-3); I. Prerequisites: MATH 160 and 354. Application of mathematical and statistical techniques to the theory of the firm, market, and national income models.

**ECON 501.** Environmental Economics. (3-0-3); II. Prerequisites: ECON 201 and 202 or consent of instructor. Analysis of the economic reasons contributing to environmental degradation and exploration of economic policies to reduce this problem. May not be taken for M.B.A. credit.

**ECON 503.** Urban and Regional Economics. (3-0-3); on demand. Prerequisites: ECON 201 and 202. 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 510.** History of Economic Thought. (3-0-3); on demand. Prerequisites: ECON 201 and 202. The origin and development of economic theories from the Mercantilist through modern times.

**ECON 539.** Cooperative Study V. (1 to 8 hrs.); on demand. Work experience providing advanced specialized exposure in a career-related position. Available to upper division undergraduate and graduate students.

**ECON 541.** Public Finance. (3-0-3); I. Prerequisites: ECON 201 and 202 or consent of instructor. Public expenditures; public revenue; taxation; public credit; financial administration of government.

**ECON 545.** Industrial Organization and Public Policy. (3-0-3); on demand. Prerequisites: ECON 201 and 202 or ECON 504. Forms of business combination; the problem of business concentration and monopoly; the role of the regulatory agency; antitrust legislation and interpretation.

**ECON 547.** International Economics. (3-0-3); I. Prerequisites: ECON 201 and 202 or consent of instructor. International trade theory, international monetary relationships, and the balance of payments. Emphasis is placed on contemporary problems and possible solutions.

**ECON 551.** Macroeconomic Theory. (3-0-3); I. Prerequisites: ECON 201 and 202 or ECON 504. National income accounting; macroeconomic theories of output determination, employment, inflation, and growth; monetary and fiscal policies to control aggregate economic activity.

**ECON 555.** Economic Development and Growth. (3-0-3); on demand. Prerequisites: ECON 201 and 202 or consent of instructor. Classical and modern theories of growth and development and their application in both advanced and underdeveloped nations.

**ECON 590.** Economic Education for Teachers. (3-0-3); on demand. Fundamental economic concepts and their application and integration in education (cannot be used to satisfy requirements for the economics major, minor, or option, nor as an elective in the MBA program).

**ECON 599.** 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.

## EDUCATION (ADULT AND CONTINUING)

**EDAC 102.** Study Skills. (1-0-1); I, II (Each 9-week period). Course is designed to provide special training in the skills and techniques necessary for college level study.

**EDAC 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.

**EDAC 299.** Workshop. (1 to 3 hrs.); on demand. Workshop for specifically designated task orientation in education. May be repeated in additional subject areas.

**EDAC 399.** Workshop. (1 to 3 hrs.); on demand. Workshop for specifically designated task orientation in education. May be repeated in additional subject areas.

**EDAC 499.** Workshop. (1 to 3 hrs.); on demand. Workshop for specifically designated task orientation in education. May be repeated in additional subject areas.

**EDAC 554.** Principles of Adult and Continuing Education. (3-0-3); I, II. Overview of adult education; historical development; psychological and sociological basis of adult learning; trends and major issues in adult education; and principles of teaching adults.

**EDAC 599.** Workshop. (1 to 3 hrs.); I, II, III. Workshop for specifically designated task orientation in education. May be repeated in additional subject areas. Maximum of six semester hours may be earned under this course number.

## EDUCATION (EARLY CHILDHOOD)

**EDEC 199.** Workshop. (1 to 3 hrs.); I, II, III. 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, III. 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.); I, II, III. Continuation of EDEC 199.  
 EDEC 470. Research Problems. (1 to 3 hrs.). I, II, III. Independent research study of a professional nature. Conferences with instructor by arrangement. Maximum of six semester hours may be earned under this course number.

EDEC 527. The Pre-School Child. (3-1-3); I, II, III. Principles of growth and development from prenatal period to age six. Focuses attention on learning experiences for nursery and kindergarten age children. (Laboratory experiences an integral part of course.)

EDEC 528. Activities and Materials in Early Childhood. (3-1-3); I, II, III. Investigates needs and interests of early childhood and provides opportunities to explore objectives, materials, and techniques of instruction for this age group. (Laboratory experiences an integral part of course.)

EDEC 529. Practicum in Early Childhood Education. (1-4-4); I, II, III. Prerequisites: EDEC 527, 528, and admission to teacher education program. Students are assigned to pre-school classroom for observation, participation, and teaching. On-campus seminars are held weekly. (Application made through coordinator of professional laboratory experiences.)

EDEC 599. Workshop. (1 to 3 hrs.); I, II, III. Prerequisites: upper division or graduate classification. Workshop for specifically designated task orientation in education. May be repeated in additional subject areas. Maximum of six semester hours may be earned under this course number.

## EDUCATION (ELEMENTARY)

EDEL 110. Developmental Reading I. (2-2-3); I, II, III. Provides diagnostic independent guided improvement of reading skills. Vocabulary and improved comprehension skills are stressed.

EDEL 111. Developmental Reading II. (2-2-3); I, II, III. Prerequisite: EDEL 110. Continuation of Developmental Reading I.

EDEL 112. Reading English as a Second Language. (2-2-3); I, II, III. Individualized program for teaching vocabulary and reading skills to the non-English speaking student.

EDEL 199. Workshop. (1 to 3 hrs.); I, II, III. Workshop for specifically designated task orientation in elementary education. Maximum of six semester hours may be earned under this course number.

EDEL 228. Literature and Materials for Children. (3-0-3); I, II, III. Survey of children's literature from its beginning to present time; all types of literature except textbooks. Various types of media for preschool through grade six. Emphasis on criteria for evaluation and aids for selection of materials; reading interests, needs, and abilities of children.

EDEL 250. Practicum. (1 to 6 hrs.); I, II, III. Experiences include placement in either a classroom or simulated classroom laboratory.

EDEL 276. Independent Study. (1 to 3 hrs.); I, II, III. Directed study of specific areas in elementary education. Topic must be approved in advance by instructor. Conferences with instructor by arrangement.

EDEL 301. Media Strategies. (2-2-2); I, II. Introduction to educational media. Principles of utilization and hands-on experience with hardware and software. Basic production projects also required.

EDEL 321. Teaching of Arithmetic. (2-2-3); I, II, III. Prerequisites: admission to the teacher education program and MATH 231 or corequisite course. Essential number concepts; emphasis on functional arithmetic and its application. (Laboratory experiences are integral part of course.)

EDEL 322. Teaching Social Studies in the Elementary School. (3-0-3); I, II, III. Prerequisite: admission to teacher education program. Scope and sequence of skills and concepts of social studies program in the elementary school. Emphasis given to instructional methods and recent trends in social studies area. (Laboratory experiences are integral part of course.)

EDEL 323. Language Arts for the Elementary School. (3-0-3); I, II, III. Prerequisite: admission to teacher education program. Role of language arts program in elementary school curriculum. Identification of language arts skills and subsequent teaching techniques of skills will be central to course. Skills emphasized are listening, speaking, writing, and spelling. (Laboratory experiences an integral part of course.)

EDEL 333. Fundamentals of Elementary Education. (3-1-4); I, III. Prerequisites: admission to teacher education program and approval of head of the department. 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 336. Foundations of Reading. (2-2-3); I, II, III. Prerequisite: admission to teacher education program. Materials and methods of teaching basic reading skills in grades K-8. Students are taught how to teach subskills of word attack, vocabulary development, and comprehension. (Laboratory experiences an integral part of course.)

EDEL 337. Reading Strategies for the Elementary Teacher. (2-2-3); I, II, III. Prerequisites: admission to teacher education program and EDEL 336 or equivalent. Materials and methods of teaching advanced reading skills in grades K-8. Students are taught how to teach skills needed for content area reading. Various types of grouping techniques stressed. (Laboratory experiences an integral part of this course.)

EDEL 410. Human Growth and Development II. (3-0-3); III. Prerequisites: EDF 207, 211, and admission to teacher education program. (When taken separately, approval of head of the department is required.) Continuation of EDF 211.

EDEL 425. Supervised Teaching Practicum—Elementary. (4 to 12 hrs.); I, II. See prerequisites for admission to professional semester. Student is assigned

to student teaching center during which time observation, participation, and student teaching are done. Teaching may be done in any elementary grade. Special conferences with supervising teacher, attendance, and participation in faculty meetings and out-of-school activities required.

EDEL 427. Professional Semester (Elementary). (9-30-15); I, II. Professional semester is comprised of EDEL 410, and 425. Prerequisites: EDF 207, 211, EDEL 301, 321, 322, 323, 336 or 337, EDSP 230. Admission to teacher education program; attainment of a scholastic standing of 2.50 on a 4.0 scale on all residence courses at Morehead State at time student teaching begins; a minimum standing of 2.5 on a 4.0 scale on all work completed in area of concentration, major(s), and minor(s); completion of a minimum of 90 semester hours of work; at least one semester of residence credit earned at this university, and approval of the university Teacher Education Council. Twelve weeks spent in student teaching and four weeks spent in class work. National Teacher Exam required. (Application made through coordinator of professional laboratory experiences.)

EDEL 470. Research Problems. (1 to 3 hrs.); I, II, III. Independent research study of a professional nature. Conferences with instructor by arrangement. Maximum of six semester hours may be earned under this course number.

EDEL 516. Educational Data Processing. (3-0-0); II. Introduction to computers. Role of computer and educational uses of computers presented in broad context. Instructional mode will be classroom presentation and "hands-on" experience with time-sharing and batch-process computing using the PRIME 550/750 computing systems.

EDEL 562. Remedial Reading. (2-2-3); I, III. Prerequisite: EDEL 336 or equivalent course. Materials, methods of diagnosing and treating reading difficulties. (Laboratory experiences an integral part of course.)

EDEL 599. Workshop. (1 to 3 hrs.); I, II, III. Prerequisite: upper division or graduate classification. Workshop for specifically designated task orientation in education. May be repeated in additional subject areas. Maximum of six semester hours may be earned under this course number.

## EDUCATION (FOUNDATIONS)

EDF 207. Foundation of Education. (3-0-3); I, II, III. Prerequisite: sophomore standing. Orientation for student considering teaching as a career. Course will survey the scientific, historic, philosophic, and social foundations of the teaching profession. (Laboratory experiences an integral part of course.)

EDF 211. Human Growth and Development. (3-0-3); I, II, III. Prerequisite: PSY 154. Survey of developmental patterns from birth to adulthood and their implications for elementary and secondary teachers. (Laboratory experiences an integral part of course.)

EDF 311. Learning Theories in the Classroom. (3-0-3); I, II, III. Study of the principles of learning and motivation as they are applied in the classroom. (Laboratory experiences an integral part of course.)

EDF 360. History of Education. (3-0-3); II. 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 contribution.

## EDUCATION (GUIDANCE AND COUNSELING)

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.

EDGC 199. Selected Topics. (1 to 3 hrs.); I, II, III. Investigation of specific problem areas in field of study. May be repeated in additional subject areas.

EDGC 299. Workshop. (1 to 3 hrs.); on demand. Workshop for specifically designated task orientation in education. May be repeated in additional subject areas.

EDGC 364. Career and Vocational Guidance. (3-0-3); II. Study of concept of career education, and exploration of emerging role of the guidance counselor in regard to problems that exist in present educational system; innovative concept of career education; 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.

EDGC 399. Workshop. (1 to 3 hrs.); on demand. Workshop for specifically designated task orientation in education. May be repeated in additional subject areas.

EDGC 499. Workshop. (1 to 3 hrs.); on demand. Workshop for specifically designated task orientation in education. May be repeated in additional subject areas.

EDGC 566. Introduction to Vocational Rehabilitation Services. (3-0-3); I, III. History of vocational rehabilitation movement, legislative efforts, and impact; overview of the rehabilitation process, roles of rehabilitation professionals in various rehabilitation settings, discussion of values and ethics, and examination of professional organizations for rehabilitation personnel.

EDGC 567. Rehabilitation of Special Groups. (3-0-3); I, III. Prerequisite: EDGC 566 or permission of instructor. In-depth study of various target populations in need of rehabilitation services, including physically disabled, public offenders, delinquents, drug addicts, aged, mentally ill, mentally retarded, and the educationally, socially, and culturally disadvantaged.



**EDGC 580. Measurement Principles and Techniques.** (3-0-3); I, III. Identification of educational objectives associated with test construction; table specifications; elementary statistics; testing and non-testing procedures. Investigations of major types of tests; administration, scoring, and interpretation of test results.

**EDGC 599. Workshop.** (1 to 3 hrs.); I, II, III. Workshop for specifically designated task orientation in education. May be repeated in additional subject areas. Maximum of six semester hours may be earned under this course number.

## EDUCATION (SECONDARY)

**EDSE 199. Workshop.** (1 to 3 hrs.); I, II, III. Workshop for specifically designated task orientation in secondary education. Maximum of six semester hours may be earned under this course number.

**EDSE 276. Independent Study.** (1 to 3 hrs.); I, II, III. 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. Teaching Skills and Media.** (2-2-3); I, II, III. Prerequisites: admission to teacher education program 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.

**EDSE 399. Workshop.** (1 to 3 hrs.); I, II, III. Continuation of EDSE 199.

**EDSE 415. Teacher in Today's Schools.** (3-0-3); 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.

**EDSE 416. Student Teaching.** (12-0-12); I, II. Prerequisite: admission to professional semester. Classroom component comprised of preparation for student teaching followed by placement in a student teaching center during which time observation, participation, and student teaching are done. Special conferences with supervising teacher, attendance and participation in faculty meetings, co-curricular activities, and the National Teacher Exam required. (Application made through coordinator of professional laboratory experiences.)

**EDSE 470. Research Problems.** (1 to 3 hrs.); I, II, III. 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 516. Educational Data Processing.** (3-0-3); II. This course provides introductory familiarization with computers. The role of the computer and the educational uses of computer are presented in a broad context. Instructional mode will be classroom presentation and "hands-on" experience with time-sharing and batch-process computing using the PRIME 550/750 computing system.

**EDSE 576. Reading in the Secondary School.** (2-2-3); I, II, III. Emphasis is centered around reading instruction in junior high and high school. Materials are included for instruction and studies of administrative problems involved. (Laboratory experiences an integral part of course.)

**EDSE 599. Workshop.** (1 to 3 hrs.); I, II, III. Prerequisites: upper division or graduate classification. Workshop for specifically designated task orientation in education. May be repeated in additional subject areas. Maximum of six semester hours may be earned under this course number.

## EDUCATION (SPECIAL)

**EDSP 199. Workshop.** (1 to 3 hrs.); I, II, III. 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 and Exceptional Children.** (3-0-3); I, II. Prerequisite: PSY 154. Procedures for identification, education, and treatment of exceptional children—the gifted, those with low intelligence, and handicapped—including behavioral deviations.

**EDSP 231. Field Experiences.** (0-6-3); I, II. Involves the student in on-site experiences in a variety of schools, institutions, and agencies providing services to the trainable mentally handicapped. Should be taken concurrently with EDSP 230.

**EDSP 276. Independent Study.** (1 to 3 hrs.); I, II, III. Independent study of a professional problem in special education.

**EDSP 320. Introduction to Corrective Speech.** (3-0-3); I, II. Introductory course in speech correction for classroom teacher. (Same as SPCH 320.)

**EDSP 332. Teaching the Exceptional Student.** (2-2-2); I, II. Prerequisites: admission to teacher education program and EDF 311. Describes physical and behavioral characteristics of exceptional students and their educational needs. Describes social and legal responsibilities regarding exceptional persons and reviews educational practices and appropriateness for specific exceptional behavior.

**EDSP 350. Characteristics of Individuals with Mental Retardation and Orthopedic Handicaps.** (2-2-3); I, II. Prerequisite: EDSP 230 or 601. 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 399. Workshop.** (1 to 3 hrs.); I, II, III. 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, III. Prerequisites: admission to teacher education program; attainment of scholastic standing of 2.50 on residence courses at Morehead State; 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 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 436. Supervised Teaching Practicum.** (4 to 12 hrs.); I, II, III. Prerequisites: admission to the teacher education program; attainment of a scholastic standing of 2.50 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 in a public school setting with trainable mentally handicapped students and in regular elementary classrooms on the basis of one week placement for each credit hour unit. (Application made through coordinator of professional laboratory experiences.)

**EDSP 470. Research Problems.** (1 to 3 hrs.); I, II, III. Independent research study of a professional problem. Conferences with instructor by arrangement.

**EDSP 537. Educational Assessment of Exceptional Children.** (2-2-3); I, III. Assessment methodology relating to identification of behavioral deficits and excesses of students which lessen their performance level in one or more core academic subject areas.

**EDSP 547. The Trainable Mentally Handicapped.** (3-0-3); II. Prerequisites: EDSP 230 and 550. Etiology and symptomatology of trainable mentally handicapped children and assessment procedures appropriate with children who are severely to profoundly handicapped.

**EDSP 550. Characteristics of Individuals with Learning Disabilities and Behavior Disorders.** (2-2-3); I, III. Prerequisite: EDSP 230 or 601. 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 551. Curriculum for Pre-School Exceptional Children.** (2-2-3); II, III. Prerequisites: EDSP 230 and 550. Designed to prepare the teacher to work with pre-school children having handicapping conditions. Curriculum procedures involving perpetual-motor activities, prosthetic devices, and system approaches in special education featured.

**EDSP 552. Learning Disabilities.** (3-0-3); III. Examination of psychological, medical, and educational literature involved with survey, clinical, and experimental work concerning a specific learning disorder.

**EDSP 553. Language Arts for Exceptional Students.** (2-2-3); I, III. Prerequisites: EDSP 230, 350, 550 and 537 or consent of instructor. Designed to prepare the teacher of exceptional children in curriculum development and specialized procedures for teaching language arts, including reading, spelling, handwriting, language, and written composition.

**EDSP 555. Prescriptive Teaching for Children with Learning and Behavior Problems.** (2-2-3); I, III. Prerequisite: EDSP 230, 350, 537, 550 and 553 or 557, or consent of instructor. Transfer of educational assessment data into behavioral objectives, instructional planning for implementing such objectives, behavior management, techniques, methods and materials for instruction, and formative and terminal evaluation techniques for individuals with learning and behavior problems.

**EDSP 556. Teaching the Trainable Mentally Handicapped.** (2-2-3); II. Prerequisites: EDSP 547 and 550. Application of methods and materials for teaching trainable mentally handicapped. Construction and use of instructional aids to be used with handicapped individual.

**EDSP 557. Content Areas and Career Preparation for Exceptional Students.** (2-2-3); I, III. Prerequisites: EDSP 230, 350, 537 and 550 or consent of instructor. Designed to prepare teacher of exceptional children in curriculum development and specialized procedures for teaching mathematics, content areas, and preparing students for vocations.

**EDSP 558. Learning Disabilities Methodology.** (2-2-3); III. Prerequisite: EDSP 552. Application of materials and methods (including construction of instructional aids) for teaching student with learning disabilities.

**EDSP 581. Educational Statistics.** (2-2-3); II, III. Introduction of statistical and graphical methods to educational and psychological logical data. Includes areas of descriptive and inferential statistics that apply to educational research.

**EDSP 599. Workshop.** (One to three hours); I, II, III. Supervised practice in working in specific areas of special education.

## EDUCATION (PROFESSIONAL)

**EDUC 582. Discipline and Classroom Management.** (3-0-3); I, II, III. Designed to provide assistance in establishing an organized, well-managed classroom. Emphasis on available options and alternatives in dealing with disruptive student in classroom.

## ELECTRICITY-ELECTRONICS TECHNOLOGY

**EET 140. Basic Electricity.** (2-2-3); I, II. Series and parallel d-c circuits, meters, magnetism, and a-c circuits with inductance, capacitance, transformers. Not recommended for electricity or electronics technology majors.

**EET 141. Electrical Circuits.** (2-2-3); I, II. Corequisite MATH 135. Introduction to direct and alternating current circuits, including resistive, inductive, and capacitive components, reactance, and resonance.

**EET 240. Residential Wiring.** (2-2-3); I, II. Corequisite MATH 141. Comprehensive study of latest National Electric Code and its application to theory, plans, specifications, and installation.

**EET 241. Circuit Analysis.** (3-0-3); II. Prerequisite: EET 141. Mathematical analysis of d-c and a-c circuits using Kirchhoff's laws, Thevenin's, Norton's, and Millman's theorems, determinants, polar-rectangular conversions, and impedance and admittance vectors.

**EET 242. Transistors and Semiconductors.** (2-2-3); I. Prerequisite: EET 141 or consent of the instructor. Physical properties, models, and basic circuit design of transistor and semiconductor devices.

**EET 243. Power Transformers and Distribution.** (2-2-3); I. Prerequisites: EET 241 or consent of instructor. Advanced study in industrial type transformers and power distribution systems. Practice in connecting, testing, trouble-shooting, installing, and planning distribution systems and network analysis.

**EET 245. Digital Electronics.** (2-2-3); II. Prerequisites: EET 141 or consent of the instructor. Functional and logical operation of digital circuits, including logic gates, combinational logic, multivibrators, counters and registers.

**EET 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 broadcasting facility.

**EET 341. Electrical Drafting and Design.** (2-2-3); II. Prerequisite: GCT 103 and EET 141 or consent of the instructor. Electrical and mechanical design, documentation, and production of electrical and electronic devices, including printed circuit boards, parts layout final assembly, and packaging.

**EET 343. Motors and Generators.** (2-2-3); II. Prerequisite: EET 241 or consent of instructor. Advanced study of industrial type electric motors and generators with practice in connecting, operating, and repair.

**EET 344. Communications Circuits.** (2-2-3); I. Prerequisite: EET 242 or consent of instructor. Radio frequency components and circuits, including passive and active devices, amplifier, oscillator, modulation, and detection circuits.

**EET 345. Microprocessor Electronics.** (2-2-3); I. Prerequisite: EET 245 or consent of instructor. Components and operation of a microprocessor system, including program counters, address counters, accumulators, arithmetic logic units, instruction decoders, controller-sequencers, and registers.

**EET 442. Industrial Electronics.** (2-2-3); I. Corequisite: EET 242 or consent of instructor. Industrial transducers and control devices, including special diodes, optoelectronic devices, PNP devices, Unijunction transistors, FETs, SCRs, special ICs, op-amps, and various other devices.

**EET 443. Industrial Electricity.** (2-2-3); II. Prerequisites: EET 241 and EET 240 or consent of instructor. The practice and theory of industrial wiring, including the wiring of multi-family dwellings, commercial buildings, industrial plants, and equipment.

**EET 444. Communications Systems.** (2-2-3); II. Corequisite: EET 344 or consent of instructor. Radio transmitters, data communications, television, transmission lines and networks, and antennas.

**EET 445. Computer Electronics.** (2-2-3); II. Prerequisite: EET 345 or consent of instructor. Computer architecture, addressing modes, instruction sequence, memories, IO systems, AD systems, assemblers, interpreters, and operating systems.

## ENGLISH

**Honors Seminar in Modern Literature.** (3-0-3); on demand. Intensive analytical study of a particular modern literary technique, movement, theme, or author. Restricted to Honors Program students.

*NOTE: English 101 and 102 or 192, or English 103 are prerequisites for all other English courses.*

**ENG 099. Basic Writing Skills.** (3-0-3); I, II. A placement composition course with an emphasis on writing sentences and paragraphs. *Does not satisfy the general education requirement in written composition.*

**ENG 101. Composition I.** (3-0-3); I, II, III. Development of writing ability, basic problems of structure of language, frequent papers.

**ENG 102. Composition II.** (3-0-3); I, II, III. Continuation of ENG 101; emphasis on critical thinking; frequent papers, including a short research paper.

**ENG 103. Composition III.** (3-0-3); I. An advanced placement composition course which covers in one semester the essential material of ENG 101 and 102.

**ENG 192. Technical Composition.** (3-0-3); I, II, III. Continuation of 101, with emphasis on the writing of scientific-industrial directions, letters, and memos, abstracts, minor project reports, and the use of visual aids.

**ENG 202. Introduction to Literature** (3-0-3); I, II, III. Extensive reading in poetry, fiction, and drama, with emphasis on basic principles of literary evaluation. (Not recommended for English area, major, or minor students.)

**ENG 211. Introduction to World Literature I.** (3-0-3); I. Analysis of selected masterpieces of literature from the early Greeks to the Renaissance, with emphasis on ideas basic to the Western tradition.

**ENG 212. Introduction to World Literature II.** (3-0-3). Analysis of selected masterpieces of literature from the Renaissance to the present, with emphasis on ideas basic to the western tradition.

**ENG 215. Structure of English.** (3-0-3); on demand. The structures of the English language from the perspective of descriptive and structural linguistics.

**ENG 231. English Literature to 1750.** (3-0-3); I. A survey of English literature from Beowulf through Dr. Johnson.

**ENG 232. English Literature since 1750.** (3-0-3); II. A survey of English literature from Wordsworth to the present.

**ENG 241. American Writers before 1850.** (3-0-3); I. A survey of American literature from its colonial beginnings to Whitman.

**ENG 242. American Writers since 1850.** (3-0-3); II. A survey of American literature from Whitman to the present.

**ENG 293. Creative Writing I.** (3-0-3); I, II, III. Study of and practicum in description, narration, exposition, or poetry as literary forms, with extensive practice writing.

**ENG 294. Creative Writing II.** (3-0-3); I, II, III. Continuation of ENG 293.

**ENG 325. Religious Literature of the World.** (3-0-3); on demand. The literature of the major religions of the world.

**ENG 344. The Short Story and the Novel.** (3-0-3); I, II. Study of representative forms of the short story and the novel.

**ENG 360. Appalachian Writers.** (3-0-3); I. 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. Readings in the major representative Southern authors.

**ENG 367. Old Testament Literature.** (3-0-3); I. A critical study of the history and literature of the Old Testament.

**ENG 368. New Testament Literature.** (3-0-3); II. A critical study of the history and literature of the New Testament.

**ENG 372. Oriental Literature.** (3-0-3); on demand. The major literary figures and genres of the literatures of China, Japan, India, Arabia, and Iran.

**ENG 393. History of the Language.** (3-0-3); annually. The major developments in the evolution of English from an early Germanic dialect to its present form.

**ENG 409. American English: Use and Usage.** (3-0-3); on demand. A study of the dialects and the effectiveness of the language of the various parts of American society.

**ENG 410. Introduction to Science Fiction.** (3-0-3); II. Representative science fiction short stories and novels, mostly by British and American authors of the twentieth century; occasional films; independent reading.

**ENG 434. Chaucer.** (3-0-3); on demand. Study of some of his major works.

**ENG 435. Shakespeare.** (3-0-3); twice a year. Study of selected histories, comedies, tragedies, and sonnets.

**ENG 436. The English Renaissance.** (3-0-3); on demand. Selected literature from 1500 to 1600, including works by Skelton, Wyatt and Surrey, Sidney, Spenser, and Shakespeare (excluding his plays).

**ENG 441. Neoclassical Writers.** (3-0-3); on demand. 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. 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. Representative selections of English literature, including works by Browning, Tennyson, Arnold, and Carlyle.

**ENG 444. Twentieth Century British Literature.** (3-0-3); on demand. Study of modern British poetry, novels, and short stories.

**ENG 466. American Poetry.** (3-0-3); on demand. 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 471. European Literature 1100-1600.** (3-0-3); on demand. Selected works from such major writers as Dante, Petrarch, Boccaccio, Machiavelli, Erasmus, Montaigne, and Rabelais.

**ENG 472. European Literature 1600-1800.** (3-0-3); on demand. Selected works from such major writers as Cervantes, Racine, Moliere, Pascal, Voltaire, Diderot, Goethe, and Schiller.

**ENG 473. European Literature 1800 to the Present.** (3-0-3); on demand. Selected works by such major writers as Chekhov, Dostoyevsky, Proust, Kafka, Mann, and Nabokov.

**ENG 499. Seminar: Major Writers.** (3-0-3); on demand. Intensive study of one or more major figures in the literature of the world.

**ENG 500. Studies in English for Teachers.** (3-0-3); I, III. The philosophy, rationale, and content of English in the American junior and senior high schools.

**ENG 501. Linguistics: Semantics.** (3-0-3); II (alternate years). Presents the problems of meaning as related to referential, distributional, and rational ways of encountering experience.

**ENG 502. Non-print Literary Materials for Teachers 7-12.** (3-0-3); on demand. Prerequisite: ENG 500 or consent of instructor. Student and faculty demonstrations of teaching the various literary genres; use of such appropriate non-print media as films, cassettes, and tapes to augment teaching



effectiveness; and development of meaningful techniques of evaluating secondary school students of literature.

ENG 505. Linguistics: Grammar. (3-0-3); I, II, III. Principles of structural, transformational, generative, and tagmemic grammar.

ENG 510. Programmed Writing and Learning. (3-0-3); on demand. Using, writing, and understanding programmed texts; instruction individualized to the student's particular area of study.

ENG 516. Basic Linguistics for Teachers. (3-0-3); on demand. Application of linguistics principles to writing, reading, and literary comprehension.

ENG 528. Literary Criticism. (3-0-3); on demand. A survey of traditional criticism from the classical period to the twentieth century; or a study of modern criticism; the New Humanists, New Critics, Neo-Aristotelians, and various linguistics structuralists.

ENG 533. English Fiction. (3-0-3); on demand. Development of the English novel from its beginnings to the twentieth century.

ENG 539. Milton. (3-0-3); on demand. Intensive reading of Milton's poetry and major prose.

ENG 544. Folk Literature. (3-0-3); I, II, III. The origin of such primitive literary forms as the proverb, tale, epic, ballad, and folk drama.

ENG 545. Seventeenth Century British Literature. (3-0-3); on demand. English literature 1600-1660; Donne, Jonson.

ENG 552. Early Dramatic Literature. (3-0-3); on demand. Representative dramas from the Greeks to the mid-nineteenth century.

ENG 553. Modern Drama. (3-0-3); on demand. Representative dramas from the advent of realism to the present.

ENG 560. Early American Authors. (3-0-3); on demand. Writings of the American colonial and federal periods.

ENG 562. Nineteenth Century American Fiction. (3-0-3); on demand. The development of American fiction from Charles Brockden Brown to Stephen Crane.

ENG 564. Twentieth Century American Fiction. (3-0-3); on demand. The development of American fiction from 1900 to the present.

ENG 570. Introduction to Film Literature. (3-0-3); I. An introduction to the study of film as literature with extensive reading in the history of film and viewing of selected film classics.

ENG 591. Technical Writing I. (3-0-3); I, II, III. Principles of analysis, process, and definition; progress, recommendation, and research reports; proposals and memoranda; visual aids; transitions, mechanics of clear and precise statement.

ENG 592. Technical Writing II. (3-0-3); I, II, III. Continuation of ENG 591.

ENG 593. Fiction and Poetry Writing I. (3-0-3); II, III. Practicum in sustained writing. Evaluation and marketing of manuscripts.

ENG 594. Fiction and Poetry Writing II. (3-0-3); II, III. Continuation of ENG 593.

ENG 595. A Linguistics Approach to Writing. (3-0-3); I. Language patterns, inherent symbols and their meanings, and tagmemics.

ENG 598. Logical Reasoning for Aptitude Examination. (3-0-3); on demand. Application of the language of logical reasoning and practical judgement in qualitative and quantitative aptitude examinations such as LAST, GRE, NTE, GBAT, GMAT, CTBS, ACT, and SAT. *May not be used as an elective in any English program.*

FINANCE

FIN 139. Cooperative Study I. (1 to 8 hrs.); on demand. Work experience in a field relevant to the student's career objective and academic preparation. Experience is usually analogous to a freshman level course.

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.

FIN 239. Cooperative Study II. (1 to 8 hrs.); on demand. Work experience with an extension of exposure gained in FIN 139 or of a nature similar to a sophomore status course.

FIN 252. Mathematics of Finance. (3-0-3); I, II. Interest annuities, amortization, sinking funds, bond valuation, life insurance.

FIN 264. Personal Finance. (3-0-3); II. Planning personal finance, financial statements, budgeting, managing financial and non-financial assets, taxes, insurance, and estate planning.

FIN 325. Bank Management. (3-0-3); I. Prerequisite: consent of instructor. Organization and operation of the commercial bank.

FIN 339. Cooperative Study 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.

FIN 342. Money and Banking. (3-0-3); I. Prerequisite: ECON 201. Origin, development, and functions of money; banking functions and processes; the Federal Reserve System and monetary policy.

FIN 343. Investments. (3-0-3); II. Prerequisite: ECON 201. Investment risks, security analysis, investment policy-making, both individual and institutional.

FIN 360. Business Finance. (3-0-3); I, II, III. Prerequisites: ACCT 282, ECON 202. Financial management, management of cash, receivables, inventories, plant assets, short-term debt, long-term debt, intermediate-term debt, owner's equity.

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.

FIN 407. Principles of Insurance. (3-0-3); I. Prerequisite: ECON 202, junior standing, or permission of instructor. A general course in risk and insurance, including basic insurance concepts, legal principles, property and liability insurance, life and health insurance, and the insurance industry organization and operations.

FIN 439. Cooperative Study 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.

FIN 476. Special Problems in Finance. (1 to 3 hrs.); I, II, III. Prerequisite: Open to majors and minors in finance with prior consent of the instructor. 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 539. Cooperative Study V. (1 to 8 hrs.); on demand. Work experience providing advanced specialized exposure in a career-related position. Available to upper division undergraduate and graduate students.

FIN 560. Financial Markets. (3-0-3); I, II. Prerequisite: ECON 201 and 202. Institutional and business factors that influence demand and supply of funds, effect on price movements, detailed analysis of money and capital markets.

FIN 599. 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.

FINE ARTS

FNA 160. Appreciation of the Fine Arts. (3-0-3); I, II, III. To make students aware of the relationship of the common core which permeates all the arts.

FNA 187-588. 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

FRN 101. Beginning French I. (3-2-3); I, II. Drill on hearing and speaking; reading of simple texts; basic points of grammar.

FRN 102. Beginning French II. (3-2-3); I, II. Review of grammar; stress on active use of the language; reading, speaking, writing, and understanding.

FRN 201. Intermediate French. (3-0-3); I. Exercises in writing compositions based on readings. Laboratory work designed to complete mastery of basic language patterns and active vocabulary.

FRN 202. Conversation and Composition. (3-0-3); II. Intensive training in correct writing and fluent speech. Subject matter taken from literary selections.

FRN 203. Introduction to France. (3-0-3); I. The elements which have contributed to the culture of France.

FRN 321. Literature of the Middle Ages and Renaissance. (3-0-3); I. An introduction to typical epics, romances, and bourgeois poetry, followed by study of selections from Villon, Marot, Rabelais, the Pleiade, and Montaigne.

FRN 322. Seventeenth-Century Literature. (3-0-3); II. Study of French Classicism through representative plays.

FRN 323. Eighteenth-Century Literature. (3-0-3); I. Development of rationalistic and democratic tendencies as expressed in the writings of the period leading up to the Revolution.

FRN 324. Nineteenth-Century Literature. (3-0-3); II. Examination of representative works illustrating the development of literature from Romanticism to Realism and Symbolism.

FRN 405. Linguistics and Language Teaching. (3-0-3); III. For French majors and minors. A seminar in various foreign languages requiring projects appropriate to the specialty in each.

FRN 435. Twentieth-Century Literature. (3-0-3); on demand. Selected works of recent writers: France, Romans, Gide, Proust, Giraudou, Sartre, and others.

FRN 550. Reading French I. (3-0-3); on demand. Prerequisite: permission of instructor. Intensive practice in reading of the French language, with rapid and correct idiomatic translation as the aim.

FRN 551. Reading French II. (3-0-3); on demand. Prerequisite: FRN 550 or permission of the instructor. Further study of grammar and drill in reading, with emphasis on reading in the student's own subject area.

GEOGRAPHY

GEO 100. Fundamentals of Geography. (3-0-3); I, II, III. Man's varied responses and adjustments to his natural and cultural environment; human activity within major regions of the world. Basic to further study in geography.

GEO 101. Physical Geography. (3-0-3); I, II, III. 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.

GEO 211. Economic Geography. (3-0-3); I, 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, II. Major land-use regions of the United States and Canada, their physical and cultural landscapes.

**GEO 300. World Geography.** (3-0-3); I, II, III. A general survey of the human and physical geography of the major regions of the world. Emphasis is on the interaction between man and his environment in various environmental settings.

**GEO 310. Australia.** (3-0-3); I. Resources of Australia, New Zealand, and islands of the Pacific; significance of position and political connection of these lands.

**GEO 319. Middle America.** (3-0-3); II. Mexico, the Central American Republics, and the islands of the Caribbean; emphasis upon cultural and historical traditions.

**GEO 320. South America.** (3-0-3); I. Regional analysis on national and continental basis with treatment of the physical, cultural, and economic characteristics; stress upon prospects of expansion for settlement, development of resources, and growth of industries.

**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.

**GEO 331. Europe.** (3-0-3); I, II. Geographic factors in the economic, social, and political structure of Europe; emphasis on natural regions, resource distribution, and industrial development.

**GEO 341. Appalachia.** (3-0-3); I, III. 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 man's activities in the region.

**GEO 344. Kentucky.** (3-0-3); I, II. Physiographic divisions and subdivisions; interpretations of natural features; occupations and land use; a survey of political units and consideration of traditions and potentialities.

**\*GEO 349. Cartography I.** (3-0-3); I, II. History of map-making; properties and qualities of maps; characteristics of map projections; construction of basic projections; basic techniques of mapping spatial data.

**\*GEO 350. Cartography II.** (3-0-3); II. Prerequisite: GEO 349. Selection of source material for the base and body of the map; mechanical reproduction; construction of complex projections; basic aerial photo interpretation; field mapping techniques and practice.

**\*GEO 360. Physiography of the United States.** (3-0-3); I. Prerequisite: physical geography or geology. Description and detailed analysis of the physiographic provinces. An explanation and interpretation of surface features and their evolution.

**\*GEO 366. Political Geography.** (3-0-3); II. 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.

**GEO 375. The Teaching of Social Studies.** (3-0-3); I, II. (See HIS 375.) (Does not count in major or minor.)

**GEO 383. Asia.** (3-0-3); on demand. The man-land relations characterizing this large and diverse region. An evaluation of a continent in the midst of change in terms of geographic potentials.

**\*GEO 390. Weather and Climate.** (3-0-3); I, II. 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 500. Soviet Union.** (3-0-3); on demand. Systematic and regional study, with special attention given to the resource base. Appraisal of the agricultural and industrial strengths of the country; consideration of the effects of governmental policy and economic growth.

**GEO 502. Geographic Factors and Concepts.** (3-0-3); on demand. A general survey of the various aspects of the field of geography. Designed for beginning teachers and students not having a background for work in geography.

**\*GEO 505. Conservation of Natural Resources.** (3-0-3); I, II, III. Natural resources basic to human welfare; emphasis on lands, water, minerals, forests, and wildlife, including their relationships.

**\*GEO 510. Urban Geography.** (3-0-3); II. Origin and development of cities, urban ecology, central place theory, functional classifications, and a consideration of site, situation, and land utilization of selected cities.

**\*GEO 540. World Manufacturing.** (3-0-3); on demand. Interpretive analysis of the distribution and function of selected manufacturing industries; location theory, trends in regional industrial changes.

**GEO 550. Geography for Teachers.** (3-0-3); on demand. A study of the basic concepts, materials, and techniques for the teaching of geography.

**\*GEO 590. Applied Meteorology.** (3-0-3); on demand. Prerequisite: GEO 390. Weather elements, emphasis on meteorological skills; application to industrial, aviation, maritime and military needs.

## GEOSCIENCE

**GEO 100. Physical Geology.** (0-2-1); I, II. An introductory study of common minerals, rock classes, and topographic and geologic maps.

**GEO 107. Introduction to Geoscience.** (3-0-3); I, II, III. A general survey of earth; its astrophysical setting, its fluid portion, its solid part, its active processes, its history, the role of geology in preserving earth's resources. See SCI 107.

**GEO 199. Selected Topics.** (1 to 6 hrs.); on demand.

**GEO 200. Coal Mining Geology.** (3-0-3); I. Prerequisite: GEO 100. A study of coal and coal-bearing rocks together with the application of geologic techniques of surface and underground mining.

**GEO 201. Historical Geology.** (2-2-3); II.\* Prerequisites: GEO 100 and 107. Physical events in the earth's history; structure of sedimentary facies of each major stratigraphic subdivision; fossil record from the Precambrian period.

**GEO 240. Oceans.** (3-0-3); II.\* An elective semi-technical course providing a broad general background in the biological, chemical, physical, and geological aspects of oceans and ocean basins; various types of pollution and future economic potentials of the oceans.

**GEO 250. Minerals and Rocks.** (2-2-3); on demand.\* Principal rock-forming and economic minerals and their occurrences.

**GEO 262. Mineralogy.** (2-4-4); II in alternate years. Prerequisites: GEO 100 or CHEM 102 and 102A or 112 and 112A. Physical and chemical properties of minerals, chemical, optical, and X-ray methods of identification; systematic survey of common mineral groups.

**GEO 276. Geologic Methods.** (2-2-3); I in alternate years. Prerequisites: GEO 201. Emphasis on basic laboratory and field techniques and instruments relevant to geologic studies.

**GEO 290. Selected Topics.** (1 to 6 hrs.); on demand.

**GEO 300. Petrology.** (2-2-3); II in alternate years. Prerequisite: GEO 262. Modes of occurrence and origin in igneous and metamorphic rocks in relation to geologic processes; methods of identifying and classifying rocks.

**GEO 301. Economic Geology I (Metals).** (3-0-3); on demand.\* Prerequisites: GEO 100 and 107. Formation and occurrence of metallic ore deposits. Economic factors affecting the mining industry.

**GEO 302. Economic Geology II (Non-metals).** (3-0-3); on demand.\* Prerequisites: GEO 100 and 107. Formation and occurrence of non-metallic mineral deposits. Methods and equipment used in exploration. Sampling and evaluation of mineral properties. Uses and economic factors.

**GEO 315. Stratigraphy and Sedimentation.** (2-4-4); I in alternate years.\* Prerequisite: GEO 201 or 410. Geologic correlation of stratal units; facies analyses, systematic analysis of sedimentary rocks, and biostratigraphic studies.

**GEO 325. Structural Geology.** (2-2-3); I in alternate years.\* Prerequisites: GEO 201 and MATH 141 (or its equivalent). Mechanical properties of rocks and dynamics of rock deformation. Folds, faults, joints, cleavage, igneous structures.

**GEO 350. Geomorphology.** (2-2-3); on demand. Prerequisite: GEO 107 or GEO 100. Land surfaces; topographic form and geologic history; morphologic analysis.

**GEO 376. Environmental Geology.** (3-0-3); I. Prerequisite: GEO 100. Man's relationship to the geological environment. Geological hazards; mineral resources and the environment; urban geology.

**GEO 379. Invertebrate Paleontology.** (2-4-4); I in alternate years.\* Prerequisites: GEO 201, BIOL 208 or GEO 410. Invertebrate animals, their morphology, classification, paleoecology, phylogeny, and stratigraphic succession; faunal assemblages and research techniques.

**GEO 399. Selected Topics** (1 to 6 hrs.); on demand.

**GEO 410. Geological History of Plants and Animals.** (2-2-3); I. Prerequisites: BIOL 208 and 215 or GEO 201. The evolutionary history of plants and animals throughout geological time.

**GEO 413. Micropaleontology.** (2-2-3); on demand.\* Prerequisite: GEO 379. Collection, preparation, microscopic investigation, classification, paleoecology, and stratigraphic succession of microfossils.

**GEO 415. History of Geology.** (2-0-2); on demand. Development of geological thought; important men and their contributions to our knowledge of the earth.

**GEO 420. Optical Mineralogy.** (2-2-3); on demand. Prerequisite: GEO 262. Behavior of light in isotropic and anisotropic minerals. Identification of minerals with polarizing microscope.

**GEO 460. Geological Oceanography.** (3-0-3); II in alternate years.\* Prerequisites: GEO 315 and 325 or consent of instructor. Marine erosion, transportation and deposition, continental shelves, slopes, and ocean basins; marine environments. Shoreline processes and analyses.

**GEO 499. Selected Topics** (1 to 6 hrs.); on demand.

\*Field trip required or recommended.

## GERMAN

**GER 101. Beginning German I.** (3-2-3); I, II. Fundamentals of structure: basic vocabulary, reading, writing, pronunciation and some conversation.

**GER 102. Beginning German II.** (3-2-3); I, II. A continuation of GER 101.

**GER 201. Intermediate German I.** (3-0-3); I. A review of grammar and pronunciation, with emphasis on reading of contemporary writings.

**GER 202. Intermediate German II.** (3-0-3); II. Prerequisite: GER 201. A continuation of GER 201.

**GER 203. Expository German.** (3-0-3); I. 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); II. Further development of language skills. Extensive experience in the language laboratory is required.

**GER 302. Composition and Conversation.** (3-0-3); on demand. A continuation of GER 301 with greater emphasis on stylistics.



GER 303. Advanced Expository German. (3-0-2); on demand. Extensive reading in the contributions of the German-speaking world to the fine arts, business, and special and exact sciences.

GER 310. The German Novelle. (3-0-3); on demand. The Novelle from Goethe to the present.

GER 311. German Literature to 1880. (3-0-3); on demand. A general of German literature from old High German to Hebbel and Ludwig.

GER 312. German Literature since 1880. (3-0-3); on demand. A survey of German literature from Hauptmann to the present.

GER 320. German Literature from 1750 to 1800. (3-0-3); on demand. A survey of the literature of Germany in the latter half of the eighteenth century.

GER 330. The German Lyric. (3-0-3); on demand. An intensive study of German lyric poetry from 1730 to the present.

GER 405. Linguistics and Language Teaching. (3-0-3); III. For German majors and minors. Seminar for majors or minors in various foreign languages; requires projects appropriate to the specialty of each.

GER 420. German Drama of the Nineteenth Century. (3-0-3); on demand. Major representative plays and their background.

GER 440. Literature of the Twentieth Century. (3-0-3); on demand. Major modern German writers.

GER 480. Independent Study. (3-0-3); on demand. A close reading of selected texts for their literary merit. Open only to students majoring or minoring in German. May be repeated once for credit.

## GOVERNMENT

GOVT 101. International Student Orientation. (1 hr. credit); I. An informational and orientational course to familiarize the international student with the University and the community.

GOVT 141. Government of the United States. (3-0-3); I, II, III. The nature, organization, powers, and functions of the United States government.

GOVT 242. State and Local Government. (3-0-3); I, II, III. The nature, organization, powers, and functions of American state and local governments.

GOVT 290. Introduction to Paralegalism. (3-0-3); I. Prerequisite: GOVT 141. Introduction to the history, role, and ethical standards of the paralegal, with exposure to the various fields of law encountered in the program.

GOVT 300. Municipal Government. (3-0-3). The nature, organization, powers, and functions of American municipal governments.

GOVT 305. Introduction to Political Behavior. (3-0-3). Prerequisite: GOVT 141 or consent of the instructor. A study of political personality and attitudes, public opinion, voting behavior, political socialization, and culture as it relates to the overall understanding of the political process.

GOVT 310. Current World Problems. (3-0-3). Emphasis on United States domestic and international problems since World War II.

GOVT 315. Street Law. (3-0-3). Study of practical criminal and civil law which every citizen should know.

GOVT 330. Parliamentary Democracies. (3-0-3); I. Constitutional development, political organization, legislatures, administration, courts of the governments of the United Kingdom, France, and Germany.

GOVT 334. Soviet Union and Eastern European Governments. (3-0-3); I. Soviet political system; its contemporary ideological base, governing structures, and political processes; analysis of other governments in Eastern Europe.

GOVT 335. The Game of Politics. (3-0-3). A practical approach to the understanding of American government.

GOVT 340. Public Opinion and Propaganda. (3-0-3); II. The nature, formation, and role of public opinion, techniques, strategies, and effects of propaganda.

GOVT 343. American Political Parties. (3-0-3); I. Nature and role of parties and interest groups; party structure and development; functions of primaries; nomination system and campaign methods; public opinion and policy making.

GOVT 344. Kentucky Government. (3-0-3); I. The nature, organization, powers, and functions of Kentucky state government.

GOVT 348. The Legislative Process. (3-0-3); II. Prerequisite: GOVT 141 or consent of the instructor. Legislative behavior in the context of the political system; procedures and influences in the formation of public policy.

GOVT 350. Appalachian Politics. (3-0-3). A study of the politics and political institutions of the Appalachian region.

GOVT 352. Survey in Political Theory. (3-0-3); I. Early political ideas of Greeks, Romans, and Medieval Church; evolution of states and acquisition of sovereignty; contract theory; rise of liberalism, totalitarianism, and Marxist Socialism.

GOVT 360. United Nations and World Organizations. (3-0-3); II. Evolution of international organizations, from League of Nations to the United Nations; problems and issues of present world organization.

GOVT 366. Political Geography. (3-0-3); II. (See GEO 366.)

GOVT 370. Pressure Groups and Politics. (3-0-3); Prerequisite: GOVT 141 or consent of the instructor. Theory of interest groups; the role of interest groups in the political process; group ideology; techniques of political propaganda.

GOVT 375. The Teaching of Social Studies. (3-0-3); I. (See HIS 375.) (Does not count in the major or minor.)

GOVT 380. American Courts and Civil Rights. (3-0-3); I, II. Prerequisite: GOVT 141 or consent of the instructor. A study of the American court systems, jurisdiction, terminology, and an enumeration of man's rights and responsibilities in a democratic society.

GOVT 390. Legal Research and Writing. (3-0-3); II. Prerequisite: GOVT 290. This course provides an in-depth knowledge of the law library and research methods; includes writing legal memoranda and briefs for both trial and appellate practice.

GOVT 435. Modern Asian Governments. (3-0-3). Background, development, ideologies, and structure of Asian governments, including Japan, China, India.

GOVT 444. The American Constitution. (3-0-3). Prerequisite: GOVT 141, 242, or consent of instructor. Sources of American heritage in the evolution of constitutionalism; interpretation of principles and precedents in such fields as civil rights, federal-state relationships.

GOVT 450. International Relations. (3-0-3). Prerequisites: GOVT 141 or consent of the instructor. Survey of interstate relationships in theory and practice; concepts of power and its application; machinery of foreign policy making and enforcement; world politics and law; the world community.

GOVT 470. American Chief Executives. (3-0-3); on demand. Prerequisite: GOVT 141, 242, or consent of instructor. Analysis of executive position and leadership in federal, state, and local governments.

GOVT 476. Special Problems. (1 to 3 hrs.); on demand. Prerequisite: consent of the instructor. Original research project or readings in a particular subject area. Open only to government majors and minors.

GOVT 490. Trial Practice and Preparation. (3-0-3); I. Prerequisite: GOVT 390. This course includes interviewing and investigating skills, rules of procedure and evidence, and discovery techniques for trial preparation.

GOVT 495. Legal Internship. (1 to 6 hrs.); on demand. Prerequisite: GOVT 490. Actual work experience in a law office; experience in law office organization, interviewing clients, research and preparing briefs, assisting in trial preparation, and observing first-hand court procedure.

GOVT 496. Frankfort Legislative Intern Program. (15 hrs.) Five months work-study experience with the Kentucky General Assembly. Candidate selection required.

GOVT 505. Politics of Ecology. (3-0-3); II. Prerequisite: GOVT 141 or consent of the instructor. A political analysis of the problems of the environmental crises.

GOVT 510. Law of Corrections. (3-0-3); on demand. See Corrections 510.

GOVT 540. Public Administration. (3-0-3); I. Prerequisite: GOVT 141 or consent of the instructor. Historical evolution; theory of organization and administration; personnel, financial, and legal aspects of public administration.

GOVT 541. Public Finance. (3-0-3); I. Prerequisites: ECON 201 and 202. See Economics 541.

GOVT 546. Public Personnel Administration. (3-0-3). Prerequisite: GOVT 540 or consent of the instructor. Manpower utilization, concepts, principles, and practice of the merit system; leadership; decision-making process; motivation of public employees.

GOVT 555. Internship in Public Affairs. (1 to 6 hrs.); on demand. Prerequisite: consent of the instructor. On-the-job work study experience in government.

## GRAPHICS COMMUNICATIONS TECHNOLOGY

GCT 102. Graphic Arts I. (1-4-3); 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 bookcrafts.

GCT 103. Technical Drawing I. (1-4-3); I, II. A study of the principles and techniques of communicating ideas by means of graphic representation.

GCT 202. Graphic Arts II. (1-4-3); II. Prerequisite: GCT 102 or consent of instructor. An advanced course for students to apply the principles and competencies developed in the initial course. Units include automatic press operation (letter-press and offset), bindery operations, and darkroom procedures for photography and photographic screen process applications to the graphic arts industry.

GCT 203. Technical Drawing II. (1-4-3); I, II. Prerequisite: GCT 103. Breadth and depth are derived from the background of principles and techniques developed previously in technical drawing.

GCT 204. Descriptive Geometry. (2-2-3); I. Prerequisite: GCT 203. The historical and theoretical background for technical drawing and the study of special problems.

GCT 301. Tool Layout and Design. (2-2-3); II. The layout and design of machine tool jigs and fixtures; simple banking, forming and piercing dies, and plastics process dies.

GCT 302. Offset Lithography. (1-4-3); II. Prerequisite: GCT 202. 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.

GCT 303. Technical Illustration. (2-2-3); II. Prerequisite: GCT 203. A study of the principles, practices and techniques used in industry to describe complex mechanisms.

GCT 305. Housing. (2-2-3); I. Prerequisite: GCT 103 or consent of instructor. Instruction centers around the problems, practices, and techniques of the housing industry, including historical development.

**GCT 322. Photography.** (1-2-2); I. 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).

**GCT 350. Machine Composition I.** (1-4-3); on demand. Prerequisite: GCT 202 or consent of instructor. Designed to introduce students to the history and development of linecasting machines while acquainting them with keyboard operation, mechanical processes, slug casting, mechanical adjustments and maintenance.

**GCT 351. Graphic Duplication.** (1-2-2); II. Prerequisite: for business majors, consent of the instructor; for industrial education majors, GCT 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.

**GCT 403. Machine Drawing and Design.** (2-2-3); II. Prerequisite: GCT 301. 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.

**GCT 404. Architectural Drawing.** (2-2-3); II. Prerequisite: GCT 305. A technical course covering the fundamental principles, techniques, and practices of residential and selected commercial architecture.

**GCT 450. Machine Composition II.** (1-4-3); on demand. Prerequisite: GCT 350. A follow-up course to GCT 350—Machine Composition I, concentrating on the intricate facets of typesetting as performed by experienced operators in commercial shops or newspapers to simulate an actual industrial experience in the classroom.

## HEALTH

**HLTH 150. Personal Health.** (2-0-2); I, II, III. (Course not accepted as credit toward a major or minor.) Principles and practices of healthful living: personal, family, and community as aspects of health.

**HLTH 160. Introduction to Health.** (2-0-2); I, II. Foundations of health, physical health, mental health, social health, environmental health.

**HLTH 200. Introduction to Driver Education.** (3-1-3); I, II, III. Emphasis upon effect of attitudes, emotions, and motivations on behavior. Review of research on accident causation and other relevant research. (Laboratory experiences an integral part of this course.)

**HLTH 201. Administration of Driver and Traffic Education.** (3-0-3); I, II. Prerequisites: HLTH 200 and 307. Organizational and administrative aspects of driver and traffic education as they relate to total school and other specialized programs. Historical and philosophical aspects, evaluation, related professional organizations, and occupational opportunities.

**HLTH 202. Supervision of Safety Education.** (3-0-3); I, II. Prerequisite: HLTH 200. Course examines the responsibilities, activities, and problems of administering safety programs; school bus transportation discussed. Thorough examination of operational procedures of safety educational programs on high school, college, city, and state levels discussed.

**HLTH 203. Safety and First Aid.** (3-0-3); I, II, III. Safety education and accident prevention program in school, industry, and public service; Red Cross Standard, Advanced, and Pre-Instructor First Aid.

**HLTH 204. Instructor First Aid.** (1-0-1); I, II. Prerequisites: Current Red Cross Advanced First Aid Certificate and permission of instructor. Red Cross First Aid Instructor Training Course.

**HLTH 205. Mental Health.** (3-0-3); I, II, III. Prerequisite: PSY 154. Models of man, philosophy of life, standards of mental health, social factors in mental illness, stress and its effect, parent-child relations, and school problems.

**HLTH 300. Health in the Elementary School.** (2-1-2); I, II, III. Prerequisite: admission to teacher education program. Elementary school health program; educational theory and methods as applied to health teaching on elementary school level. (Laboratory experiences an integral part of course.)

**HLTH 303. Community Health.** (3-0-3); I, II. Principles and practices of health as applied to community; nature of community, problems of community health, community health education.

**HLTH 304. Health in the Secondary School.** (2-1-2); I, II. Prerequisite: admission to the teacher education program. Secondary school health program, educational theory and method as applied to health teaching on secondary school level. (Laboratory experiences are integral part of course.)

**HLTH 306. Methods of Teaching Driver and Traffic Education.** (3-0-3); I, II. Prerequisite: HLTH 200. Designed to give the student an understanding of specifics of classroom instruction in various subject matter fields. Selection of presentation and evaluation techniques based on recognized course objectives.

**HLTH 307. Intermediate Driver Education.** (2-2-3); I, II, III. Prerequisite: HLTH 200. Teaching student how to teach others to drive. Discussion of all levels of organization and appropriate teaching procedure. (Laboratory experiences are integral part of course.)

**HLTH 320. Elements of Nutrition.** (3-0-3); I, II, III. (Same as HEC 320.)

**HLTH 360. Family Health.** (3-0-3); I, II, III. Family and family living; nature of family, love, marriage preparation, marriage, family living.

**HLTH 400. Advanced Driver Education.** (3-0-3); I, II, III. Prerequisites: HLTH 200 and 307. Analysis of psycho-physical problems of human behavior as it relates to safety and driver education.

**HLTH 419. Emergency Medical Techniques.** (5-1-6); I, II. Prerequisite: HLTH 203. Development of skills in recognition of symptoms of illness and injuries and proper procedures of emergency care. Reliance placed heavily on

demonstration and practice as teaching method. (Laboratory experiences are integral part of course.)

**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.

**HLTH 508. Principles of General School Safety.** (3-0-3); I, II. Prerequisite: senior or graduate student. Review of principles and practices in establishing and maintaining a healthful and safe school environment.

**HLTH 518. Use and Abuse of Drugs.** (3-0-3); I, II, III. Designed to survey field of psychoactive drugs with emphasis on behavioral effects of these agents.

**HLTH 576. Special Problems in Health.** (1 to 3 hrs.); I, II. Prerequisite: upper division or graduate classification. Designed to meet special needs of individual students. Intensive study of approved specific problems from area of health, physical education, and recreation, under direction of instructor.

**HLTH 599. Workshop.** (1 to 3 hrs.); I, II, III. Workshop for specifically designated task orientation in health. May be repeated in additional subject areas. Maximum of six semester hours may be earned under this course number.

## HISTORY

**HIS 130. Man and His World.** (3-0-3); I. Man throughout history; his socioeconomic, cultural, and political contributions within his environment and his relationship with others. (Open only to elementary and special education majors.)

**HIS 131. Intro. to Civilization I.** (3-0-3); I, II, III. From early man to the end of the religious wars.

**HIS 132. Intro. to Civilization II.** (3-0-3); I, II, III. From the Age of Reason to the Atomic Age.

**HIS 140. Progress of American Democracy.** (3-0-3); II. This course traces the concept of democracy from the frontier in colonial America to the cities of modern times. (Open only to elementary and special education majors.)

**HIS 141. Intro. to Early American History.** (3-0-3); I, II, III. A survey of the basic tenets of American life from the Age of Discovery to the War Between the States.

**HIS 142. Intro. to Recent American History.** (3-0-3); I, II, III. A continuation of History 141, culminating with today's social and economic problems.

**HIS 324. The New South.** (3-0-3); II. A study of the origins of the twentieth century South.

**HIS 325. The Old South.** (3-0-3); I. The growth of southern sectionalism and the development of regional characteristics.

**HIS 326. The Civil War and Reconstruction.** (3-0-3); I. The role of the Southern states in the rebirth of the American nation.

**HIS 327. The Negro in American History.** (3-0-3); I. The origin of African slavery in America to its demise in the Civil War.

**HIS 328. The Negro Faces Freedom.** (3-0-3); II. The revolt of the American Negro in an effort to make legal freedom an actuality and to gain a position in the life of the nation.

**HIS 329. Genealogy and Family History.** (3-0-3); I. The techniques of tracing ancestors, combined with a study of the "common man," thus individualizing American history.

**HIS 330. Ancient History.** (3-0-3); I. The rise of civilization, with emphasis on the cultural contributions of the Greeks and Romans.

**HIS 331. Historical Background of the Bible.** (3-0-3); I. Consideration of the Bible as the most important single source for the study of ancient Mediterranean history and cultures and the foundation of Western Civilization.

**HIS 332. Christianity and Its World.** (3-0-3); II. A study of the relationship between Christianity and its environment from its origins to the present.

**HIS 333. Medieval Europe.** (3-0-3); II. Western man from the collapse of Rome to the Renaissance of the sixteenth century.

**HIS 334. The Renaissance and Reformation.** (3-0-3); I. A social and intellectual history of the beginning of the modern world.

**HIS 335. Revolutionary Europe, 1648-1815.** (3-0-3); II. Europe from the Age of Absolutism to the overthrow of the Napoleonic Empire.

**HIS 338. Nineteenth Century Europe.** (3-0-3); I. The political isms, nationalistic trends, and unification movements leading to World War I.

**HIS 342. The Age of Jackson.** (3-0-3); II. Analysis of national, political, and social movements of our westward trek, when America sought compromise and found Civil War.

**HIS 343. History of Appalachia.** (3-0-3); I, II, III. A study in historical perspective, of the people who have resided in and events that have taken place along the spine and slopes of the Appalachian mountains.

**HIS 344. A History of Kentucky.** (3-0-3); I, II, III. Colonial birth to the creation of the Commonwealth, with emphasis upon its constitutional and social development.

**HIS 345. The American Frontier.** (3-0-3); II. The Westward Movement in the shaping of American life and institutions.

**HIS 346. Violence in America.** (3-0-3); II. An analysis of a series of primary and secondary sources that illustrate political, economic, racial, ethnic, personal, and terrorist violence in America.

**HIS 347. The American Indian.** (3-0-3); I. The historical development of the native Americans from their entrance into this hemisphere down to the present day.

**HIS 348. Sports in History.** (3-0-3); I, II, III. Beginning with the ancient Greeks and Romans, the course moves through the Middle Ages, the



Renaissance, and Reformation to the modern world. The class stresses the development of sports in the United States.

**HIS 349. Vietnam and Watergate: Kennedy, Johnson, Nixon.** (3-0-3); II. An intensive study of the Vietnam War and the Watergate scandal in the context of domestic and foreign policy developments in America since 1945.

**HIS 350. Religion in American History.** (3-0-3); II. Religion in all facets of American history; cultural, secular, and institutional. The role of religion in the molding of our nation.

**HIS 351. England to 1660.** (3-0-3); I. The political, social, and economic institutions of England to the fall of the Puritan Commonwealth.

**HIS 352. England Since 1660.** (3-0-3); II. A history of England from the Restoration to the rise of the British Commonwealth.

**HIS 353. Russia to 1917.** (3-0-3); I. Russia from Kievan times to the overthrow of the Romanov dynasty.

**HIS 354. Russia since 1917.** (3-0-3); II. A detailed history of Soviet Russia from the revolution to the Cold War.

**HIS 363. History of Witchcraft.** (3-0-3); I, II, III. A survey of witchcraft and the occult from ancient times to the contemporary.

**HIS 366. The Middle East.** (3-0-3); I. A survey of the Moslem World beginning with the great surge of the eighth century and culminating in the present Middle Eastern situation.

**HIS 370. African History.** (3-0-3); II. The early African states, the slave trade era, the rise and fall of the Imperial Empires, and post-independence events.

**HIS 375. The Teaching of Social Studies.** (3-0-3); I. Prerequisite: open only to majors and minors in the social sciences with a minimum of 18 credit hours. This course will demonstrate methods for organizing a teaching unit, using original courses, developing critical thinking, facilitating inquiry learning, integrating the social studies, and evaluating student performance. (Does not count in a major or minor.)

**HIS 379. Latin American History.** (3-0-3); II. The Indian background, the rise and fall of the Spanish and Portuguese Empires, and the major events since independence with concentration upon the major states.

**HIS 382. War in the Modern World.** (3-0-3); I. The origins, course, and results of a century of total war and its effect upon the social, cultural, and economic life of the world.

**HIS 385. Technology and America.** (3-0-3); II. Technology in the modern world; its development as a response to the social, political, and economic forces.

**HIS 387. "Herstory": Womanhood and Civilization.** (3-0-3); I. The experiences and thoughts of women who have played outstanding roles in the social, political, and economic development of civilization.

**HIS 388. History of Corrections.** (3-0-3); I. (See CORR 388.)

**HIS 389. Honors Seminar.** (3-0-3); Prerequisite: open only to juniors and seniors in the Honors Program. An analysis and discussion of the philosophies of world history; their origins and effects.

**HIS 540. Colonial America.** (3-0-3); I. The nation from the Age of Discovery to the Revolutionary War.

**HIS 541. American Revolution and Federal Period.** (3-0-3); II. A continuation of 540 covering the period from the American Revolution to the Era of Good Feelings.

**HIS 543. The United States, 1876-1900.** (3-0-3); II. Emphasis is placed upon the rise of big business with its resultant epoch of America as a world power.

**HIS 544. Kentucky Historical Tours.** (3-0-3); I, II. Provides students with an opportunity to see, hear, and read about Kentucky's exciting historical places. (Does not count toward a master's degree in history.)

**HIS 545. The United States, 1900-1939.** (3-0-3); I. The American people from the Progressive Period through the New Deal.

**HIS 546. The United States, 1939-Present.** (3-0-3); II. America from World War to world leadership. Emphasis is placed upon the resultant social problems.

**HIS 548. United States Foreign Relations.** (3-0-3); I. A survey designed to acquaint the student with the foreign relations of the United States from its conception to our present role in the United States.

**HIS 549. American Life and Thought.** (3-0-3); II. A survey of the American intellectual heritage from Puritanism to the "mod" world.

**HIS 550. The World 1914-1939.** (3-0-3); I. A study extending from World War I to the outbreak of the Second World War with special emphasis on communism, facism, and nazism.

**HIS 552. The World, 1939 to the Present.** (3-0-3); II. A detailed study of World War II and the aftermath of a world divided.

**HIS 558. The Slavery Controversy.** (3-0-3); II. The issues growing out of differences concerning slavery within voluntary societies.

**HIS 576. American History; Directed Readings.** (1 to 3 hrs.); I, II, III. Prerequisite: open only to history majors and minors with permission of the chairman.

**HIS 577. European History; Directed Readings.** (1 to 3 hrs.); I, II, III. Prerequisite: open only to history majors and minors with permission of the chairman.

**HIS 578. Non-Western History; Directed Readings.** (1 to 3 hrs.); I, II, III. Prerequisite: open only to history majors and minors with permission of the chairman.

## HOME ECONOMICS

**HEC 101. Orientation for Home Economics Freshmen.** (1-0-1); I. The study of subject matter and career opportunities offered in the various areas of home economics. University services are explored.

**HEC 103. Interior Graphics I.** (1-4-3); I. Principles and techniques of drafting. Communication of design ideas by graphic representation with emphasis on the drawing of interior products.

**HEC 104. Interior Graphics II.** (1-4-3); II. Prerequisite: HEC 103. Continuation of previous drafting course, giving broader depth and scope to skills and knowledge in graphic representation. New techniques and shortcuts introduced. Covers a variety of paraline and perspective drawing methods.

**HEC 120. Food and People Interactions.** (3-0-3); II. Taught alternate years. Introduction to the expected effects of economic, cultural, aesthetic, and socio-psychological constraints on food and people interactions. Analysis of effects of resultant food habits on dietary intake patterns and nutritional status.

**HEC 130. Elementary Foods.** (2-3-3); I, II. Study of factors affecting nutrient content; basic preparations of food for optimum nutrition, flavor, and appearance.

**HEC 132. Introduction to Food Service.** (2-2-3); I. Survey of the types of commercial and institutional foodservice organizations and their characteristics.

**HEC 136. Introduction to Restaurant Management.** (2-2-3); II. Taught alternate years. Principles and practices of food and beverage management.

**HEC 141. Basic Clothing Construction.** (2-3-3); I, II. Relationship and manipulation of patterns and fabrics; fundamentals of clothing construction; selection, use, and care of sewing equipment.

**HEC 230. Quantity Food Purchasing/Inventory Management.** (3-0-3); II. Taught alternate years. Principles of purchasing and inventory management with respect to food and supplies for commercial and institutional foodservice units.

**HEC 231. Food and Nutrition Management.** (2-2-3); II. Prerequisite: HEC 130. Application of basic nutrition/food selection/preparation service principles in feeding individuals and groups. The study of pricing, labeling, food additives, convenience foods, product attributes, and budgets.

**HEC 232. Food Sanitation and Safety.** (3-0-3); I. Taught alternate years. Sources of food-borne illness: identification, prevention, control. Food handling practices. Federal, state, and local regulations/inspection procedures.

**HEC 235. Foodservice Equipment.** (3-0-3); I. Taught alternate years. Principles of selection, use and care of foodservice equipment.

**HEC 240. Textiles.** (3-0-3); I, II. Textiles from raw materials to finished products as related to use and care of fabrics. Simple laboratory tests on identification and behavior of textiles.

**HEC 241. Advanced Clothing Problems.** (2-3-3); I, II. Prerequisite: HEC 141 or consent of instructor. Advanced construction and simple tailoring. New and creative techniques.

**HEC 251. Household Equipment.** (3-0-3); II. Taught alternate years. Principles and practical experience acquired in selection, use, and care of equipment; development of demonstration skills of consumer products and equipment.

**HEC 252. Problems in Interior Design.** (2-2-3); II. Taught alternate years. Involves the study of practical experience in selection, arrangement, and presentation of colors, fabrics, furnishings, and cost estimates for a client. Lecture, laboratory, field trips.

**HEC 270. Materials, Techniques, and Design.** (2-2-3); II. Taught alternate years. Basic course in the characteristics, uses, and technology of wood, metals, glass, and plastics used in furniture construction. Design and construction of wood projects.

**HEC 280. Introduction to Interior Design.** (2-2-3); II. Taught alternate years. Prerequisite: HEC 103 or 104. Study of the principles and elements of design with emphasis on color and lighting. Study of furniture selection and arrangement.

**HEC 301. Principles of Nutrition.** (3-0-3); I, II. Introductory description of nutrient functions and effects of various supply/demand states on physical well-being. Nutritional health of the individual related to food and metabolism; nutrition as a factor in personal and community health problems; guides for better nutrition practices. Course will NOT be accepted as credit toward a program in general dietetics.

**HEC 303. Health of the Family.** (3-0-3); II. Taught alternate years. Problems in maintenance of individual and family health; principles and techniques applicable to home care of the sick and injured.

**HEC 310. Nutrient Supply/Demand.** (3-0-3); I. Taught alternate years. Prerequisite: CHEM 201. Nutrient functions and macrometabolic effects of various levels of nutrient supply and demand on tissue processes in people in all age groups. Nutrient requirements and assessment of nutritional intake.

**HEC 327. Child Growth and Nutrition.** (3-0-3); on demand. Selection, application, and evaluation of nutritional data concerned with infancy and child growth. Taught alternate years.

**HEC 331. Foodservice Systems Management.** (3-0-3); I. Taught alternate years. Prerequisite: HEC 330. Principles of management of foodservice systems in commercial and institutional settings with emphasis on the menu planning, ingredient control, and cost control subsystems. Development of professional skills, menu planning, ingredient specification.

**HEC 332. Field Experience in Home Economics.** (1 to 4 hrs.); I, II. Field training in home economics arranged with consent and supervision of the instructor. Student is visited on the job.

**HEC 334. Quantity Food Preparation.** (2-5-3); I, II. Prerequisite: HEC 130, HEC 231. Principles and techniques of quantity food preparation. Use of standardized recipes and institutional equipment. Must be followed by HEC 337 in next semester.

**HEC 336. Foodservice Administration.** (3-0-3); II. Taught alternate years. Prerequisites: HEC 331 and MNGT 311. Principles/practices underlying policy-making decisions for foodservice systems; executive functions with respect to personnel and facility layout/design. Development of professional skills: interviewing, training, layout/design of facilities.

**HEC 337. Food Production Management.** (1-6-3); I, II. Prerequisite: HEC 334 preceding semester. Principles of scheduling and supervision of food production.

**HEC 340. Textile Testing.** (1-3-2); on demand. Prerequisites: HEC 240, CHEM 102 and 102A. Study of textile fiber and fabric testing procedures. Individual research.

**HEC 341. Flat Pattern Design.** (1-3-2); II. Taught alternate years. Prerequisites: HEC 241 or consent of instructor. Pattern making and fitting using original designs by the students.

**HEC 343. Textiles for Interiors.** (2-2-3); I. Prerequisite: HEC 240. Selection, cost, care, standards, and evaluation of textiles used in residential and commercial interiors.

**HEC 344. Historic Costume.** (3-0-3); I. The development of costume through the ages as an expression of social, economic, and cultural life of the time, and as a contribution to current fashion.

**HEC 346. Introduction to the Apparel Industry.** (3-0-3); I. Organization and operation of the fashion world, the influence of designers, manufacturers, retailers, and mass media on apparel.

**HEC 350. Merchandise Display and Promotion I.** (2-2-3); I, II. Application of principles and practices in arranging and displaying merchandise for commercial and educational purposes; planning and executing actual window displays.

**HEC 351. Housing.** (2-2-3); I, II. Historic development of housing in the United States. Implications for housing from social and economic changes. Trends in the field of housing. Second semester course for vocational students is taught alternate years.

**HEC 355. Child Growth and Development.** (3-2-3); I. Taught alternate years. Behavioral characteristics in growth and development; positive approach to child guidance; importance of the role of parents and child care givers. Directed practicum in observation of and participation with pre-school children.

**HEC 356. The Nursery School.** (3-2-3); II. Taught alternate years. Prerequisite: HEC 355. The study of the organization and administration of pre-school programs; role of parenthood education; supervised experiences in planning and guiding children's activities in a nursery school program.

**HEC 362. Consumer Education.** (3-0-3); II. Appraisal of all segments of consumer goods and services; use of credit, legislation, and controls affecting all phases of living. Consumer's role in changing patterns of consumption and the economy. Guidelines for decision making concerning consumer goods and services in family money management.

**HEC 363. Management of Consumer Resource.** (2-0-2); on demand. Prepares guidelines for rational decision making as it relates to the family's resources, time, money, and energy.

**HEC 370. Residential Interior Design, Studio I.** (3-2-3); I. Taught alternate years. Prerequisite: HEC 280. Planning a residential interior from problem through analysis of a family's needs for each area; the design idea from conception through finished presentation drawings. Emphasis on interior components, products available, functional and economical design.

**HEC 375. Commercial Interior Design, Studio II.** (3-2-3); II. Taught alternate years. Prerequisite: HEC 280. Planning small commercial interiors from the client's approach with a problem to the final solution. Emphasis on economical and functional design, product research, analysis of needs, lighting design, acoustics, contracts and business procedures.

**HEC 380. Clothing for Consumers.** (3-0-3); II. Quality, manufacturing techniques, art principles, care, consumer services, legislation, labeling, and social-psychological implications for the consumer of clothing. Principles of clothing selection for entire family.

**HEC 381. History of Interiors I.** (3-0-3); I. A study of the development of furnishings, interiors, and architecture from ancient history through the 18th century.

**HEC 382. History of Interiors II.** (3-0-3); II. The development of furniture styles and interiors and the influence of architecture from American colonization through the twentieth century. Miscellaneous styles are studied.

**HEC 410. Bionutrition.** (3-0-3); II. Taught alternate years. Prerequisite: BIOL 332, BIOL 301. Biochemical and biophysical aspects of variation in nutrient supply and demand within the human biosystem.

**HEC 433. Diet Therapy.** (3-3-4); II. Taught alternate years. Prerequisites: BIOL 301, HEC 120, 130, 410. Role of the therapeutic dietitian as instructor, counselor, or member of the health care team. Modification of nutritionally balanced diets for the prevention and treatment of disease. Development of professional skills: diet calculation, diet instruction and counseling, charting.

**HEC 434. School Lunch Seminar.** (1 hr.); on demand. Techniques and problems related to the school lunch program.

**HEC 438. Experimental Foods.** (2-2-3); II. Taught alternate years. Prerequisite: HEC 130 and CHEM 201. Principles of sensory evaluation of food; review of principles of food science and experimental corroboration.

**HEC 440. Interior Design Studio III.** (0-6-3); I. Taught alternate years. Prerequisite: HEC 370 and 375, senior standing. Advanced study of residential interior design. Research and design of homes in period style reproduction; design of custom contemporary home. Emphasis on sales and presentation techniques, business aspects.

**HEC 445. Interior Design Studio IV.** (0-6-3); II. Taught alternate years. Prerequisite: HEC 370 and 375, senior standing. Advanced study of commercial establishments. Emphasis on business and sales aspects of interior design.

**HEC 450. Fashion Merchandising Techniques.** (3-0-3); II. Prerequisite: HEC 346, Introduction to the Apparel Industry. A study of the unique characteristics of fashion merchandisers and fashion buyers with an emphasis on fashion merchandising techniques.

**HEC 451. Home Furnishings.** (2-2-3); I. Design principles applied to interiors; selection of furnishings and the design of floor plans.

**HEC 453. Marriage and Family Living.** (3-0-3); I. Includes the changing roles of all family members' adjustments needed in marriage; family functions through the eight stages of the family life cycle.

**HEC 454. Supervised Home Management Experiences.** (4 hrs.); I. Prerequisites: HEC 231 and 251. Supervised home management experience for one-half semester. Opportunities for assuming responsibility for making decisions and for applying principles of management in the use of time, energy, and money; social experience and group activities. Arrangements for residence must be made in advance.

**HEC 460. Merchandise Display and Promotion II.** (2-2-3); II. Taught alternate years. Prerequisite: HEC 350 or consent of instructor. Advanced theory and application of window display and interior store display with actual experience in designing, presenting, and executing displays.

**HEC 470. Methods of Teaching Vocational Home Economics.** (3-0-3); I. Prerequisites: junior and senior standing in home economics and admission to the teacher education program. Study of the history, organization, and administration of consumer and homemaking classes, gainful home economics programs, and home economics adult education programs; role of the advisor of Future Homemakers of America organizations, principles of learning and application through use of various teaching techniques and methods.

**HEC 471. Seminar.** (1-0-1); II. Identification of issues reflected in the current technical and professional literature, further understandings of the role and function of semi-professional and professional fields in home economics.

**HEC 476. Special Problems.** (1 to 3 hrs.); I, II, III. Supervised study of a problem in some phase of home economics chosen by the student on the basis of individual need or interest.

**HEC 480. Historic Textiles.** (3-0-3); II. Historic background and characteristics of textile fibers, weaves, motifs, and colors from prehistoric to modern times. Taught alternate years.

**HEC 531. Nutrition Education.** (3-0-3); on demand. The study of the application of basic principles of education applied to the teaching of nutrition. Lecture.

**HEC 541. Tailoring.** (1-4-3); I. Prerequisites: HEC 241 or consent of instructor. Fitting and tailoring techniques in the construction of a tailored garment based upon individual problems. Required construction of a suit or coat.

**HEC 542. Social-Psychological Aspects of Clothing and Textiles.** (3-0-3); II. Taught alternate years. Prerequisite: 6 hrs. in clothing and textiles. Social, psychological, and economic factors in the selection and use of clothing.

**HEC 543. Advanced Textile Testing.** (1-4-3); on demand. Prerequisite: HEC 240. Advanced study of textile fibers and fabrics with emphasis on trends in wear and end-use testing.

**HEC 544. Dyes and Finishes.** (2-2-3); on demand. Prerequisite: HEC 340. Types of dyes and finishes used currently on fibers and fabrics as they affect wear, care, and storage.

**HEC 545. Clothing Design in Draping.** (1-5-3); II. Taught alternate years. Prerequisite: HEC 241. Original garments created by draping on the dress form. Dress form will be constructed in the course. Taught alternate years.

**HEC 555. The Child and the Family.** (3-0-3); on demand. Environmental factors favoring family life and family interaction; stages of family life and the changing role of members.

**HEC 557. Interior Decoration Projects.** (1-4-3); on demand. A lecture laboratory class with emphasis on projects for the home that can be utilized in vocational, occupational, and adult classes or in the home.

**HEC 573. Curriculum Development in Home Economics.** (3-0-3); I. Development of secondary and post-secondary home economics programs; review of home economics curriculum at all grade levels for useful and gainful programs; a critical survey of resources; development of competency-based curriculum in the five areas of home economics.

**HEC 590. Creative Foods.** (1-4-3); I, II. The study and preparation of gourmet foods. Emphasis on foods from different cultural backgrounds and geographical regions. Arranged laboratories.

**HEC 592. Foods for Special Occasions.** (1-4-3); II. Prerequisite: permission of instructor and/or one food preparation course. A lecture-laboratory course with emphasis on planning, preparing, and serving foods for special occasions, including special diets, meal service, special equipment, and various budget levels. Arranged laboratories.



## INDUSTRIAL EDUCATION AND TECHNOLOGY

**IET 100. World of Technology.** (3-0-3); I. 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 111. Basic Wood Technics.** (2-2-3); I, II. This is the beginning course in wood technics, consisting of theory and application with particular emphasis on individual and industrial values of wood.

**IET 160. Introduction to Power and Fluid Mechanics.** (2-2-3); I, II. 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); I, II. Prerequisite: IET 111 or consent of instructor. This is a continuation of basic wood technics. 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.** (1-2-2); 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 260. Hydraulics and Pneumatics.** (2-2-3); I. 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); I. Control mechanisms are studied along with rocket engines, various forms of jet engines, and advanced power systems.

**IET 311. Design and Construction.** (1-4-3); I. Prerequisite: IET 211. Students design, plan, construct, and finish an appropriate product requiring knowledge of advanced principles and techniques in wood technology.

**IET 317. Time and Motion Study.** (2-0-2); I, II. Process charts, analysis of methods, materials, tools, and equipment of industry for profit improvement.

**IET 319. Quality Control.** (3-0-3); I, II. Analytical and statistical inference techniques for process and manufacturing product control. Development of process capabilities and derivation of process limit graphs.

**IET 320. Supervisory Practices.** (3-0-3); I, II. Development of various direct and indirect supervisory techniques commonly used in management positions with special emphasis placed on those unique to technical shops.

**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); on demand. 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. Students will visit regional industries.

**IET 330. Industrial Design.** (1-2-2); I, II. Product design with emphasis upon modular systems, consumer relations, and manufacturing capabilities. Individual and group activities using interdisciplinary and systems design techniques.

**IET 360. Internal Combustion Engines I.** (2-2-3); on demand. Study of operating cycle and maintenance procedures on spark ignition, diesel, and wankel engines.

**IET 362. Fluid Power.** (2-2-3); on demand. Prerequisite: IET 262. To gain an in-depth knowledge of fluid systems as they are used in modern industry.

**IET 364. Career and Vocational Guidance.** (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.

**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 381. Related Science, Mathematics, and Technology in Occupations.** Offered only through written examination. (0-0-6); on demand. 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.** Offered only through technical competence examinations. (0-0-6); on demand. 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—offered only through oral examinations.** (0-0-6); on demand. 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 390. Principles of Industrial Education.** (3-0-3); I, III. The history of industrial education, types of curriculum, types of schools, and level of industrial education programs are given emphasis as are vocational guidance and competency based occupational preparation.

**IET 391. Trade and Technical Analysis Techniques.** (2-0-2); on demand. The techniques used in analyzing a trade and jobs within a trade, in discovering the teachable content and the method of using scientific analysis in the development of course outline.

**IET 392. Technical Curriculum and Media Development.** (2-2-3); I, III. Emphasis is placed on developing competency based objectives for technical subject matter and on developing a variety of instructional media appropriate for technical curricula.

**IET 393. Methods in Vocational Industrial Education.** (3-0-3); on demand. Basic principles of teaching and learning with practical applications of procedures used in industrial education programs.

**IET 394. Student Teaching in Vocational Industrial Education.** (4 to 8 hrs.); on demand. Prerequisite: IET 393, admission to teacher education program. Each student is assigned to an approved student teaching center offering comprehensive teaching experiences at the preparation-industrial education level. Directed to 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 associate degree will complete a minimum of 45 hours of supervised student teaching, 60 hours of directed observation, and 20 hours of participation. This experience carries four hours of credit.*

*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.*

**IET 395. Special Problems in Vocational Industrial Education.** (1 to 3 hrs.); I, II, III. Prerequisite: permission of the instructor prior to registration. 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.

**IET 398. Supervised Work Experience.** (1 to 9 hrs.); I, II, III. Prerequisite: 20 hours in major department and consent of the department head 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 400. Seminar in Industrial Education—Orientation and Exploration Levels.** (4-0-4); on demand. Prerequisite: four years of successful teaching experience at the industrial education preparation level. Seminar designed for individuals who have four years of successful teaching experience at the industrial education preparation level and desire dual certification to include industrial education at the orientation and exploration levels.

**IET 401. Seminar in Industrial Education—Preparation Level.** (4-0-4); on demand. Prerequisite: four years of successful teaching at the industrial education orientation and exploration levels. 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.

**IET 411. Wood Technics.** (2-2-3); I. Prerequisite: IET 111, 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 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 460. Internal Combustion Engines II.** (2-2-3); on demand. Prerequisite: IET 360. 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 472. Basic Industries Practicum.** (1-2-2); II. Prerequisite: Upper division standing in industrial education. A study of basic industry through lecture-discussion, reports, and field trips. Emphasis will be placed on contact with local industry through a minimum of seven field trips.

**IET 475. Teaching Methods in Industrial Education—Orientation and Exploration Levels.** (3-0-3); II. Co-requisite, enrolled in IET 478—Supervised Teaching Practicum. Must be admitted to teacher education program. A study of the objectives of industrial arts and related behavioral changes; industrial arts curricular patterns and trends; selection and organization of subject matter, problem selection, and the project method of teaching; instructional materials and teaching aids; testing and evaluation; and professional growth.

**IET 476. Special Problems.** (1 to 3 hrs.); I, II, III. Prerequisite: upper division standing; approval 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.

**IET 478. Supervised Teaching Practicum in Industrial Education—Orientation and Exploration Levels.** (8 hrs.); co-requisite, enrolled in IET 475—Teaching Methods in Industrial Education, and admission to the teacher education program. Each student is assigned to an approved student teacher

center offering comprehensive teaching experience in the industrial education program at the orientation and exploration levels. Supervision will be provided by University faculty competent in industrial education at the orientation and exploration levels.

**IET 496. Organization and Management of the Laboratory.** (2-0-2); on demand. **Prerequisite:** IET 393. 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 497. Seminar in Vocational Industrial Education.** (1-0-1); I. Current problems, issues, and trends in vocational education.

**IET 520. Industrial Arts for the Elementary Teacher** (3-0-3); on demand. **Prerequisite:** formal admission to the teacher education program. This course is designed as a means to develop professional and technical competencies of pre-service and in-service elementary school teachers so they may enrich and strengthen programs of instruction by using industrial arts as both method and content.

**IET 560. Foundations of Industrial Education.** (3-0-3); on demand. Study of the philosophical positions underlying the development of industrial education; leaders, their influence and contributions; contemporary educational theories affecting the current programs of industrial education.

**IET 571. Seminar for Industrial Education.** (1-0-1); I, II. Participants will develop a further understanding of the underlying concepts of industrial education by participation in one or more programs followed by informal discussion. Faculty presentation will enrich the experience by raising real problems and issues confronting industrial education.

**IET 590. Supervised Internship.** (1 to 6 hrs.); I, II. **Prerequisite:** approval prior to registration.

A. To provide work experience in an occupational area. Student works under supervision in an approved position. Advanced credit commensurate with time worked, type of work, variety of work experience, and research paper. Maximum credit allowed in the internship will be six hours.

B. A person who chooses to do the internship in administration will be assigned to work in secondary, post secondary or higher education institution or for the State Bureau of Vocational Education in an administrative capacity approved by his advisor.

In each case, conditions will be agreed upon by employer, student, and graduate advisor prior to registration.

## JOURNALISM

**JOUR 110. Introduction to Mass Communications.** (3-0-3); I, II, III. Survey of history, functions, career openings, and interrelationship of newspapers, radio, television, other media, and attendant agencies.

**JOUR 155. Broadcast Performance.** (3-4-3); I, II. (See R-TV 155.)

**JOUR 192. Technical Composition.** (3-0-3); I, II, III. (See ENG 192.)

**JOUR 201. News Writing and Reporting.** (3-0-3); I, II, III. Gathering news from sources on and off campus; organizing and writing basic types of news items, some for campus newspaper.

**JOUR 204. Copyreading and Editing.** (3-0-3); I, III. Copy correcting, both on typed news copy and on video display terminals (VDTs); proofreading, headline writing, news selection, page layout.

**JOUR 240. Writing for Broadcast.** (3-0-3); I, II. (See R-TV 240.)

**JOUR 285. Introduction to Photojournalism.** (2-2-3); I, II, III. Lecture and laboratory, introduction to camera use, darkroom procedure, photo layout and practices in reporting news pictorially. For journalism majors and minors only. Camera rental fee for students without suitable camera. (Lab fee will be assessed each student.)

**JOUR 301. Advanced News Writing and Reporting.** (3-0-3); II, III. **Prerequisite:** JOUR 201. Advanced reporting including covering courts, police, governmental agencies. Interviewing skills, legal aspects of the press, and theories of social responsibility.

**JOUR 304. Newspaper Production.** (3-0-3); II, III. Development of modern printing methods from hand-set type to computerized photocomposition. Experience in electronic typesetting of offset paste-ups.

**JOUR 305. Newspaper Typography and Design.** (3-0-3); I. **Prerequisite:** JOUR 204. Elements of newspaper design; emphasis on typography and photo display.

**JOUR 310. History of Journalism.** (3-0-3); I. Origins and development of American journalism as a profession, mainly through newspapers and their roles in history.

**JOUR 344. Broadcast News and Public Affairs.** (3-0-3); I. **Prerequisite:** 9 hours of undergraduate radio-TV or consent of faculty. (See R-TV 344.)

**JOUR 357. Sports Casting.** (2-2-3); I. Basic philosophy and ethical consideration in developing sports reporting style in oral or written presentation. Application of principles in play-by-play description of seasonal sports. (Cross referenced as R-TV 357.)

**JOUR 358. Sports Writing.** (3-0-3); I, II. Philosophy and techniques in writing sports and sports analysis or commentary for print media. (Cross referenced as R-TV 358.)

**JOUR 364. Feature Writing.** (3-0-3); I, II. Researching, organizing, writing and marketing of non-fiction articles.

**JOUR 382. Principles of Public Relations.** (3-0-3); I. Purposes, methods, and responsibilities in the profession of public relations.

**JOUR 383. Principles of Advertising.** (3-0-3); II. Advertising principles and practices.

**JOUR 386. Photo Essay and Editing.** (3-0-3); I. Photographic composition and selection of pictures for various publications.

**JOUR 387. Advanced Photojournalism.** (3-0-3); II. **Prerequisite:** JOUR 285. In-depth study of photojournalism equipment, techniques, and style, including color photography. For journalism majors and minors only. Camera rental fee for students without suitable camera.

**JOUR 399. Public Relations Workshop.** (3-0-3); III. A hands-on workshop in preparing print-media public relations materials.

**JOUR 464. Magazine Editing and Design.** (3-0-3); II. Editing and the graphic design of magazines.

**JOUR 465. Editorial Writing.** (3-0-3); I. Purposes and methods of editorial writing, including ethics and values.

**JOUR 482. Public Relations Practices.** (3-0-3); II. **Prerequisite:** JOUR 382. Specific practices in carrying out campaigns in public relations.

**JOUR 483. Advertising Design.** (3-0-3); I. Study and application of methods of designing and producing advertisements. Primarily for print media, but includes television storyboards.

**JOUR 501. Interpretative Reporting.** (3-0-3); I. **Prerequisite:** six hours (200 or above) advanced credit in journalism, including one basic news-writing course. Writing in-depth analysis of current events using investigative research.

**JOUR 504. School Publications.** (3-0-3); III. Advisement of students in the production of school newspapers, yearbooks, and magazines; includes a complete review of journalism principles.

**JOUR 505. Law and Ethics of the Press.** (3-0-3); II. **Prerequisite:** six hours of advanced journalism credit. An examination of law as it affects publications.

**JOUR 506. Community Newspapering.** (3-0-3). Community-newspaper editors and publishers to discuss reporting, editing, advertising, circulation, and management on community newspapers.

**JOUR 558. Public Broadcasting.** (3-0-3); II. **Prerequisite:** junior standing and consent of the faculty. (See Radio-TV 558.)

**JOUR 560. Reviews and Criticism.** (3-0-3); II. Evaluating and writing critical reviews of drama, literature, art, music, and restaurants for the mass media.

**JOUR 565. Public Opinion and News Media.** (3-0-3); I. Cultural, social, and psychological nature of public opinion and its influence on and by press, television, radio, and film; the nature of propaganda in advertising.

**JOUR 583. Advertising Copy Writing.** (3-0-3); II. Writing advertising headlines and copy for print and broadcast media.

**JOUR 584. Psychology of Advertising.** (3-0-3); I. **Prerequisite:** JOUR 383. Psychological strategy used in art, words, and graphics as persuasive advertising devices.

**JOUR 591. Technical Writing I.** (3-0-3); I, II, III. (See English 591.)

**JOUR 592. Technical Writing II.** (3-0-3); I, II, III. (See English 592.)

**JOUR 599. Yearbook Workshop.** (1-0-1); III. Planning, staffing, financing, and producing a high school yearbook.

## LATIN

**LAT 101. Beginning Latin I.** (3-2-3); I, II. Drill in the basic elements of Latin grammar, word study, and reading of simple Latin selections.

**LAT 102. Beginning Latin II.** (3-2-3); I, II. A continuation of 101.

**LAT 201. Intermediate Latin I.** (3-0-3); I. Selections from Catullus, Cicero, Horace, Pliny, Martial, Livy, and Ovid.

**LAT 202. Intermediate Latin II.** (3-0-3); II. Writings of Cicero; his life and influence.

**LAT 301. Advanced Latin I.** (3-0-3); I. Poets of the Augustan Age, together with the history of the period.

**LAT 302. Advanced Latin II.** (3-0-3); II. Further study of the poetry of the Augustan Age. Selections from Vergil's Aeneid.

**LAT 401. Latin Literature I.** (3-0-3); I. Selections from the works of Horace, Vergil, Catullus, and others. Rotation of course content allows students to repeat the course for additional credit.

**LAT 402. Latin Literature II.** (3-0-3); II. Selections from Livy, Tacitus, Suetonius, Caesar, and others. Rotation of course content allows students to repeat the course for additional credit.

## LIBRARY SCIENCE AND INSTRUCTIONAL MEDIA

**LSIM 101. Use of Books, Materials, and Libraries.** (2-0-1), nine weeks only; I, II. General library organization and orientation with emphasis upon utilization of library resources, including card catalogs, indexes, encyclopedias, and handbooks. Emphasis upon organization and resources of Johnson Camden Library. Course is designed for college freshmen.

**LSIM 199. Library Media Workshop.** (1 to 3 hrs.); I, II, III. Workshop for specifically designated task orientation in library and instructional education.

**LSIM 412. Media Strategies.** (3-1-2, eight weeks); I, II. **Prerequisite:** enrollment in professional semester. Course content deals with communication, mediated teaching, choosing, producing, evaluating, and using audiovisual materials of instruction. Heavy emphasis placed upon use of major types of audiovisual equipment found in modern school.

**LSIM 521. Literature and Materials for Young People.** (3-0-3); I, III. Investigation of reading interests and needs of young people grades 7 through



12, with emphasis on criteria for selection and evaluation of materials, technical and literary qualities, and methods for utilization of such materials.

**LSIM 522. Literature and Materials for Adults.** (3-0-3); II. Investigation of adult reading interests and library's role in adult education with consideration of services offered to culturally disadvantaged and physically handicapped. Students given opportunity to read and discuss the "popular book" and practice in writing of book reviews.

**LSIM 581. Utilization of Educational Media.** (3-0-3); II, III. Overview of educational media in schools. Principles of acquisition and application of materials and equipment.

**LSIM 583. Production of Educational Media** (3-0-3); I, III. Production of types of educational media with emphasis upon classroom use of still photography, motion picture photography, audio production, microcomputers, and educational television.

**LSIM 588. Educational Gaming and Simulation.** (3-0-3); I, III. Introduction to design, production, utilization, and evaluation of educational games and simulations. Student shall produce an educational game and an educational simulation of his or her own design which will be evaluated and revised by tryout with selected target groups.

**LSIM 599. Library Media Workshop.** (1 to 6 hrs.); on demand. Subject matter and length of time vary; prerequisites determined for each. May be repeated but not to exceed a total of six hours.

## MANAGEMENT

**MNGT 139. Cooperative Study I.** (1 to 8 hrs.); on demand. Work experience in a field relevant to the student's career objectives and academic preparation. Experience is usually analogous to a freshman level course.

**MNGT 160. Introduction to Business.** (3-0-3); I, II, III. Basic survey course. Management, business organization, marketing, retailing, accounting, banking, finance, risk, and insurance.

**MNGT 199. Selected Workshop Topics.** (1 to 4 hrs.); on demand. Workshops in 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 239. Cooperative Study II.** (1 to 8 hrs.); on demand. Work experience with an extension of exposure gained in MNGT 139 or of a nature similar to a sophomore status course.

**MNGT 261. The Legal Environment of Business Organizations.** (3-0-3); on demand. 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 301. Principles of Management.** (3-0-3); I, II, III. Prerequisites: CCT 282 and ECON 202. History of management, the management process, the principles of management and their 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 Management.** (3-0-3); I, II, III. Prerequisite: MNGT 01, MATH 160, and MATH 354. Organization and operation of production management within the on-going service and product organization are described and analyzed. Descriptive practices and techniques, including work measurement, facilities location, and layout are used in analysis and problem solution.

**MNGT 310. Small Business Organization.** (3-0-3); I. 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. Personnel Management.** (3-0-3); I, II. 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 Study 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.

**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 399. Selected Workshop Topics.** (1 to 4 hrs.); on demand. Workshops in 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 411. Labor Relations.** (3-0-3); I, II. 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 439. Cooperative Study 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.

**MNGT 463. Law and Ethics in Business.** (3-0-3); on demand. Prerequisites: MNGT 261 and MNGT 362. The social responsibility of business and individuals in commerce. Value systems, externally or self-imposed, their development and operation.

**MNGT 472. Business Policies and Problems.** (3-0-3); I, II, III. Prerequisites: MNGT 301, MKT 304, or consent of instructor. Specific problems involved in the forming of consistent business policies and maintaining of an efficient organization. Actual cases used for discussions and preparation of reports for executive decision making.

**MNGT 476. Special Problems in Management.** (1 to 3 hrs); I, II, III. Prerequisites: senior standing and prior consent of head of department. 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); I, II, III. Prerequisites: junior or senior standing and 12 hours in major area, with 2.5 GPA in major area. 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.

**MNGT 506. Operations Analysis.** (3-0-3); on demand. Prerequisite: MNGT 306, MATH 160 and 354, or consent of instructor. Production and operations management are analyzed. Concepts and techniques used in the design, operation, and control of productive systems are studied.

**MNGT 539. Cooperative Study V.** (1 to 8 hrs.); on demand. Work experience providing advanced specialized exposure in a career-related position. Available to upper division undergraduate and graduate students.

**MNGT 556. Small Business Institute Field Project.** (1-4-3); I, II. Prerequisite: senior undergraduate or graduate standing and permission of instructor. Student serves as a member of a consulting team to a small business. Responsibility is to analyze the business operation and make recommendations for improving of identified problem areas.

**MNGT 565. Organizational Behavior.** (3-0-3); I. Prerequisite: senior standing or consent of instructor. A study of human and interpersonal behavior to understand, evaluate, and appraise business and social situations. Emphasis on skill and the ability to work with peoples, groups, and institutions.

**MNGT 599. 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.

## MANUFACTURING TECHNOLOGY

**MFT 106. Thermoplastic Processing.** (2-2-3); I. Prerequisite: GCT 103. Introduction is made to the materials and techniques employed in the processing of thermoplastics.

**MFT 107. Thermosetting Plastics Processing.** (2-2-3); II. Prerequisite: GCT 103. Study is made as to the various ways in which thermosetting plastic compounds are processed.

**MFT 186. Manufacturing and Fabrication.** (2-2-3); I, II. Ferrous and nonferrous metals, basic metallurgy and heat treating, sheet metal, metal spinning and electroplating, basic welding, casting and forging.

**MFT 286. Machine Tool Processes.** (2-2-3); II. Prerequisite: MFT 186 or consent of the instructor. Various metal forming and machining experiences; emphasis on exact tolerances and precise dimensions. Lathe, mill, shaper, and grinder experiences.

**MFT 306. Mold Design and Construction.** (2-2-3); II. Prerequisite: consent of the instructor. (Recommended courses MFT 106, 107, 111, and 286.) Study and experiences evolve around the design of products in relationship to the physical characteristics of plastics, molding techniques, and mold construction methods.

**MFT 386. NC-CNC Manufacturing Technology.** (2-2-3); I. Prerequisite: MFT 286 or consent of instructor. Designed to provide advance tooling theory and numerical controlled and computer numerical controlled machine processes. Application and selection of carbide tooling emphasized in production applications.

**MFT 486. Patternmaking and Foundry.** (1-2-2); II. Casting of hot metals with activities in pattern development, sand testing, and mold design.

**MFT 488. Flexible Manufacturing Engineering Technology.** (1-4-3); II. Prerequisite: MFT 386. Advanced tools and machining theory; use of carbides, with emphasis on production machining. Turret and progressive tooling design.

**MFT 588. Machine Shop.** (1-4-3); on demand. Prerequisite: MFT 386. Advanced tool and machining theory, with emphasis on production machining, and progressive tooling design for numerical control applications.

## MARINE SCIENCE

The following courses, which are taught only at Gulf Coast Research Laboratory during the summer, are suitable for elective courses in major and minor programs of study in the sciences. The Laboratory furnishes the staff for courses and research. Applications for the courses and additional information are available from the on-campus coordinator in the Department of Biological and Environmental Sciences. Tuition is paid to Morehead State University at the Mississippi resident rate.

**MSCI 571. Special Problems in Marine Science (Marine Science 400).** (1 to 6 sem. hrs. as determined by the problem director); III. Prerequisites: to be set

by problem director. Special problems are research oriented and grades are based on reports submitted by students.

**MSCI 572. Special Topics in Marine Science (Marine Science 405).** (1 to 6 sem. hrs. as determined by topic advisor); III. Prerequisites: to be set by topics advisor. Provides an opportunity for students to obtain credit for study in areas in which the laboratory offers no formal course.

## MARINE SCIENCE (BOTANY)

**MSCI 322. Marine Botany (Botany 341).** (4 hrs.); III. Prerequisites: Ten semester hours of biology, including botany. A survey, based upon local examples of the principal groups of marine algae and marine flowering plants, treating structure, reproduction, distribution, identification, and ecology.

**MSCI 323. Coastal Vegetation (Botany 331).** (3 hrs.); III. Prerequisites: Ten hours of biology, including general botany. General and specific aspects of coastal vegetation, with emphasis on local examples.

**MSCI 562. Salt Marsh Plant Ecology (Botany 441).** (4 hrs.); III. Prerequisites: General botany, plant taxonomy, plant physiology, and general ecology or consent of instructor. Emphasis on the botanical aspects of local marshes. Plant identification, composition, structure, distribution, and development of coastal marshes. Biological and physical interrelationships. Primary productivity and relation of marshes to estuaries and associated fauna.

## MARINE SCIENCE (CHEMISTRY)

**MSCI 462. Marine Chemistry (Chemistry 461).** (6 hrs.); III. Prerequisites: 16 semester hours chemistry and three to six hours of general biology and geology or consent of instructor. Chemical aspects of the oceans and the interactions of chemistry, biology, and geology in the marine environment.

## MARINE SCIENCE (EDUCATION)

**MSCI 595. Marine Science for Teachers I: Basic Techniques (Marine Science Education 431).** (3 hrs.); III. Prerequisites: biology background or consent of instructor. Introduces students, particularly in-service teachers, to the study of marine science and to promote the teaching of marine biology at all grade levels.

**MSCI 596. Marine Science for Teachers II: Advanced Studies (Marine Science Education 432).** (3 hrs.); III. Prerequisites: MSCI 595. Augments MSCI 595 to enable the students, particularly in-service teachers, to establish further studies in the marine sciences in local school systems at all grade levels.

**MSCI 597. Marine Science for Elementary Teachers (Marine Science Education 433).** (3 hrs.); III. Prerequisites: six hours in biology. Prepare teachers of elementary grade children to conduct classes using marine-related materials.

## MARINE SCIENCE (GEOLOGY)

**MSCI 331. Coastal Marine Geology (Geology 431).** (3 hrs.); III. Prerequisites: Six semester hours of geology. Onshore and nearshore geological processes, sedimentation patterns, and landform development.

## MARINE SCIENCE (MICROBIOLOGY)

**MSCI 566. Marine Microbiology (Microbiology 452).** (5 hrs.); III. Prerequisites: general microbiology and environmental microbiology or consent of instructor. Microbiology and advanced biology students are introduced to the role of microorganisms in the overall ecology of the oceans and estuaries.

## MARINE SCIENCE (OCEANOGRAPHY)

**MSCI 464. Oceanography I: Physical, Chemical, and Geological (Oceanography 251).** (5 hrs.); III. Prerequisites: college algebra and two semesters of general chemistry. Geology and physics courses helpful, but not required. This introductory course in oceanography integrates chemical, geological, and physical oceanography to provide a multidisciplinary approach to the fundamentals of oceanography.

**MSCI 465. Oceanography II: Marine Biology (Oceanography 252).** (5 hrs.); III. Prerequisites: eight semester hours of biological sciences. A general introduction to marine biology with emphasis on local fauna and flora.

## MARINE SCIENCE (ZOOLOGY)

**MSCI 341. Marine Invertebrate Zoology (Zoology 361).** (6 hrs.); III. Prerequisites: 16 semester hours of zoology, including at least an introductory course in invertebrate zoology. A concentrated study of the important free-living, marine and estuarine invertebrates of the Mississippi Sound and adjacent continental shelf of the northeastern Gulf of Mexico, with emphasis on the structure, classification, phylogenetic relationships, larval development, and functional processes.

**MSCI 342. Marine Vertebrate Zoology and Ichthyology (Zoology 362).** (6 hrs.); III. Prerequisites: 16 semester hours of zoology, including comparative anatomy or consent of instructor. A general study of the Marine Chordata, in-

cluding lower groups and the mammals and birds, with most emphasis on the fishes.

**MSCI 561. Comparative Histology of Marine Organisms (Zoology 408).** (1 to 6 hrs.); III. Prerequisites: consent of instructor. A detailed study of the histological organization of representative marine organisms. Fixation, processing, and study of tissue using light microscopy, transmission electron microscopy, and scanning electron microscopy. The relationship between structural changes and physiological changes during life cycle of organism. Histopathology with respect to tissue responses to infection and to damage by toxic agents.

**MSCI 563. Marine Fisheries Management (Zoology 442).** (4 hrs.); III. Prerequisite: consent of instructor. An overview of practical marine fishery management problems.

**MSCI 564. Behavior and Neurobiology of Marine Animals (Zoology 443).** (4 hrs.); III. Prerequisites: 16 semester hours of zoology and/or psychology or consent of the instructor. Survey of behavior, neuroanatomy, and neurophysiology of marine animals with emphasis on the neural mechanisms underlying the behavior of selected invertebrates, fishes, birds, and mammals.

**MSCI 565. Marine Ecology (Zoology 452).** (5 hrs.); III. Prerequisites: 16 hours of biological science, including general zoology, general botany, and invertebrate zoology. A consideration of the relationship of marine organisms to their environment. The effects of temperature, salinity, light, nutrient concentration, currents, food, predation, and competition on the abundance and the distribution of marine organisms are considered.

**MSCI 567. Parasites of Marine Animals (Zoology 461).** (6 hrs.); III. Prerequisites: General parasitology or consent of instructor. Parasites of marine and estuarine animals; emphasis on morphology, taxonomy, life histories, and host-parasite relationships.

**MSCI 568. Aquaculture (Zoology 464).** (6 hours); III. Prerequisites: general zoology or invertebrate and vertebrate zoology or permission of instructor. A lecture, laboratory, and field course designed to introduce aquatic and marine biology students to the history, principles, problems, and procedures relating to the culture of commercially important crustaceans, fish, and mollusks along the Gulf Coast.

**MSCI 569. Fauna and Faunistic Ecology of Tidal Marshes (Zoology 447).** (4 hrs.); III. Prerequisites: 16 semester hours of biological sciences and junior standing or consent of instructor. Survey and discussion of the taxonomy, distribution, trophic relationships, reproductive strategies, and adaptation of tidal marsh animals, with emphasis on those occurring in northern Gulf marshes.

**MSCI 570. Early Life History of Marine Fishes (Zoology 570).** (4 hrs.); III. Prerequisites: ichthyology, fisheries, biology, ecology, and/or consent of instructor. Reproductive strategies and early developmental processes of marine fishes. Temporal and spatial distribution patterns, population dynamics, and ecological interactions of fish eggs and larvae; role of early stages of fishes in fisheries oceanography, marine ecology, and systematics; methods of sampling and identifying fish eggs and larvae; data quantification and analysis; rearing experiments; techniques for studying larval fish dynamics.

**MSCI 571. Special Problems in Marine Science (Marine Science 400).** III. Prerequisites and credit to be set by problem director. Supervised undergraduate research on specific problems in all areas of marine science.

**MSCI 572. Special Topics in Marine Science (Marine Science 405).** III. Prerequisites and credits to be set by instructor. Supervised undergraduate study in subject areas not available to students through other courses.

**MSCI 576. Biological Electron Microscopy I (Zoology 530).** (3 hours); III. Prerequisite: consent of instructor. A study of tissue preparation, theory, and techniques of ultramicrotomy, and an introduction to the fundamentals of electron microscopy.

**MSCI 577. Biological Electron Microscopy II (Zoology 531).** (3 hours); III. Prerequisite: MSCI 576. Continuation of MSCI 576; includes a study of special techniques and the operation and maintenance of an electron microscope.

**MSCI 595. Basic Techniques in Marine Science for Teachers (Marine Science Education 431).** (3 hours); III. Prerequisite: biology background or consent of instructor. A course designed to introduce the students, particularly in-service teachers, to the study of marine science and to promote the teaching of marine biology at all grade levels.

**MSCI 596. Advanced Studies in Marine Science for Teachers (Marine Science Education 432).** (3 hours); III. Prerequisite: MSCI 595. Trains teachers to conduct classes in marine science at the elementary and secondary school levels.

## MARKETING

**MKT 139. Cooperative Study I.** (1 to 8 hrs.); on demand. Work experience in a field relevant to the student's career objectives and academic preparation. Experience is usually analogous to a freshman level course.

**MKT 199. 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 239. Cooperative Study II.** (1 to 8 hrs.); on demand. Work experience with an extension of exposure gained in MKT 139 or of a nature similar to a sophomore status course.



**MKT 304. Marketing.** (3-0-3); I, II. Prerequisite: ECON 201. Raw materials and products; organized exchange; analysis of market; market price; manufactured products; warehouses, cooperative societies; distribution organizations.

**MKT 305. Purchasing.** (3-0-3); II. Prerequisite: MKT 304 or consent of instructor. Purchasing functions and procedures, organization and operation of the purchasing department, inventory, quantity and quality controls, sources of supply, legal aspects of purchasing, evaluating purchase performance.

**MKT 339. Cooperative Study 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.

**MKT 350. Salesmanship.** (3-0-3); I, II. The role of selling in the American economy; salesman's job and qualifications, development and application of sales techniques; selection, training, and management of the sales force.

**MKT 351. Sales Management.** (3-0-3); I. Prerequisites: MNGT 301. The changing role of the sales manager, developing a managerial and strategic framework concerning the sales manager's job; the behavior of a manager of people, money, and things within the sales sphere of business.

**MKT 399. Selected Workshop Topics.** (1 to 4 hrs.); on demand. Workshops on various marketing subjects will be presented periodically to supplement the basic course offerings in marketing. Credit toward degree programs must be approved by the student's advisor.

**MKT 439. Cooperative Study 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.

**MKT 450. Consumer Behavior.** (3-0-3); II. Prerequisite: PSY 154 and SOC 101 recommended. Fundamental process of motivation, perception, and learning nature and influence of individual predisposition, group influence on marketing, consumer decision processes, aggregate consumer behavior.

**MKT 451. Retail Merchandising.** (3-0-3); on demand. Prerequisite: MKT 304. Establishing a store, store organization, buying, pricing and selling, planning and control, credit management, insurance tax reports and operating analysis, basic principles of retailing.

**MKT 453. Marketing Policies.** (3-0-3); II. Prerequisites: MNGT 301 and 6 hours of marketing courses. Overview of marketing functions, emphasis on formulation of policies and management of all marketing activities. Case studies are used.

**MKT 476. Special Problems in Marketing.** (1 to 3 hrs.); I, II, III. Prerequisites: senior standing and prior consent of head of department. 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 539. Cooperative Study V.** (1 to 8 hrs.); on demand. Work experience providing advanced specialized exposure in a career-related position. Available to upper division undergraduate and graduate students.

**MKT 552. Marketing Research and Analysis.** (3-0-3); I. Prerequisites: MKT 304 and MATH 354. Use of research to minimize error in decision analysis. Individual studies made by students in all areas of marketing, including advertising, packaging, and merchandising.

**MKT 555. Advertising.** (3-0-3); I. Prerequisite: MKT 304. Advertising as an indirect selling technique; emphasis on determining appeals, creating images, and developing coordinated campaigns. Actual campaign to be developed by each student; stress on ideas and concepts rather than mechanics.

**MKT 599. 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

**MATH 091. Beginning Algebra.** (3-0-3); I, II, III. Prerequisite: placement indicated by the Profile for Placement in Mathematics. 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.

**MATH 093. Intermediate Algebra.** (3-0-3); I, II, III. Prerequisite: Algebra I in secondary school or MATH 091 and placement indicated by the Profile for Placement in Mathematics. 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.

**MATH 110. Problem Solving Techniques.** (1-0-1); I, II. A basic course emphasizing problem interpretation, translation, and solution. Hand-held electronic calculators used for the solution of problems.

**MATH 123. Introduction to Statistics.** (3-0-3); I, II. Basic concepts of probability, sampling, and the algebra of events. Properties of selected discrete and continuous distributions.

**MATH 131. General Mathematics I.** (3-0-3); I, II, III. A survey course which includes topics from the different specialties in mathematics. Counting and enumeration, consumer mathematics, sequences, geometry, probability and statistics, and computers.

**MATH 132. General Mathematics II.** (3-0-3); II. A survey course in finite mathematics. Operations research, mathematics of gambling, matrices, theory of games and simulation.

**MATH 135. Mathematics for Technical Students.** (3-0-3); I, II, III. Practical mathematics as applied to technical programs. Fractions, ratio and proportion, percentage, elementary algebra, formulae, volumes, and right triangle trigonometry.

**MATH 141. Plane Trigonometry.** (3-0-3); I, II, III. Prerequisite: MATH 152 or placement indicated by the Profile for Placement in Mathematics. Trigonometric functions, trigonometric identities, inverse functions, and applications.

**MATH 152. College Algebra.** (3-0-3); I, II, III. Prerequisite: placement indicated by the Profile for Placement in Mathematics or MATH 093. Field and order axioms; equations, inequalities; relations and functions; exponentials; roots; logarithms; sequences; probability and statistics.

**MATH 160. Mathematics for Business and Economics.** (4-0-4); I, II. Prerequisite: High School Algebra II or equivalent. An introduction to finite mathematics and calculus. Systems of linear equalities and inequalities, matrix algebra, linear programming, differentiation and integration; applications.

**MATH 173. Pre-Calculus Mathematics I.** (3-0-3); I. Sets of logic; relations and functions; number systems through the reals; systems of equations.

**MATH 174. Pre-Calculus Mathematics II.** (3-0-3); I. Exponential, logarithmic, and trigonometric function; complex numbers, theory of equations; sequences and series.

**MATH 175. Analytic Geometry and Calculus I.** (4-0-4); I, II. Prerequisite: placement indicated by the Profile for Placement in Mathematics or credit in MATH 152 and MATH 141. Functions and graphs; limits; continuity; differentiation; applications of the derivative; integration; applications of the definite integral.

**MATH 231. Mathematics for the Elementary Teacher I.** (3-0-3); I, II, III. (For elementary teachers only.) Number systems, primes, and divisibility; fractions.

**MATH 232. Mathematics for the Elementary Teacher II.** (3-0-3); I, II, III. (For elementary teachers only.) Prerequisite: Mathematics 231. Algebraic sentences; real numbers; geometry of measurement; mathematical systems; introduction to calculators and computers; methods of presentation of mathematical concepts.

**MATH 252. Boolean Algebra.** (3-0-3); I. Prerequisite: MATH 152 or consent of the instructor. Study of the basic laws and operations of Boolean algebra; simplification techniques, circuit design.

**MATH 260. FORTRAN Programming.** (3-0-3); II. Prerequisites: DATA 202 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. Analytic Geometry and Calculus II.** (4-0-4); I, II. Prerequisites: MATH 175 and DATA 202. Differentiation and integration of exponential, logarithmic, and trigonometric functions; techniques of integration; numerical methods; improper integrals, infinite series; polar coordinates.

**MATH 276. Analytic Geometry and Calculus III.** (4-0-4); I, II. Prerequisite: MATH 275. Differential equations; vectors; differential calculus of functions of several variables; multiple integration; vector calculus.

**MATH 301. Elementary Linear Algebra.** (3-0-3); I. Prerequisite: MATH 175. Vector spaces; determinants; matrices; linear transformations; eigenvectors.

**MATH 304. Mathematical Logic and Set Theory.** (3-0-3); I. Propositional calculus; sets; relations; functions; Boolean algebras; cardinality.

**MATH 310. Calculus IV.** (3-0-3); II. Prerequisite: MATH 275. Algebraic and topological properties of the reals; limits and continuity; differentiation; infinite series; Riemann integration.

**MATH 312. Numerical Analysis.** (3-0-3); II. Prerequisite: MATH 275. A basic course in numerical analysis, including error analysis, series approximation, numerical integration techniques, practical applications of matrices, solution of simultaneous non-linear equations, and curve-fitting.

**MATH 350. Introduction to Higher Algebra.** (3-0-3); II. Prerequisite: MATH 304. Groups, rings, integral domains, related topics.

**\*MATH 353. Statistics.** (3-1-3); I, II, III. Prerequisite: high school Algebra II or equivalent. Introduction to basic statistics with applications.

**\*MATH 354. Business Statistics.** (3-1-3); I, II, III. Prerequisite: high school Algebra II or equivalent. Introduction to statistics with applications to business.

**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.

**1/2math 370. College Geometry I.** (3-0-3); I. Prerequisite: MATH 275. 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 373. Principals and Techniques of Mathematics.** (3-0-3); I, odd years. Prerequisite: MATH 275. For prospective teachers of secondary mathematics. Material from advanced mathematics extends topics of high school mathematics.

**MATH 481. Mathematics for Engineers and Scientists.** (3-0-3); I. Fourier series, ordinary and partial differential equations, special functions, and integral transforms. See PHYS 481.

**MATH 504. Topology.** (3-0-3); II. Prerequisites: MATH 304 and 350 or consent of instructor. Elementary set theory; topological spaces; metric spaces; compactness and connectedness; mapping of topological spaces; related topics.

**MATH 510. Real Variables.** (3-0-3); I. Prerequisite: MATH 310. Topological properties of Euclidean space; theory of differentiation and integration; sequences and series of functions, metric spaces.

**MATH 511. Functional Analysis.** (3-0-3); I. Prerequisites: MATH 301 and 510 or consent of instructor. Linear spaces; normed and Banach spaces; Hilbert spaces; applications to sequence spaces and Fourier series.

**MATH 519. Probability.** (3-0-3); I. Prerequisite: MATH 275. A first course in mathematical probability and its applications to statistical analysis.

**MATH 520. Mathematical Statistics.** (3-0-3); II. Prerequisite: MATH 519. Hypothesis testing and estimation; bivariate and multivariate distributions; order statistics; test of fit; nonparametric comparison of locations; distribution theory.

**MATH 553. Statistical Methods.** (3-0-3); I. Prerequisite: MATH 353. A second course in basic statistical methods with applications. Analysis of variance; general regression analysis; hypothesis testing; confidence intervals.

**MATH 555. Nonparametric Statistics.** (3-0-3); II. Prerequisite: MATH 353. Basic nonparametric statistical methods with applications.

**MATH 573. Projective Geometry.** (3-0-3); III. Prerequisite: MATH 372 or consent of instructor. A synthetic treatment of projective geometry leading into natural homogeneous coordinates; analytic projective geometry; conics; axiomatic projective geometry; some descendants of real projective geometry.

**MATH 575. Selected Topics.** (1 to 6 hrs.); I, II. Prerequisite: consent of instructor. Topics are offered which meet the needs of the students and which are not otherwise included in the general curriculum.

**MATH 585. Vector Analysis.** (3-0-3); I. Corequisite: MATH 276. Vector algebra; vector functions of a single variable; scalar and vector fields; line integrals; generalizations and applications.

**MATH 586. Complex Variables.** (3-0-3); II. Prerequisite: MATH 310 or 585 or permission of instructor. Algebra of complex variables, analytic functions, integrals, power series; residues and poles; conformal mappings.

**MATH 595. Mathematics Curriculum Workshop.** (1 to 6 hrs.); III. Prerequisite: consent of instructor. New curricula development in mathematics.

\*A student may receive credit toward graduation in only one—MATH 353 or 354.

## MILITARY SCIENCE

**MS 101. Introduction to Military Science.** (2-0-2); I, II, III. Introduces the Military Science Commissioning Program, its goals, purpose, and structure. Explains the organization and makeup of our present-day military forces. Study of customs and traditions of the service. Introduces basic skills in rappelling, camping, rifle marksmanship, and land navigation.

**MS 102. U.S. Army: Its Evolution and Development.** (2-0-2); II, III. Analyzes the purpose of our nation's security and defense establishments. Studies the roles of the U.S. Army, Reserves, and National Guard. Introduces the branches of the Army and their roles in the Army structure. Introduces basic skills in first aid and land navigation.

**MS 201. Leadership Principles and Techniques.** (2-0-2); I, II, III. Study of leadership and management principles related to both military and civilian applications. Introduction to counseling principles and techniques.

**MS 202. Instructional Techniques and Survey of Army Career Fields.** (2-0-2); II, III. A study of methods of instruction, physical readiness training, and drill and ceremonies. An analysis of the roles and missions of the branches of the Army as they relate to career fields. A study of advanced first aid procedures, leadership, and roles of officers and noncommissioned officers.

**MS 301. Advanced Military Science.** (2-2-3); I. Study of general military subjects relating to map reading, decision making process.

**MS 302. Advanced Military Science.** (2-2-3); II. Application of leadership and management skills; branches of the Army, military weapons, electronic communications and tactics, and military operations orders.

**MS 339. Cooperative Education in Military Leadership.** (4-0-4); III. Attendance at ROTC Advanced Summer Camp. (Six weeks in duration.)

**MS 401. Advanced Military Science.** (2-2-3); I. Development of cadet awareness of general military subjects to include briefing techniques, military justice, and military law.

**MS 402. Advanced Military Science.** (2-2-3); II. Development of cadet awareness in ethics and professionalism; and exposure to military administrative procedures, and training and logistics management.

## MINING

**MIN 101. Introduction to Mining and Reclamation.** (3-0-3); I, II. A survey of all phases of the mining industry, emphasizing the importance of safety management and including areas such as production, laws, history, geology, coal analysis and preparation, environmentalism, marketing, uses, economics, reclamation, labor relations, and transportation. Both underground and surface mining techniques are introduced.

**MIN 103. Mine Drafting.** (1-4-3); II. Prerequisite: GCT 103. The adaptation of basic drawing and drafting skills to mine layout and design. Emphasis is

placed upon accurate pictorial interpretation of measurement and layout and upon the development of mine drafting skills.

**MIN 104. Underground Mine Safety.** (3-0-3); II. A study of underground mine safety procedures as required by the Kentucky Department of Mines and Minerals and the United States Department of Labor's Mine Safety and Health Administration.

**MIN 200. Mine Surveying.** (1-4-3); I. Prerequisites: GCT 103 and CON 102. The use of the transit in underground and above-ground surveying. Techniques are used to teach the student to locate benchmarks, plot shafts, and passageways, and other details in mine surveying.

**MIN 201. Mine Equipment.** (3-0-3); I. Prerequisite: MIN 101. An analysis of various types of mining equipment, including design, function, methods of control applications, and safety of operation.

**MIN 202. Mine Design, Ventilation, and Drainage.** (3-0-3); I. Prerequisite: MIN 101. An analysis of approaches to underground mine design, ventilation, and drainage. Safety factors in design, ventilation, and drainage are used.

**MIN 210. Internship.** (1 to 8 hrs); III. The student will gain experience in actual work-place situation. The student will work in an approved organization under the direction of a supervisor for a specified period of time. Credit will be earned in the relation to the amount of time worked. The faculty will visit the student at the job site, and the student will be expected to complete a written evaluation of his or her work experience.

**MIN 301. Mine Electrical Systems.** (3-0-3); I. Prerequisites: EET 240 and MIN 101. Analysis and function of mine electrical systems, preventative maintenance, and the inspection of the electrical equipment.

**MIN 302. Coal Analysis and Preparation.** (3-0-3); II. A study of the various techniques used in analyzing and preparing coal, resulting in findings of coal characterizations such as sulfur, ash, BTU's, and moisture content. The student learns the process of cleaning, sizing, and mixing coal. Safe disposal of wastes and by-products from the preparation of coal is stressed.

**MIN 303. Mine Laws and Management.** (3-0-3); II. Prerequisite: MIN 101. A study of mining laws and their relationship to mine operations and management. An analysis is made of state and federal safety codes, their interpretations and their applications.

**MIN 304. Mine Systems Technology.** (3-0-3); II. Prerequisite: MIN 101. A basic study of the engineering and management approaches to mine systems design and operation. The course is designed to enable the mine technician to understand the planning, development, and installation of safe, effective, and efficient mine systems.

**MIN 305. Surface Mining.** (3-0-3); I. Prerequisite: MIN 101. The student learns production and safety techniques, laws, equipment studies, and management of surface mining operations.

**MIN 306. Energy Conservation Technology.** (3-0-3); II. The student will learn applied techniques in energy conservation technology for businesses, factories, homes, schools, and other structures that are heated or cooled by various energy resources. The importance of energy conservation to our society is stressed.

**MIN 401. Coal Industry Economics.** (3-0-3); I. Prerequisite: MIN 101. A study of the various economic aspects related to the coal industry, including economic history, supply and demand, industry structure, consumption and distribution patterns, social costs, and the future uses of energy resources.

## MUSIC (CONDUCTING)

**MUSC 271. Basic Conducting.** (2-0-2); I. Fundamentals of score reading and baton technique.

**MUSC 471. Choral Conducting.** (2-0-2); II. Baton technique, rehearsal procedures, choral diction, and style and interpretation of choral works.

**MUSC 472. Instrumental Conducting.** (2-0-2); II. Baton technique, rehearsal procedures, and style and interpretation of instrumental works.

**MUSC 473. Rehearsal Techniques for Jazz Ensembles.** (2-0-2); on demand. Special techniques needed in rehearsing jazz, pop, and rock ensembles.

## MUSIC (EDUCATION)

**MUSE 221. Music for the Elementary Teacher.** (2-0-2); I, II, III. Prerequisite: MUST 100, 101, or 131. Music fundamentals 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 to 3 hrs.); on demand. Two full days weekly of teaching under supervision in public schools in nearby communities.

**MUSE 336. Field Experience.** (1 to 3 hrs.); on demand. Continuation of MUSE 335.

**MUSE 375. Vocal Materials and Methods.** (2-0-2); II. Prerequisite: MUSE 325. 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. Prerequisite: credit for applied music in at least two of the following fields: strings, brasswinds, woodwinds, percussion. 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. Piano Pedagogy.** (2-1-2); II. Survey and evaluation of materials and methods for teaching class and private piano.

**MUSE 578. Teaching of Percussion.** (2-0-2); on demand. A study of the development of percussion instruments, literature, and performing techniques.

**MUSE 579. Marching Band Workshop.** (2-0-2); I. III. Techniques of preparing marching bands for performance.

**MUSE 595. 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 (CLASS APPLIED)

**MUSG 123. Class Piano I.** (0-2-1); I, II.

**MUSG 124. Class Piano II.** (0-2-1); I, II.

**MUSG 126. Traditional English and American Dance.** (0-2-1); on demand. Technique and style of American and English country dances in 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 prior playing experience with woodwind instruments. 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 prior playing experience with brasswind instruments. 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.

**MUSG 224. Class Piano IV.** (0-2-1); I, II.

**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 245. Jazz Keyboard I.** (0-2-1); I. Prerequisite: MUSG 124 or consent of the 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 583. Studio Improvisation.** (0-2-1); I, II. Prerequisite: four hours of credit in MUSG 383. May be repeated for credit.

## MUSIC (HISTORY AND LITERATURE)

**MUSH 161. Literature of Music I.** (2-0-2); I. Designed to promote intelligent listening and understanding of music of various periods and styles.

**MUSH 162. Literature of Music II.** (2-0-2); II. Continuation of MUSH 161.

**MUSH 261. Music Listening.** (3-0-3); I, II. An introduction to the various styles, periods, and media of music. A general education elective; does not count toward fulfilling music degree requirements.

**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. A survey of the history of music in Western Europe from its ancient Greek beginnings through the early eighteenth century.

**MUSH 362. History of Music II.** (3-0-3); II. The history of music in Western Europe, Russia, and America from the eighteenth century to the 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 565. Music in America.** (3-0-3); II. A survey of the history of American music from colonial times to the present.

**MUSH 581. Literature of the Piano.** (3-0-3); I. Survey of the keyboard music from the sixteenth century to the present.

**MUSH 591. 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 592. Vocal Literature.** (3-0-3); on demand. A survey of music for solo voice ensemble, sixteenth through twentieth centuries; stylistic traits, types of composition, sources, and performance practices.

## MUSIC (ENSEMBLES)

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 184, 384. Guitar Ensemble.** (0-2-1); I, II.

**MUSM 135, 335. Clarinet Choir.** (0-2-1); on demand.

**MUSM 136, 336. Woodwind Quintet.** (0-2-1); on demand.

**MUSM 161, 361. Trumpet Choir.** (0-2-1); on demand.

**MUSM 162, 362. Trombone Choir.** (0-2-1); on demand.

**MUSM 163, 363. Tuba and Euphonium Ensemble.** (0-2-1); on demand.

**MUSM 167, 367. Brass Choir.** (0-2-1); I, II. Open to brass players with the consent of the instructor.

**MUSM 168, 368. Brasswind Ensemble.** (0-2-1); on demand.

**MUSM 169, 369. Percussion Ensemble.** (0-2-1); I, II.

**MUSM 170, 370. Concert Band.** (0-2-1); II. Open to all students. Admission by audition.

**MUSM 171, 371. Symphony Band.** (0-2-1); II. Open to all students. Admission by audition.

**MUSM 172, 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 178, 378. String Ensemble.** (0-2-1); on demand.

**MUSM 179, 379. Orchestra.** (0-2-1); I, II. Open to all string students and to selected wind and percussion players as needed.

**MUSM 181, 381. Jazz Ensemble.** (0-2-1); I, II. Open to all students. Admission by audition.

**MUSM 182, 382. Jazz Vocal Ensemble.** (0-2-1); I, II. Open to all students. Admission by audition.

**MUSM 183, 383. Traditional Music Ensemble.** (0-2-1); on demand.

**MUSM 187. Piano Sight Reading I.** (0-2-1); I, II. Designed to develop sight reading competence. Required for piano majors.

**MUSM 188. Piano Sight Reading II.** (0-2-1); I, II. Continuation of MUSM 187.

**MUSM 189. Piano Ensemble.** (0-2-1); I, II. Preparation and performance of piano ensemble literature.

**MUSM 190, 390. Vocal Ensemble.** (0-2-1); on demand.

**MUSM 191, 391. University Chorus.** (0-3-1); I, II. Open to all university students interested in singing.

**MUSM 192, 392. Concert Choir.** (0-2-1); I, II. Open to all students. Admission by audition.

**MUSM 193, 393. Chamber Singers.** (0-3-1); I, II. Selected group of 16 singers. Admission by audition.

**MUSM 194, 394. Opera Workshop.** (0-2-1); on demand. Prerequisite: consent of instructor. 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 387, 388. Accompanying I, II.** (0-2-1); I, II. Two hours of studio accompanying per week.

**MUSM 487, 488. Recital Accompanying.** (0-2-1); I, II. Prerequisite: consent of piano faculty. Performance of accompaniments for junior or senior recitals. Consent of piano faculty required.

## MUSIC (PRIVATE APPLIED)

Private applied music courses may be repeated for credit. After completing at least four semesters of credit at the 200 level with a minimum grade of C, a student may enroll for courses at the 400 level. At least three semesters of upper division credit in the principal performing area are required for graduation with a major or area of concentration in music.

**MUSP 200, 400. Performance Class.**

**MUSP 201, 401, 501. Private Flute.**

**MUSP 202, 402, 502. Private Oboe.**

**MUSP 203, 403, 503. Private Bassoon.**

**MUSP 204, 404, 504. Private Clarinet.**

**MUSP 205, 405, 505. Private Saxophone.**

**MUSP 206, 406, 506. Private Horn.**

**MUSP 207, 407, 507. Private Trumpet.**

**MUSP 208, 408, 508. Private Euphonium.**

**MUSP 209, 409, 509. Private Trombone.**

**MUSP 210, 410, 510. Private Tuba.**

**MUSP 216, 416, 516. Private Harp.**

**MUSP 219, 419, 519. Private Percussion.**

**MUSP 227, 427, 527. Private Violin.**

**MUSP 228, 428, 528. Private Viola.**

**MUSP 229, 429, 529. Private Cello.**

**MUSP 230, 430, 530. Private Double Bass.**



MUSP 235, 435, 535. Private Classical Guitar.  
 MUSP 236, 436, 536. Private Guitar.  
 MUSP 237, 437, 537. Private Electric Bass.  
 MUSP 240, 440, 540. Private Voice.  
 MUSP 241, 441, 541. Private Harpsichord.  
 MUSP 242, 442, 542. Private Organ.  
 MUSP 243, 443, 543. Private Piano.  
 MUSP 262, 462, 562. Private Composition.  
 MUSP 263, 463, 563. Private Conducting. With the consent of the instructor.

MUSP 360. Junior Recital. (2-0-2); I, II, III. Prerequisite: approval of the music faculty. A solo public recital of at least 30 minutes.

MUSP 450. Senior Recital. (2-0-2); I, II, III. Prerequisite: approval of the music faculty. A solo public recital of approximately 30 minutes duration.

MUSP 460. Senior Recital. (3-0-3); I, II, III. Prerequisite: approval of the music faculty. A solo public recital of approximately 60 minutes duration.

## MUSIC (THEORY AND COMPOSITION)

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 100. Rudiments of Music. (1-2-2); I, II, III. Fundamentals of music notation and basic elements of music theory. Recorder playing, autoharp accompaniment, and singing. Prerequisite: for MUSE 221.

MUST 101. Introduction to Music Theory. (1-2-2); I, II. An introduction to the basic elements of music theory.

MUST 102. Introduction to Music Reading. (1-2-2); I, II. An introduction to the concepts and applications of reading music, vocally and instrumentally.

MUST 131. Music Theory I. (2-2-3); I, II. Prerequisite: MUST 101 or demonstration of equivalent competencies on the Music Department Entrance Examination. An extensive study of the basic elements of music (calligraphy, rhythm, meter, pitch, materials), emphasizing monodic, two and three-voice textures; timbral qualities of the instruments; basic diatonic harmony.

MUST 132. Music Theory II. (2-2-3); I, II. Prerequisite: MUST 131 or demonstration of equivalent competency on the Music Department Entrance Examination. A continuation of Music Theory I, with emphasis on three and four-voice textures, figured bass, secondary dominants, binary and ternary forms, transposition and scoring for small ensembles, and tonality changes. Supportive ear training to accompany these areas where applicable.

MUST 133. Music Reading I. (0-2-1); I, II. Prerequisite: MUST 102 or determination of equivalent competency by Music Department Entrance Examination. An ensemble approach to the development of basic skills of tonal and rhythmic reading through supervised vocal and instrumental reading experiences.

MUST 135. Music Reading II. (1-2-2). Prerequisite: MUST 133. Continuation of MUST 133.

MUST 233. Music Reading III. (2-2-3); I, II. Prerequisite: MUST 135 or determination of equivalent competency by the Music Department Entrance Examination. A continuation of Music Reading II, with emphasis on the individual development of vocal and instrumental music reading skills.

MUST 236. Music Theory III. (2-1-2); I, II. Prerequisite: MUST 132 or determination of equivalent competency by Music Department Entrance Examination. A continuation of Music Theory II, with emphasis on the broadening of total and rhythmic vocabulary through study of chromatic harmony and more complex metric rhythmic patterns.

MUST 237. Music Theory IV. (2-1-2); I, II. Prerequisite: MUST 236 or determination of equivalent competency by the Music Department Entrance Examination. A continuation of Music Theory III, with emphasis upon Post-Impressionistic twentieth century materials and styles.

MUST 263. Elementary Composition I. (1-1-2); on demand. Prerequisite: MUST 237 or consent of the 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 132. Writing of sixteenth and eighteenth century strict and free counterpoint, canon, invention, fugue. Some twentieth 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 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 Analysis. (2-0-2); on demand. Prerequisite: MUST 237, 233. A study of the elements of musical design through aural and score analysis.

MUST 531. Arranging. (2-0-2); on demand. Prerequisite: MUST 237, 233, or the equivalent. Scoring, arranging, transcribing, of selected or original materials for voices and/or instruments.

MUST 532. Advanced Arranging. (2-0-2); on demand. Prerequisite: MUST 531. Continuation of MUST 531.

MUST 563. 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 564. Advanced Composition II. (1-1-2); on demand. Prerequisite: MUST 563. Continuation of MUST 563.

MUSW 476. Special Problems in Music. I, II, III. (1 to 3 hrs.). Prerequisite: Consent of instructor. 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

NUR 200. Fundamentals of Nursing. (4-9-7); I, II. Prerequisite: official acceptance in the nursing program. Corequisites: BIOL 331—Human Anatomy, PSY 156—Life-Span Developmental Psychology and PSY 154—Introduction of Psychology. A study of nursing knowledge and skills involved in meeting the basic human need of all patients. This includes hygiene, rest, comfort, nutrition, asepsis, patient safety, nursing observation, and communication. Interpersonal relationships are integrated into the total content. The process of assessing patients' needs and determining appropriate nursing actions are introduced. Special emphasis is placed on caring for the elderly patient. The content is designed to help the beginning nursing student to better understand his or her place in the nursing profession and on the health team.

NUR 201. Maternity Nursing. (5-9-4); I, II (half semester course). Prerequisite: successful completion of the first semester of the nursing program. Corequisites: BIOL 332—Human Physiology; CHEM 100 and CHEM 100A—Basic Chemistry; and SOC 101—General Sociology. A family centered course utilizing the basic needs and the nursing process approach to studying the nursing aspects of the maternity cycle. Complications of the maternity cycle are viewed as interferences to homeostasis. Selected clinical experiences are required.

NUR 202. Psychiatric Nursing. (5-9-4); I, II (half semester course). Prerequisite: successful completion of the first semester of the nursing program. Corequisites: BIOL 332—Human Physiology; CHEM 100 and CHEM 100A—Basic Chemistry; and SOC 101—General Sociology. A study of human mental health, the manifestations of and interventions for the common mental disorders that interfere with the individual's satisfaction of basic needs are discussed. The nursing process is utilized to facilitate the student's therapeutic use of self in nursing interventions. Concomitant selected clinical experiences are required.

NUR 300. Child-Adult Nursing I. (5-9-8); I, II. Prerequisite: successful completion of the first year of the nursing program. Corequisites: ENG 101—English Composition; HEC 320—Elements of Nutrition; and BIOL 217—Elementary Medical Microbiology or BIOL 317—Principles of Microbiology. Theory and correlated nursing care of individuals from infancy throughout the life span who have interferences with one or more of their basic needs. The scope includes nursing aspects of major interferences with homeostasis during illness requiring hospitalization. Utilizing the systems approach, the focus is upon major health problems of the child or adult and ways these problems interfere with meeting basic human needs. The use of the nursing process is continued. Concomitant clinical experiences are required.

NUR 301. Child-Adult Nursing II. (5-15-10); I, II. Prerequisite: successful completion of the first three semesters of the nursing curriculum. Corequisites: NUR 310—Trends in Nursing and ENG 102—English Composition II. A continuation of Child-Adult Nursing I with an emphasis on more in-depth assessments and more complex interventions. Increased clinical experiences are required.

NUR 310. Nursing Trends. (2-0-2); I, II. Prerequisite: successful completion of the first three semesters of the nursing program. Consideration of issues in nursing and the relationship of nursing to the social order. The problem, responsibilities, and challenges of the registered nurse as a member of the nursing profession and the community.

NUR 311. Diagnostic Seminar. (2-0-2); I, II. Prerequisite: successful completion of the first three semesters of the nursing program. Corequisite: NUR 301-Child-Adult Nursing II. A course designed to identify deficits in associate degree nursing knowledge and to provide guidance and learning experiences to assist the learner in meeting identified needs.

## OFFICE ADMINISTRATION

OADM 111. Beginning Typewriting. (3-0-3); I, II. Mastery of the keyboard and machine techniques. Emphasis on development of rapid and accurate typewriting skills and application of these skills to fundamental communication forms, manuscripts, and tabulation.

OADM 112. Intermediate Typewriting. (3-0-3); I, II. Prerequisite: OADM 111 or equivalent, or consent of instructor. Development of speed and accuracy. Business letter styles, manuscripts, and various business forms emphasized.

OADM 131. Shorthand I. (3-0-3); I. Prerequisite: OADM 111 or equivalent. Fundamental principles of Gregg Shorthand. The development of skill in reading, writing, and transcribing. Designed for students with no previous shorthand instruction.

OADM 136. Business Calculations. (3-0-3); I, II. Business problem solutions with aid of calculating machines. Payroll, banking, credit, insurance, investments, depreciation, amortization, weights and measures, distribution of goods, statistics.

**OADM 190. Office Accounting.** (3-0-3); I, II, III. Accounting systems and financial records for professions, small businesses, and institutions. Practice sets simulate accounting cycle.

**OADM 199. Selected Workshop Topics.** (1 to 4 hrs.); on demand. Workshops on various office administration subjects will be presented periodically to supplement the basic course offerings in office administration. Credit toward degree programs must be approved by the student's advisor.

**OADM 210. Word Processing I.** (3-0-3); I. Prerequisites: OADM 111, ENG 101. Introduction to word processing concepts, review of English mechanics, editing and proofreading applications, filing rules and systems.

**OADM 213. Advanced Typewriting.** (3-0-3); II. Prerequisite: OADM 112 or equivalent. Production typewriting stressed. Emphasis on typing business letters, memorandums, manuscripts, statistical reports, and specialized business forms and reports.

**OADM 220. Word Processing II.** (3-0-3); II. Prerequisites: OADM 112 and OADM 210. Introduction to machine dictation/transcription; text-editing word processing application; electronic storage and retrieval.

**OADM 232. Shorthand II.** (3-0-3); II. Prerequisite: OADM 131 or equivalent. Mastery of principles of Gregg Shorthand emphasizing speed and accuracy in reading, writing, vocabulary, punctuation, spelling, and mailability.

**OADM 234. Specialized Office Procedures.** (3-0-3); II. Prerequisite: OADM 220. Medical secretarial studies students will also need AHS 302 as a prerequisite. Materials, methods, techniques for the legal and medical secretary, with emphasis on office routine, information processing, human relations. Students work on individualized basis.

**OADM 321. Business Communications.** (3-0-3); I, II, III. Prerequisites: ENG 102 and typewriting competency. Current principles in business letter and report writing, stressing human relations approach.

**OADM 331. Shorthand III.** (3-0-3); I. Prerequisite: OADM 232 or equivalent. Accuracy and speed in writing and transcribing Gregg Shorthand. Emphasis on mailability.

**OADM 340. Simulated Office Education.** (3-0-3); I, II. Prerequisites: OADM 112, OADM 136, and OADM 220. Bridging the gap between theoretical classroom learning and employment preparation through simulation of the real work involved in office occupations within a specific company.

**OADM 363. Office Management.** (3-0-3); I, II, III. Management of data; effects of environment as it relates to production in the office. Human relations, systems analysis, and implication of automated data processing.

**OADM 398. Supervised Field Experience.** (1 to 3 hrs.); I, II, III. To provide work experience in an occupational area. Student works under supervision in approved position. Credit commensurate with time worked, type of work, variety of work experience.

**OADM 399. Selected Workshop Topics.** (1 to 4 hrs.); on demand. Workshops on various office administration subjects will be presented periodically to supplement the basic course offerings in office administration. Credit toward degree programs must be approved by the student's advisor.

**OADM 431. Shorthand IV.** (3-0-3); on demand. Prerequisite: OADM 331 or equivalent. Dictation and transcription of five-minute speed tests and mailable letters of increased difficulty. Office-style dictation and transcription.

**OADM 475. Methods of Teaching Business Subjects.** (4 to 5 hrs.); I. Prerequisites: senior standing and formal admission to teacher education program. Introduction to vocation business and office education; approaches, objectives, lesson plans, skill building techniques, methods, materials, teaching aids, testing, measurement, grading. Secretarial studies majors register for 4 hrs. credit and basic business majors register for 5 hrs. credit.

**OADM 476. Special Problems in Office Administration.** (1 to 3 hrs.); I, II, III. Prerequisite: open to majors and minors in office administration with prior consent of advisor. This course is an independent study of office administration 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.

**OADM 539. Cooperative Study V.** (1 to 8 hrs.); on demand. Work experience providing advanced specialized exposure in a career-related position. Available to upper division undergraduate and graduate students.

**OADM 599. Selected Workshop Topics.** (1 to 4 hrs.); on demand. Workshops on various office administration subjects will be presented periodically to supplement the basic course offerings in office administration. Credit toward degree programs must be approved by the student's advisor.

## PERSONAL DEVELOPMENT INSTITUTE

**PDI 100. Personal Development.** (1-0-1); I, II. This is an elective course structured in the Institute format. The course covers such areas as: personality enhancement, attitude improvement, psychology of achievement, visual poise, sharpening social skill, the art of entertaining, voice improvement, speech and conversation, vocabulary expansion, interview preparation, and improved interpersonal relationships.

## PHILOSOPHY

**PHIL 200. Introduction to Philosophy.** (3-0-3); I, II, III. Alternative views concerning the nature of reality, knowledge, truth, God, man, art, and the good life.

**PHIL 300. Philosophy of Science.** (3-0-3); II. Scientific methods and explanation; the role of mathematics in empirical science; and theories of matter, space, time, motion, and causality.

**PHIL 303. Social Ethics.** (3-0-3); I, II, III. Theoretical and practical problems of moral conduct and proposed solutions to them.

**PHIL 306. Logic.** (3-0-3); I, II. Informal fallacies, the methods of constructing deductive and inductive arguments, and the ways of justifying or testing them.

**PHIL 307. Philosophy of Religion.** (3-0-3); II. Proposed sources of religious knowledge and the meaning of God, Jesus, sin, and salvation in four major theories of the universe.

**PHIL 308. Philosophy of the Arts.** (3-0-3); I. Major theories of art, aesthetic experience, the structure of art, problems in aesthetics, and art criticism.

**PHIL 309. Existentialism.** (3-0-3); I. Theories of the nature of reality, knowledge, and the good life from the point of view of those who appeal to their "existing situation" rather than reason.

**PHIL 310. Analysis of Ideas.** (3-0-3); on demand. Prerequisite: PHIL 200 or consent of the department. Analysis of statements and the application of this technique to basic statements in the various sciences.

**PHIL 311. Ordinary Language Philosophy.** (3-0-3); on demand. Prerequisite: any one of the following courses: PHIL 200, 505, 506. An introduction to a contemporary philosophy which attempts to solve philosophical problems by appealing to language as ordinarily used.

**PHIL 312. Symbolic Logic.** (3-0-3); on demand. Prerequisite: permission of instructor. Introduction to methods of constructing and justifying deductive arguments as they have been developed by the use of modern symbols.

**PHIL 313. American Philosophy.** (3-0-3); on demand. Prerequisite: PHIL 200 or consent of the department. A survey of philosophical thought in America from the eighteenth century to the present with special attention given to the Pragmatists.

**PHIL 389. Honors Seminar in Philosophy.** (3-0-3); I. Prerequisite: membership in the Junior-Senior Honors Program. Contemporary moral issues are examined, discussed, and evaluated. The topics may vary from semester to semester.

**PHIL 410. Contemporary Philosophy.** (3-0-3); II. An examination, interpretation, and evaluation of the philosophic ideas of leading representatives of twentieth-century philosophies.

**PHIL 476. Special Problems.** (1 to 3 hrs.); I, II. Prerequisite: 12 hours in philosophy or consent of the department. The student selects an approved topic in philosophy on which to do a directed study.

**PHIL 505. History of Philosophy I.** (3-0-3); I. Ancient and Medieval philosophy; a history of Western philosophy from Thales (624-546 B.C.) to the beginning of the Renaissance.

**PHIL 506. History of Philosophy II.** (3-0-3); II. Modern and contemporary philosophy; a history of Western philosophy from the Renaissance to the present.

## PHYSICAL EDUCATION

**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, III. Emphasis on skill, knowledge, tactics, and techniques for individual participation.

**PHED 103. Archery.** (0-2-1); I, II, III. Emphasis on skill, knowledge, tactics, and techniques for individual participation.

**PHED 104. Gymnastics.** (0-2-1); I, II. Emphasis on self-testing activities.

**PHED 106. Wrestling.** (0-2-1); I, II. Holds, escapes, and conditioning necessary to perform skills.

**PHED 107. Bowling.** (0-2-1); I, II, III. 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. (Same as AGR 109.)

**PHED 110. Judo.** (0-2-1); II. Throws used in sport judo.

**PHED 111. Angling.** (0-2-1); I, II, III. Skills used in fly and bait casting.

**PHED 112. Handball.** (0-2-1); I, II. Emphasis on knowledge, tactics, skill, and techniques for individual participation.

**PHED 113. Soccer.** (0-2-1); I, II. Techniques and participation in soccer.

**PHED 114. Track and Field.** (0-2-1); I, II. Emphasis on skill, knowledge, and techniques for individual participation.

**PHED 115. Apparatus.** (0-2-1); I, II. Skills used in self-testing activities.

**PHED 116. Lacrosse.** (0-2-1); I. Basic skills in lacrosse.

**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, III. Rules, techniques, and participation in volleyball.

**PHED 119. Intermediate Horsemanship.** (0-2-1); I, II. Prerequisite: PHED 109 or equivalent. (Same as AGR 119.)

**PHED 120. Basic Rhythms.** (0-2-1); I, II, III. Skills and knowledge in fundamentals of dance.

**PHED 121. Modern Dance.** (0-2-1); I, II. 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 124. Canoeing. (0-2-1); I, III. Emphasis on skill, knowledge, and tactics in all types of streams.

PHED 125. Basketball Skills. (0-2-1); I, II. Skills of basketball.

PHED 127. Racquetball. (0-2-1); I, II. Emphasis on skill, knowledge, and strategy.

PHED 130. Beginning Swimming. (0-2-1); I, II, III. Learning to swim well enough to care for one's self under ordinary conditions.

PHED 131. Intermediate Swimming. (0-2-1); I, II, III. Perfection of standard strokes, diving.

PHED 132. Life Saving. (0-2-1); I, II, III. Rescue methods in all types of water.

PHED 133. Instruction to Water Safety. (0-2-1); I, II. Prerequisite: current Senior Lifesaving Certificate. Teaching methods and techniques in lifesaving.

PHED 135. Field Hockey. (0-2-1); II. Skills and techniques in field hockey.

PHED 138. Fencing. (0-2-1); I, II. Emphasis on skill, knowledge, and strategy.

PHED 150. Introduction to Physical Education. (2-0-2); I, II, III. Principles and basic philosophy, aims, and objectives; standards; and significance in profession of physical education.

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. 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 206. Rhythmical Activities in the Elementary School. (1-1-2); I, II. Body mechanics and posture taught to rhythmical patterns.

PHED 207. Training Room Modalities. (1-1-2); I, II. Prerequisites: PHED 203, 302. Emphasis on participation and use of machinery.

PHED 208. Medical Aspects of Athletic Training. (1-1-2); I, II. Prerequisite: PHED 302. Relationships existing between training programs and medical society, including case history studies.

PHED 209. Training Room Practice. (1-1-2); I, II. Prerequisite: PHED 302. Work-participation situation involving student in training room work.

PHED 210. Diagnostic Techniques of Athletic Injuries. (1-1-2); I, II. Prerequisite: PHED 302. Diagnosis of athletic injuries.

PHED 222. Individual Sports I. (1-1-2); I, II. Emphasis on development of performance skills, teaching techniques, and officiating in tennis, badminton, and racquetball.

PHED 223. Individual Sports II. (1-1-2); I, II. Emphasis on development of performance skills and teaching techniques in cycling-exercise program, archery, and golf.

PHED 300. Physical Education in the Elementary School. (2-0-2); I, II, III. Prerequisite: admission to the teacher education program. Selection and organization of materials and techniques of instruction for elementary school program. (Laboratory experiences are integral part of course.)

PHED 301. Evaluation in Health, Physical Education, and Recreation. (3-0-3); I, II, III. Methods, techniques, and procedures used in evaluation of students in health, physical education, and recreation.

PHED 302. Athletic Injuries. (2-0-2); III. Theory and practice of massage, bandaging, taping, and caring for athletic injuries.

PHED 303. Physical Education in the Secondary School. (2-0-2); I, II, III. Prerequisite: admission to teacher education program. Selection and organization of materials and techniques of instruction for secondary school program.

PHED 304-305. Affiliation in Physical Education. (0-2-1); I, II. Students will observe and assist a staff member in one or more of the service classes.

PHED 308. Baseball Techniques. (2-0-2); I, II. Theoretical and practical aspects of baseball theory.

PHED 309. Team Sports I. (1-1-2); I, II. Emphasis on development of performance skills, teaching techniques, and officiating in volleyball and soccer.

PHED 311. Movement Exploration. (2-1-3); I, II. Child-centered program and demonstrate methods whereby a child may learn to move experimentally, expressively, and efficiently.

PHED 312. Individual and Team Games for Elementary School. (2-3-4); I, II. Emphasis on development of individual skills in team game atmosphere.

PHED 319. Team Sports II. (2-0-2); I, II. Emphasis on development of performance skills, teaching techniques, and officiating in basketball and softball.

PHED 401. Organization and Administration of Physical Education. (3-0-3); I, II, III. Arrangement of units making up physical education program, and process of leadership by which serious aspects are brought together in a functioning whole.

PHED 402. Kinesiology. (3-0-3); I, II, III. Study of human action.

PHED 409. Team Sports III. (2-0-2); I, II. Emphasis on development of performance skill and teaching techniques in football.

PHED 419. Team Sports IV. (2-0-2); I, II. Emphasis on the development of performance skills and teaching techniques in cross country, track and field, and field hockey.

PHED 420. Administration of School Athletic Programs. (3-0-3); I, II. Administrative principles and procedures applicable to school athletic program.

PHED 422. Coaching Inter-Scholastic Athletics. (3-0-3); I, II. Emphasis on coaching techniques of inter-scholastics.

PHED 432. Physiology of Exercise. (3-0-3); I, II, III. Prerequisite: PHED 402. Study of response of the body to muscular activity; work and efficiency, cardiorespiratory adjustment, training, and fitness. (Laboratory experiences are integral part of course.)

PHED 475. Adapted Physical Education. (2-0-2); I, II. Problems of exceptional students and means whereby these students can be aided through physical education.

PHED 576. Special Problems in Physical Education. (1 to 3 hrs.); I, II. Prerequisite: upper division or graduate classification. Course to meet the special needs of individual students.

PHED 599. Workshop. (1 to 3 hrs.); I, II, III. Workshop for specifically designated task orientation in physical education. May be repeated in additional subject areas. Maximum of six semester hours may be earned under this course number.

## PHYSICS

PHYS 199. Selected Topics. (1 to 6 hrs.); on demand.

PHYS 201. Elementary Physics I. (3-0-3); I, II, III. Prerequisite: working knowledge of algebra and trigonometry. Mechanics and heat; Newton's law of motion, energy and momentum, and heat transfer.

PHYS 201A. Elementary Physics I Laboratory. (0-2-1); I, II, III. Must take concurrently with PHYS 201. Laboratory for PHYS 201.

PHYS 202. Elementary Physics II. (3-0-3); I, II, III. Prerequisite: PHYS 201. Electricity and magnetism, light, nuclear and atomic physics.

PHYS 202A. Elementary Physics II Laboratory. (0-2-1); I, II, III. Must take concurrently with PHYS 202. Laboratory for PHYS 202.

PHYS 211. Circuits. (3-2-4); II. Prerequisite: MATH 275; corequisite: PHYS 232. Linear circuits consisting of passive and active circuit elements; sinusoidal-forcing functions and phasors; steady-state response.

PHYS 212. General Physics Problems. (2-0-2); I. Prerequisite: PHYS 202. Corequisite: MATH 275. Selected problems from engineering physics. Application of elementary calculus to the solution of general physics problems. (This course is designed exclusively for students who have completed PHYS 201 and 202 and are interested in taking additional upper-division physics courses. For courses for which PHYS 231 and 232 are the recommended prerequisites, the sequence PHYS 201, 202, and 212 is acceptable in lieu of PHYS 231 and 232 except for students in the pre-engineering program.)

PHYS 221. Statics. (3-0-3); II. Corequisite: MATH 276. Vector algebra, moments of force, equivalent force systems, equilibrium, trusses, frames, friction, centroids, and center of mass.

PHYS 231. Engineering Physics I. (4-0-4); I. Corequisite: MATH 275. Introduction to physics for scientists and engineers. Statics, kinetics, and dynamics of linear and rotational motion, gravitational fields; thermal properties of matter and heat transfer.

PHYS 231A. Engineering Physics I Laboratory. (0-2-1); I. Must be taken concurrently with 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. Must be taken concurrently with PHYS 232. Laboratory for PHYS 232.

PHYS 250. Light, Color, Cameras, and Perception. (3-0-3); I, II. A non-mathematical study of the phenomena of light and perception. Applications of light and color are presented in art, psychology, photography, and other areas.

PHYS 299. Selected Topics. (1 to 6 hrs.); on demand.

PHYS 320. The Science of Music. (3-0-3); I, II. Properties of sound, the hearing process, musical scales, production of music by wind and stringed instruments, electronic recording and reproduction, and architectural acoustics.

PHYS 332. Electricity and Magnetism. (4-0-4); II in 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 340. Experimental Physics. (1-4-3); I. 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 or 232. Interdisciplinary course in nuclear science for students in pre-medicine, environmental studies, physics, chemistry, geology, pre-dentistry, and pre-veterinary medicine.

PHYS 352. Concepts of Modern Physics. (3-0-3); 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 or 232-232A. A survey of electronics: components, basic circuits such as amplifiers and oscillators, feedback, op-amps, digital circuits, and interfacing.

PHYS 381. Computer Solutions to Engineering and Science Problems. (3-0-3); II. Prerequisites: PHYS 232 and DATA 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. Prerequisite: Physics 221 or 231. A study of motion of bodies. Kinematics and dynamics of particles and rigid bodies; work and energy; impulse and momentum.

PHYS 399. Selected Topics. (1 to 6 hrs.); on demand.



**PHYS 410. Solid State Physics.** (3-0-3); on demand. Prerequisite: PHYS 352. Lattice dynamics, electrons in metals, semi-conductors, 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 452. Nuclear Physics.** (3-0-3); on demand. Prerequisite: PHYS 232. Binding energies, nuclear forces, transmutation of nuclei; natural and artificial radioactivity.

**PHYS 481. Mathematics for Engineers and Scientists.** (3-0-3); I. Prerequisite: MATH 276. Fourier series, ordinary and partial differential equations, special functions, and integral transforms. See MATH 481.

**PHYS 493. Quantum Mechanics.** (3-0-3); on demand. Prerequisite: PHYS 391 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

**PSY 154. Introduction to Psychology.** (3-0-3); I, II, III. Course concerning application of psychological theories and principles in area of personality, abnormal psychology, clinical psychology, psychodiagnostics, developmental psychology, psychotherapy and counseling; includes some understanding of methods used in personality and clinical research.

**PSY 156. Life-span Developmental Psychology.** (3-0-3); I, II. Prerequisite: PSY 154 or consent of instructor. Covers developmental theories, principles, and characteristics of individuals across three major developmental periods: infancy and childhood, adolescence, and adulthood.

**PSY 157. Psychology of Adjustment.** (3-0-3); I, II. Prerequisite: PSY 154 or consent of instructor. 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.); I, II, III. Workshop for specifically designated task orientation in psychology. May be repeated in additional subject areas. Maximum of 6 sem. hrs. may be earned under this course number.

**PSY 276. Independent Study** (1 to 3 hrs.); I, II, III. Professional problem in psychology.

**PSY 353. Industrial Psychology.** (3-0-3); II. 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. 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 381. Experimental Psychology I.** (2-2-3); I. Prerequisites: PSY 154 and EDSP 581 or MATH 353. Study of experimental methods and design related to sensation, perception, discrimination, learning, forgetting, and retention. Laboratory experiences are integral part of course.)

**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.); I, II, III. 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 422. Comparative Psychology.** (3-0-3); II. 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 470. Research Problems.** (1 to 3 hrs.); I, II, III. Independent research study of professional problem. Conferences with instructor by arrangement.

**PSY 521. Physiological Psychology.** (3-0-3); II. Prerequisite: PSY 154. Physiological mechanisms of normal human and animal behavior. Anatomy and physiology relevant to study of sensory and motor functions, emotion, motivation, and learning.

**PSY 554. Seminar in Social Psychology.** (3-0-3); II. Prerequisite: PSY 154 or consent of instructor. Intensive examination of research methods and theory in modern social psychology.

**PSY 555. Environmental Psychology.** (3-0-3); II. Prerequisite: PSY 154. Study of ways in which social and physical environments affect human behavior. Direct effects of physical settings on behaviors, individual utilization of various physical settings, analysis of personal space utilization, and their non-verbal behaviors examined.

**PSY 556. Introduction to Clinical Psychology.** (3-0-3); I. 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 558. Psychological Testing.** (3-0-3); II. 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 559. Behavior Modification.** (2-2-3); II, III. Prerequisite: PSY 154. Operant learning principles that govern human behavior applied to modification of behavior in school setting. Course is designed to give experience in dealing with behavioral problems in classroom and other settings. (Laboratory experiences are integral part of course).

**PSY 575. Selected Topics.** (2-2-3 to 6 hours); I, II, III. Prerequisite: consent of instructor. Various methods courses in instrumentation and data reduction, innovation and research design, directed study of special problems in psychology, various application courses and others.

**PSY 576. Seminar in Developmental Research.** (3-0-3); II. Prerequisite: PSY 156 or permission of instructor. Intensive examination of research and contemporary developmental psychology. Emphasis on reading and evaluating current journal articles and designing research projects.

**PSY 582. Experimental Psychology II.** (2-2-3); II. Prerequisite: PSY 381 or consent of instructor. A seminar course in experimental psychology emphasizing content areas of learning, motivation, perception, and physiological psychology. Course is designed to give student practice in critical thinking, evaluation of experimental design, and original research, and affords student an opportunity to present and debate his or her own ideas. (Laboratory experiences are an integral part of course).

**PSY 583. Sensory Psychology.** (3-0-3); I. Prerequisites: PSY 154 and EDSP 581 or MATH 353. Biological and physical bases of sensory experience. Presentation of psychophysical data and basic techniques for scaling of sensation. Coverage of all sensory systems with primary emphasis on vision and audition.

**PSY 584. Perception.** (2-2-3); III. Prerequisites: PSY 154. Examination of role of perception as an information extraction process. Includes constancies, space perception, illusions, and influence of learning and experience on development of perception. (Laboratory experiences are integral part of course).

**PSY 585. Systems and Theories.** (3-0-3); I. Prerequisites: PSY 154 and EDSP 581 or MATH 353. Intensive study of most influential historical systems of psychology including structuralism, functionalism, associationism, behaviorism, Gestalt psychology, and psychoanalysis, and a treatment of contemporary developments.

**PSY 586. Motivation.** (2-2-3); II. Prerequisite: PSY 154. Consideration of bases of human and animal motivation in relation to other psychological processes. (Laboratory experiences are integral part of course.)

**PSY 589. Psychology of Learning.** (3-0-3); I, III. 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 skills, remembering, and logical thinking.

**PSY 590. Abnormal Psychology.** (3-0-3); I, II, III. Prerequisite: PSY 154. Psychology, behavior, and treatment of individuals having superior or inferior mental abilities, perceptual handicaps, orthopedic problems, and behavioral disorders; general methods used in therapy, and research in this area.

**PSY 591. Application on SPSS to the Life Sciences.** (1-1-1); I. Prerequisite: MATH 353 or EDSP 581 or consent of instructor. Application of descriptive and inferential statistics by SPSS computer package for data analyses in life sciences.

**PSY 592. Application of BMD to the Life Sciences.** (1-1-1); I. Prerequisite: MATH 353 or EDSP 581 or consent of instructor. Application of descriptive and inferential statistics by BMD computer package for data analyses in life sciences.

**PSY 593. Application of SAS to the Life Sciences.** (1-1-1); I. Prerequisite: MATH 353 or EDSP 581 or consent of instructor. Application of descriptive and inferential statistics by SAS computer package for data analyses in life sciences.

**PSY 599. Workshop.** (1 to 3 hrs.); I, II, III. Workshop for specifically designated task orientation in psychology. May be repeated in additional subject areas. Maximum of six semester hours may be taken.

## RADIO-TELEVISION

**R-TV 110. Introduction to Mass Communications.** (3-0-3); I. (See Journalism 101.)

**R-TV 150. Introduction to Broadcasting.** (3-0-3); I, II. Basic conditions of the broadcasting industry from regulation to advertising. Students will also learn the basics of everyday station operations.

**R-TV 151. Introduction to Broadcast Techniques.** (2-0-2); I, II. Familiarization with radio, television, and film equipment utilized in studio and remote broadcast productions.

**R-TV 155. Broadcast Performance.** (3-0-3); I, II. Fundamentals of broadcast announcing, emphasis on vocal communication skills of enunciation, pronunciation, inflection, and pacing.

**R-TV 240. Writing for Broadcast.** (3-0-3); I, II. Prerequisite: R-TV 151 and a proficiency in typing. Techniques used in writing commercials and programs for radio and television. Emphasis is placed on storyboards and advertising presentation.

**R-TV 250. Audio Production and Direction.** (3-2-4); I, II. Prerequisite: R-TV 151. Discussion of all areas of audio production, including radio, television, audio, and film audio with practical work in radio production.

**R-TV 283. Photographic Design.** (2-2-3); I, II. Experimental and standard photographic processes and techniques are approached with an aesthetic view of the medium.

**R-TV 320. Broadcast Advertising/Sales.** (3-0-3); I. Prerequisite: R-TV 240. Provides a foundation in both practical and theoretical aspects of broadcast advertising. Principles of sales will be examined from the perspective of the advertising copywriter.

**R-TV 338. Radio Operating Practices.** (1-0-1); I, II. (See IET 338). Basic law, technical operating practices, meter reading, and electronic fundamentals necessary in the operation of a broadcast facility.

**R-TV 340. Video Production and Direction I.** (2-2-3); I, II. Prerequisite: R-TV 151 and 240 or permission of instructor. Basic television production techniques and introduction of directing skills in a laboratory situation.

**R-TV 344. Broadcast News and Public Affairs.** (3-0-3); I, II. Prerequisite: 9 hours of undergraduate radio-TV or consent of the instructor. Theory and practice of news and public affairs writing and reporting as it applies to the broadcast media.

**R-TV 357. Sportscasting.** (2-2-3); I. Philosophy and techniques utilized in developing style of presentation in sports broadcasts. Theory practically applied in play-by-play description, interviewing, and presentation of copy. (Cross referenced as JOUR 357.)

**R-TV 358. Sports Writing.** (3-0-3); II. Philosophy and techniques in writing sports news and sports analysis or commentary for mass media. Same as JOUR 358.

**R-TV 379. Field Study Experience.** (3-0-3); III. (May be repeated for credit when topics vary.) Prerequisite: consent of instructor. Participants will travel to a major broadcasting center and tour commercial network, major independent, public cable, and satellite broadcast facilities. Will also include related media facilities, news services, public relations and advertising agencies, government facilities and agencies; discussions and informal seminars with practicing professionals and officials in their fields of expertise.

**R-TV 383. Photographic Design II.** (2-2-3); I, II. Prerequisite: R-TV 283. Advanced work in the use of photographic concepts and techniques.

**R-TV 420. Feature and Documentary Writing for Broadcast.** (3-0-3); I. Prerequisite: R-TV 340. Advanced theory and practices of writing for the broadcast medium. Emphasis placed on writing and producing features and documentaries for radio and television.

**R-TV 423. Advanced Commercial and Continuity Writing.** (3-0-3); II. Prerequisite: R-TV 340. Script writing techniques for the advanced broadcast copywriter. Practice in writing various types of commercials, continuities, and formats for radio and television.

**R-TV 440. Video Production and Direction II.** (3-3-4); I, II. Prerequisite: R-TV 340. Junior standing and consent of instructor. Extension of R-TV 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 production.

**R-TV 445. Electronic Field Production.** (3-0-3); III. Prerequisite: R-TV 340 and consent of instructor. Theory and practice in the production of commercial and feature production outside the studio using a single-camera technique, including post-production electronic editing and production techniques.

**R-TV 450. Broadcast Management.** (3-0-3); II. Prerequisite: 18 hours of undergraduate radio-television or consent of instructor. Examination of administrative decision-making in radio and television with attention to programming, research, audience, sales, regulatory, and personnel concerns. Special attention is given to the purpose and basic idea of programs in relation to audience composition.

**R-TV 451. Professional Audio Practices.** (2-2-3); II. Prerequisite: R-TV 250—Audio Production and Direction I and consent of instructor. Experience and advanced study in areas such as music recording and sound, its relation to television, film, multi-media, and radio production.

**R-TV 459. Broadcast Law and Regulation.** (3-0-3); I. Basic regulatory law and policy examined in terms of application to daily station operation and from historical and socio-economic perspectives.

**R-TV 550. Problems in Contemporary Broadcasting.** (3-0-3); I. Prerequisite: junior standing and consent of instructor. Treatment of current problems within the broadcasting industry.

**R-TV 558. Public Broadcasting.** (3-0-3); I. Prerequisite: junior standing and consent of the instructor. Study of the development of public broadcasting from both theoretical and operational standpoints.

**R-TV 560. History of Broadcasting.** (3-0-3); I. Prerequisite: junior standing and consent of instructor. Historical study of radio-television as a communication service and its development in America.

**R-TV 562. Broadcast Criticism.** (3-0-3); II, IV. Prerequisite: junior standing and consent of instructor. Examination of broadcasting in sociological, aesthetic, historical, psychological, and humanistic terms.

**R-TV 580. New Technology Policy and the Communications Industry.** (3-0-3); II. Prerequisite: junior standing and consent of instructor. Examines both broadcast media, cable, common carriers, the sources of policy and influence which guide them, and public interest issues affected by communications media policy.

**R-TV 582. American Popular Culture and Communications Technology.** (3-0-3); II. Prerequisite: junior standing and consent of instructor. 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.

**R-TV 583. Photographic Design III.** (2-2-3); I, II. Prerequisite: R-TV 383. Individual problems in photographic design.

## RADIOLOGIC TECHNOLOGY

**RAD 110. Radiographic Anatomy and Positioning I.** (3-2-4); I. Corequisites: BIO 331, AHS 302. Introduction to radiographic positioning, including basic terminology relating to the structure of the human body and discussion of the physiological systems, with a thorough explanation of positioning nomenclature. Emphasis will be given to chest and abdominal radiography which will include the routine examinations demonstrating the various visceral structures of the gastro-intestinal tract, including radiological examinations of the gallbladder, bile ducts, and the urinary system. This course will prepare the students to assist or perform fluoroscopic studies, and will also cover routine positioning for the upper extremity, shoulder girdle, sternum, ribs, and clavicle.

**RAD 120. Radiologic Technology I.** (3-2-4); I. Corequisites: RAD 110. An introduction to radiologic technology, including the history of the field. Professional and medical ethics and the legal implications. Nursing procedures that are pertinent to radiology. An introduction to the production and control of ionizing radiation used in medical diagnosis with the main emphasis placed upon the x-ray tube and protection. An introduction to technical factors affecting radiographic quality. Other topics include the radiograph and image formation, as well as film processing and darkroom chemistry.

**RAD 130. Clinical Internship I.** (0-40-10); II. Prerequisites: RAD 110, 120. Clinical experience in an affiliated hospital's radiology department is specifically designed to introduce the student to areas of professional practice in radiologic technology. Departmental orientational emphasis will be placed on patient management, patient care, and transporting responsibilities, radiological equipment knowledge, office procedures, and darkroom processing procedures. Technological emphasis will require the student to successfully achieve at least 25 clinical competencies in areas which include chest, abdominal, and gastro-intestinal radiography, as well as radiological examinations of the upper extremity, thorax, and shoulder girdle. Students will be assigned to rotate through specialty areas of radiology as available to them.

**RAD 131. Special Problems—Nursing Procedures (Directed Study).** (2-0-2); II. Prerequisites: RAD 110, 120. Nursing procedures and techniques used in the general care of the patient while in the radiology department, emphasizing the role of the radiologic technologist in performing such tasks as setting up sterile trays, preparing and transporting a patient in isolation, performing one-person or two-person C.P.R., etc. Students will be evaluated on how well they carry out the skills.

**RAD 210. Radiographic Anatomy and Positioning II.** (2-2-3); III. Prerequisites: RAD 110. This course is designed to be a continuance of RAD 110 which will emphasize the radiographic anatomy and positioning of the lower extremity, hips, pelvis, sacroiliac joints, and the entire vertebral column. Related radiographic anatomy will be demonstrated for each area reviewed.

**RAD 220. Radiographic Anatomy and Positioning III.** (2-2-3); III. Prerequisites: RAD 110, RAD 120. Corequisite: BIO 332. A continuance in the study of radiographic anatomy and positioning, with primary emphasis in skull radiography. Also included is an in-depth study of the radiographic procedures for examination of the facial bones, nasal bones, mandible, orbits and optical foramina, paranasal sinuses, mastoids, eye localizations, and sialography. Skull radiography of the trauma patient shall be incorporated within the subject material.

**RAD 230. Clinical Internship II.** (0-40-10); I. Prerequisites: RAD 130, 210, 220. Clinical assignment in an affiliated hospital's radiology department will provide the student with further application experience in professional knowledge. Students will be expected to continue to exhibit competencies previously acquired, and must successfully achieve 25 additional competencies in other radiographic procedures. Demonstrated competency emphasis will be placed in areas of the lower extremity, pelvic girdle, and the entire vertebral column. Students who have not had prior opportunity will be assigned to rotate through specialty areas available to them.

**RAD 231. Special Problems—Radiographic Quality (Directed Study).** (2-0-2); I. Prerequisite: RAD 120. This course takes the theory that has been examined in previous courses and shows why and how radiographic quality is important to the radiology department. Radiographic quality experiments will be done in the clinical affiliate to provide the student with the education in analyzing the radiographs by independently examining each of the multiple factors that contribute to the appearance of the image. Emphasis is placed on quality assurance used in the radiology department.

**RAD 240. Radiologic Technology II.** (2-2-3); II. Prerequisites: RAD 120, 231. A course designed to advance the study of radiographic processing, x-ray production, and image formation. Medical ethics will be explored further with specific case studies in radiologic technology. Different types of image modalities will be examined as well as quality assurance, protection, radiographic exposure, equipment maintenance, and proper usage.

**RAD 250. Radiation Physics and Electronics.** (2-2-3); II. Prerequisite: RAD 120. A study of radiation physics and electronics necessary to understand the circuitry of an x-ray machine and how x-rays are generated and produced. Topics will include the structure of matter, electrostatics, magnetism, electrodynamics, electromagnetism, rectification, and the x-ray tube.

**RAD 260. Advanced Radiographic Procedures.** (3-0-3); II. Prerequisites:



**RAD 110, 210, 220.** An introduction into the areas of specialized radiological procedures such as cerebral angiography, with discussion of the "Seldinger Technique," catheters and guidewire, and special procedure trays and equipment. Myelography, lymphangiography, hysterosalpingography, with discussion of contrast media utilized for "special procedures." CAT scanning with some cross-sectional anatomy, discussion of the newer imaging modalities, including nuclear magnetic resonance, digital radiography, and advancements in nuclear medicine, xeroradiography and endoscopic procedures assisted by technologists, and ultrasonography.

**RAD 320. Radiation Biology and Pathology.** (3-0-3); II. Prerequisite: RAD 120. This course will integrate film evaluation with radiologic pathology. An overall picture of how pathological conditions can be determined by a good quality radiography. Classifications of diseases by etiology and by organ systems will be examined as well as methods of diagnosis of disease. Radiation biology will also be studied as it affects the public right to minimal radiation exposure. An overall view of the effects of ionizing radiation to all the biological systems.

**RAD 330. Clinical Internship III.** (0-40-4); III. Prerequisites: RAD 130, 230. Clinical education experience in an affiliated hospital's radiology department has been individually assigned to encourage the students in assuming their roles as new entry-level technologists. Educational advancement in special procedures, mammography, arthrography, pacemaker insertions, and tomography is emphasized. Students are expected to continue demonstration of previously earned procedural competencies, and must successfully acquire competency level in 13 additional radiographic procedures. Students who have not had prior opportunity will rotate through specialty areas available to them.

**RAD 340. Clinical Internship IV.** (0-40-4); III. Prerequisites: RAD 130, 230. Clinical education experience in an affiliated hospital's radiology department has been assigned by the faculty of the Radiologic Technology Program to provide the student with a deeper knowledge of radiography. The student must continue to exhibit procedural competencies learned previously and must successfully achieve competency in 12 more radiological examinations. Special emphasis will be placed on advanced cranial procedures and trauma radiography. Students who have not had prior opportunity will rotate through specialized areas within the field such as special procedures, radiation therapy, ultrasonography, nuclear medicine, mammography, xerography, and CAT scanning.

## REAL ESTATE

**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, include license law, ethics, listing and purchase agreements, brokerage, deeds, financing, appraisal, mortgages, and property management.

**REAL 139. Cooperative Study I.** (1 to 8 hrs.); on demand. Work experience in a field relevant to the student's career objectives and academic preparation. Experience is usually analogous to a freshman level course.

**REAL 199. Selected Workshop Topics.** (1 to 4 hrs.); on demand. Workshops on various real estate subjects 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 239. Cooperative Study II.** (1 to 8 hrs.); on demand. Work experience with an extension of exposure gained in REAL 139 or of a nature similar to a sophomore status course.

**REAL 303. Real Estate Market Analysis.** (3-0-3); I. Prerequisite: REAL 120 or consent of instructor. 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 or permission of instructor. 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); II. Prerequisite: REAL 105 or permission of instructor. Overview of real estate law, focusing on legal fundamentals including contracts, concepts of title, title examination.

**REAL 320. Real Estate Marketing.** (3-0-3); I. Prerequisite: REAL 105 or permission of instructor. 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 325. Appraisal of Residential Property.** (3-0-3); I. Prerequisite: REAL 105 or permission of instructor. An introduction to the current theory and practice of real estate appraisal as taught by the professional appraisal societies. Insight into the direction of appraisal and feasibility in the future.

**REAL 330. Real Estate Property Management.** (3-0-3); II. Prerequisite: REAL 105 or consent of instructor. 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.** (3-0-3); I. Prerequisite: REAL 105 or permission of instructor. Introduction to the mechanisms of real estate finance, sources of funds, principles of mortgage risk analysis, governmental agency roles, and cash flows.

**REAL 335. Real Estate Investment.** (3-0-3); II. Prerequisite: REAL 105 or consent of instructor. Theory and practices of real estate investments and the wide range of topics in this area. Reasons for and against investing, homes and business properties, sale and lease-backs, and the real estate investor.

**REAL 339. Cooperative Study 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.

**REAL 345. Appraisal of Income Property.** (3-0-3); II. Prerequisite: REAL 125. Introduction to current theory and practice of income property appraisal and appraisal techniques.

**REAL 399. Selected Workshop Topics.** (1 to 4 hrs.); on demand. Workshops on various real estate 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 or consent of instructor. 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 410. Urban Land Use Analysis.** (3-0-3); on demand. Prerequisite: REAL 105 and 125 or consent of instructor. Introduction to the responsibility of planning agencies to bring plans into closer harmony with the basic currents of economic development in the relationship between urban form and human behavior and activity patterns. Theory development, the use of models in planning, transportation systems, and other urban activities.

**REAL 439. Cooperative Study 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.

**REAL 476. Special Problems in Real Estate.** (1 to 3 hrs.); I, II, III. Prerequisites: senior standing and prior consent of head of department. 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.

**REAL 539. Cooperative Study V.** (1 to 8 hrs.); on demand. Work experience providing advanced specialized exposure in a career-related position. Available to upper division undergraduate and graduate students.

**REAL 599. Selected Workshop Topics.** (1 to 4 hrs.); on demand. Workshops on various real estate subjects 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.

## RECLAMATION TECHNOLOGY

**RCL 301. Reclamation Laws and Regulations.** (3-0-3); I. A study of federal and state regulatory agencies and regulations affecting the reclamation of disturbed land.

**RCL 302. Reclamation Management and Systems Planning I.** (2-4-4); II. Studies of current surface mining procedures and reclamation methods. Laboratory and field studies devoted to surface mining permit application procedures and site evaluation.

**RCL 303. Reclamation Management and Systems Planning II.** (2-4-4); on demand. Prerequisite: approval of instructor. An emphasis on evolving concepts in surface mining. Laboratory and field studies devoted to advanced site evaluation, environment testing procedures, and land use planning.

## RECREATION

**REC 201. Outdoor Recreation.** (3-0-3); II, III. Scope and history of outdoor recreation. Development of camp craft skills.

**REC 209. Recreational Sports.** (2-1-2); I, II, III. Prerequisite: Three of five activities. History, knowledge of rules, proficiency of skills, and teaching ability of bowling, archery, volleyball, soccer, and squash-handball. (Laboratory experiences are integral part of course.)

**REC 285. Community Recreation.** (2-0-2); I, II, III. Emphasizes general aspects of community recreation, place of school and other social institutions in recreation.

**REC 286. Recreation Leadership.** (2-0-2); I, II, III. History, theory, and philosophy of recreation. Practical techniques of leadership for low organization activities.

**REC 288. Recreational Arts and Crafts.** (1-2-2); I, II, III. Methods and materials, techniques of producing all types of crafts suitable for playground, community centers, hospital, school, camp, and club programs.

**REC 290. Field Experience I.** (1-1-1); I, II, III. Designed to give student practical experience under guidance of qualified leadership. (Laboratory experiences are integral part of course.)

**REC 305. Social Recreation.** (2-0-2); II. Practical application of planning, demonstrating, and conducting activities and programs for various social events and gatherings.



REC 310. Youth Organizations. (2-0-2); II. History, principles, and purposes of major youth service organizations with emphasis on leadership techniques and programming.

REC 375. Creative Dramatics. (3-0-3); II, III. Analysis and application of principles of creative dramatics as applied to classroom teaching recreation activities. (Same as THEA 375.)

REC 388. Community Centers and Playgrounds. (3-0-3); I, III. Leadership techniques, programming, and operation related to planning and administration of community centers and playgrounds.

REC 471. Seminar. (1-0-1); I, II. Discussion and reporting of current issues and problems in recreation profession.

REC 475. Therapeutic Recreation. (3-0-3); II, III. Philosophy, objectives, and basic concepts of therapeutic recreation. Emphasis on rehabilitation needs within institutional and community settings.

REC 477. Recreation Internship. (4 to 8 hrs.). Planning, leadership, supervision, and program evaluation experience in community and recreation public agency program under qualified administrative leadership and University faculty supervision. (Laboratory experiences are integral part of course. Application made through Coordinator of Professional Laboratory Experiences.)

REC 490. Field Experience II. (1-1-1); I, II, III. Designed to give student practical experience under guidance of qualified leadership. (Laboratory experiences are integral part of course.) (Application made through Coordinator of Professional Laboratory Experiences.)

REC 522. Park Management and Resource and Operation. (3-0-3); I, II. Prerequisite: senior standing. Theory and current practices involved in effective management and operation of parks and recreation areas, with emphasis on management policies and procedures for efficient operation. Practical work with local, state, and federal park systems and personnel to apply theoretical knowledge in a practical situation.

REC 526. Fiscal Management in Parks and Recreation. (3-0-3); I, II. Prerequisite: senior standing. Things peculiar to recreation and park administration such as tax structures, budgets, budget preparation procedure, projecting financial aspects of recreation, and things necessary to handle properly the financial affairs in recreation and park field.

REC 528. Camping Administration. (2-0-2); I, II. Prerequisite: senior standing. Successful administration and organization of the camp.

REC 576. Special Problems in Recreation. (1 to 3 hrs.); I, II. Prerequisite: upper division or graduate classification. Designed to meet special needs of individual students. Intensive study of approved specific problems from area of recreation under direction of instructor.

REC 580. Outdoor Interpretation. (2-2-3); II, III. Procedures for conducting and supervising naturalist and outdoor interpretive programs.

REC 585. Programs and Materials for Therapeutic Recreation. (0-2-3); I, II. Prerequisite: senior standing. In-depth study of programs and materials used in therapeutic recreation. Considers various devices, activities, and materials used in programs for individuals. Practical work with individuals in therapeutic situations is stressed.

REC 599. Workshop. (1 to 3 hrs.); I, II, III. Workshop for specifically designated task orientation in recreation. May be repeated in additional subject areas. Maximum of six semester hours may be earned under this course number.

## RELIGION

*NOTE: Credit in philosophy is not given for any of the courses in religion.*

REL 221. World Religions I. (3-0-3); I. Prerequisite: PHIL 200—Introduction to Philosophy, is recommended. Origin, development, assumptions, values, beliefs, practices, great leaders, and principal events of Judaism, Christianity, Islam, and Zoroastrianism.

REL 222. World Religions II. (3-0-3); II. Prerequisite: PHIL 200—Introduction to Philosophy, is recommended. Origin, development, assumptions, values, beliefs, practices, great leaders, and principal events of Hinduism, Buddhism, Confucianism, Taoism, Jainism, Sikhism, and Shintoism.

REL 321. Early and Medieval Christian Thought. (3-0-3); on demand. Prerequisite: PHIL 200—Introduction to Philosophy, 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 recommended. Ideas concerning the nature of God, Jesus, the church, man, sin, salvation, the good life, and other issues presented by theologians and religious leaders from the beginning of the Reformation to the twentieth 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 twentieth-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 the Department of Philosophy. The student selects an approved topic in religion on which to do a directed study.

## ROBOTICS

ROB 170. Fundamentals of Robotics. (3-0-3); II. An introduction to the operations and applications of robots. Android and industrial robots; emphasis on the history, development, sociological implications, and future trends. As survey class appropriate for any college major.

ROB 270. Robotics Systems Engineering. (2-2-3); I. Prerequisite: ROB 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.

ROB 370. Robotics Interfacing Engineering. (2-2-3); II. Prerequisites: ROB 270 and EET 345. 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.

ROB 470. Robotics Applications Engineering. (0-6-3); I. Prerequisite: consent of instructor. 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.

## RUSSIAN

RUS 101. Beginning Russian I. (3-0-3). An introduction to Russian grammar beginning with the learning of the Cyrillic alphabet and progressing through a brief introduction of conjugation of verb forms and declension of adjectives and nouns.

RUS 102. Beginning Russian II. (3-0-3). Prerequisite: RUS 101 or one year of high school Russian. A continuation of RUS 101. An analysis of Russian grammar with emphasis on writing and speaking.

RUS 201. Intermediate Russian I. (3-0-3). Prerequisite: RUS 102. A continuation of Russian grammar with emphasis on vocabulary building and language structure. Russian lecture and elementary translation exercises are introduced in this course.

RUS 202. Intermediate Russian II. (3-0-3). Prerequisite: RUS 201. A continuation of RUS 201 with additional emphasis on Russian literature, translation, conversation, and writing.

RUS 301. Readings in Russian Literature. (3-0-3). Prerequisite: RUS 202. Directed study in Russian literature. The short story, poetry, prose, and essays. Review of Russian grammar as necessary. Oral practice.

RUS 302. Advanced Readings in Russian Literature. (3-0-3). Prerequisite: RUS 301. Readings in Russian from Lermontov, Turgenev, Tolstoy, Gogol, Dostoyevski, and others. Assigned readings on Russian culture and history. Review of Russian grammar as necessary.

## SCIENCE

SCI 103. Introduction to Physical Sciences. (3-0-3); I, II, III. Measurements, energy, states of matter, nature and processes of physical sciences. An interdisciplinary approach to astronomy, chemistry, earth science, and physics.

SCI 107. Introduction to Geoscience. (3-0-3); I, II, III. A general survey of Earth; its astrophysical setting, its fluid portion, its solid part, its active processes, its history, the role of geology in preserving Earth's resources. See GEOS 107.

SCI 199. Selected Topics. (1 to 6 hrs.); on demand.

SCI 200. Descriptive Astronomy. (3-0-3); I, II, III. A non-mathematical presentation of methods and results of astronomical exploration of the solar system, our stellar system, and the galaxies.

SCI 299. Selected Topics. (1 to 6 hrs.); on demand.

SCI 360. Science of Aviation. (3-0-3); I, II, III. A study of airplane systems, meteorology, navigational procedures, the medical aspects pertinent to flying, and the development of aviation. With the completion of the course, the student should be able to perform successfully on the FFA examination, one of the requirements for the private pilot's license.

SCI 389. Honors Seminar in Sciences and Mathematics. (3-0-3); I, II. A study of current environmental problems and issues, and possible solutions to these problems. In future semesters the topics and times may vary.

SCI 399. Selected Topics. (1 to 6 hrs.); on demand.

SCI 471. Seminar. (1-0-1); I, II. Prerequisite: senior standing. An introduction to research and literature in the sciences and mathematics.

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, III. Prerequisite: completion of the minimum general education requirements in sciences and mathematics. A study of teaching scientific concepts to elementary children.

SCI 499. Selected Topics. (1 to 6 hrs.); on demand.

SCI 570. Earth Science. (3-0-3); I, II, III. Selected topics from the geological sciences. (Especially designed for in-service and pre-service teachers.)

SCI 580. History of Science. (3-0-3); I, II, III. An interdisciplinary approach to the development of the scientific traditions, discoveries, and concepts from the time of ancient Egypt to the present. See BIOL 580.

SCI 591. Science for the Middle School Teacher. (2-2-3); on demand. Pedagogy, science content, and techniques applicable to the teaching of science to middle school and junior high children.

SCI 592. Science for the Secondary Teacher. (2-2-3); on demand. Prerequisite: permission of instructor. Concepts of teaching high school science with emphasis on laboratory techniques, test preparation, questioning, presentation methods, and care of equipment.

SCI 599. Selected Topics. (1 to 6 hrs.); on demand.

## SOCIAL WORK

SWK 210. Orientation to Social Welfare. (3-1-4); I, II. An introduction to the philosophy and early development of social welfare services, and exploration of the organization and function of social work practices in both the primary and secondary settings.

SWK 230. Social Work Values and Social Policy. (3-0-3); I, II. A study of values and policy formulation. Dominant values of the American society which influence social welfare policy will be compared with professional social work value commitment and social policy development and implementation.

SWK 310. Field Experiences in Social Work. (3-0-3); I, II. Observation and work experience in a social work agency under the supervision of a professional worker. Required for associate degree only.

SWK 315. Child Welfare Services. (3-0-3); I. Local, state, and national policies and programs designed to provide for the care, protection, and support of children.

SWK 322. Human Behavior in the Social Environment. (3-0-3); I, II. A study of the development of human behavior in the context of social systems. Special emphasis is placed on the development of physical and social functioning of the individual in the various stages of the life cycle.

SWK 325. Social Work Practice I. (3-0-3); I, II. The student will master at the beginning level the social work principles, practice methods, and processes essential to facilitating changes in various social systems.

SWK 330. Applied Medical Sociology. (3-0-3); II. (See SOC 330.)

SWK 425. Social Work Practice II. (3-0-3); I, II. This course is designed to enable the student to become a beginning practitioner who has integrated the knowledge and values of the profession as these apply to the interaction of persons and their social environment.

SWK 450. Research Methodology. (3-0-3); I, II, III. (See SOC 450.)

SWK 490. Senior Seminar. (1-0-1); I, II. A seminar providing an integrative experience in preparation for entering the field of employment.

SWK 500. Special Problems. (1 to 3 hrs.); I, II, III. Prerequisite: Consent of instructor and social work coordinator. Arranged with department to study a particular topic in the social work field.

SWK 510. Practicum in Social Work. (4 to 8 hrs.); I, II. Actual work experience in the various agencies of social welfare under supervision of a trained and certified professional worker.

SWK 515. Correctional Counseling. (3-0-3); II. (See COR 515.)

SWK 520. Social Work Administration and Management. (3-0-3); on demand. 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 525. Social Work Practice III. (3-0-3); I, II. The student will master advanced social work practice methods as they are applied to social systems and special populations.

SWK 530. Social Policy and Planning. (3-0-3); I, II. An analytical study of social welfare policy formulation, funding, and delivery systems and planning processes.

SWK 535. 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 will be given to the processes that affect the development and functioning of all types of groups.

SWK 540. Gerontology. (3-0-3); II. (See SOC 540.)

SWK 545. Death and Dying. (3-0-3); I. (See SOC 545.)

## SOCIOLOGY

SOC 101. General Sociology. (3-0-3); I, II, III. The nature and dynamics of human society. Basic concepts include: culture, groups, personality, social institutions, social processes, and major social forces.

SOC 170. Rural Sociology. (3-0-3); I. The cultural and social organizations of rural and urban societies with emphasis on the impact of economic changes and population movements.

SOC 201. Sociology of Corrections. (3-0-3); I, II. (See COR 201.)

SOC 203. Contemporary Social Problems. (3-0-3); I, II, III. A systematic and objective interpretation of contemporary social problems such as crime, delinquency, poverty, race relations, family problems, problems with emphasis on societal conditions under which deviance emerges, and the alleviation of such deviant behavior.

SOC 205. The Family. (3-0-3); I. The family in cross-cultural and historical perspective; as a social institution; the impact of economic and social conditions on family values, structure, functions, and roles.

SOC 302. Population Dynamics. (3-0-3); II. 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. 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. 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.

SOC 306. Juvenile Delinquency. (3-0-3); I, II. The extent, ecological distribution, and theories of delinquency in contemporary American society, including a critical examination of trends and methods of treatment of delinquency.

SOC 310. The Sociology of Deviance. (3-0-3); I. Designed to introduce the student to the sociological perspective with respect to the definition, causes, and social consequences of deviance.

SOC 312. Sociology of Sports. (3-0-3); on demand. 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 323. Urban Sociology. (3-0-3); on demand. 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. An examination of 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.

SOC 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.

SOC 374. American Minority Relations. (3-0-3); I, II. 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.

SOC 375. The Teaching of Social Studies. (3-0-3); I. (See HIS 375.) (Does not count in the major or minor.)

SOC 376. Industrial Sociology. (3-0-3); on demand. Modern industrialization as social behavior. Social conditions in the rise of industrialism and effects on the worker; collective bargaining and industrial conflict; the industrial community social classes and the industrial order.

SOC 401. Criminology. (3-0-3); on demand. Cause, treatment, and prevention of crime.

SOC 405. Sociological Theory. (3-0-3); I, II, III. An introduction to basic theoretical approaches to the study of society and a survey of contributions to the field by major theorists.

SOC 420. Seminar in Criminal Behavior. (3-0-3); II. (See COR 420.)

SOC 450. Research Methodology. (3-0-3); I, II, III. Fundamental assumptions underlying sociological research; some practical experience in research design, data collection, techniques, and data analysis.

SOC 476. Special Problems. (1 to 3 hrs.); I, II, III. Prerequisite: Consent of instructor and department head. Arranged with the department to study some particular aspect of the field of sociology.

SOC 510. Principles of Sociology. (3-0-3); on demand. This course is designed to give sociology majors an integrated perspective of the discipline and to provide an advanced introduction to graduate students entering sociology from related disciplines.

SOC 515. Family Dynamics. (3-0-3); II. An intensive analysis of the family in its social context. Emphases are placed upon social interaction within the family, socio-cultural and socio-economic factors which bear influence upon it, and the relationship of the family to the total social system.

SOC 525. 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.

SOC 540. Gerontology. (3-0-3); II. An analysis of aging designed to provide the student with a knowledge of the special factors involved in the aging process as well as the social work techniques designed to aid such individuals to cope with the changes inherent in the aging process.

SOC 545. Death and Dying. (3-0-3); I. The analysis of death and dying as social processes and problems; strategies for working with dying persons.

## SPANISH

SPA 101. Beginning Spanish I. (3-2-3); I, II. Practice in hearing and speaking through patterns.

SPA 102. Beginning Spanish II. (3-2-3); I, II. For those who have had a year of Spanish in high school or have passed 101. A continuation of SPA 101; practice hearing and speaking with patterns. Essentials of grammar.

SPA 201. Intermediate Spanish. (3-1-3); I. Prerequisite: SPA 102 or permission of the instructor. A reading course. Selections from famous modern authors to develop understanding and interpretation of the written language.



**SPA 202. Advanced Conversation.** (3-1-3); II. Prerequisite: SPA 102 or permission of the instructor. Intensive training in conversation. Films, magazines, and books used to practice different kinds of language.

**SPA 220. Grammar and Composition.** (3-0-3); I. Prerequisite: SPA 202 or permission of the instructor. Study and analysis of speaking and writing styles. Emphasis on written composition.

**SPA 301. Spanish Literature.** (3-0-3); I. A survey of the major periods and tendencies of Spanish literature from its beginning through the twentieth century.

**SPA 302. Spanish American Literature.** (3-0-3); II. A survey of major periods and tendencies of Spanish American literature from its beginning through the twentieth century.

**SPA 311. Spanish and Spanish American Poetry.** (3-0-3); II. A study of *Juglares*, *Cantares de Gesta*, *Romances*, *Mística*, *Poesía del Siglo de Oro*, *Romanticismo*, *Post Romanticismo*, *Modernismo*, *Siglo XX*.

**SPA 312. Spanish Theatre.** (3-0-3); on demand. A study of the evolution of the theatre from Juan Del Encina to Garcia Lorca.

**SPA 313. Spanish Novel.** (3-0-3); on demand. A survey of the novel from the thirteenth century, the *Novela de Caballería*, the *Picaresca*, the *Morisca*, the *Pastoril*, *Cervantes*, the *Costumbrismo*, the *Generación del 98*, the *Siglo II*.

**SPA 405. Linguistics and Language Teaching.** (3-0-3); III. For Spanish majors and minors. A seminar in various foreign languages requiring projects appropriate to the specialty of each.

**SPA 501. Advanced Grammar.** (3-0-3); on demand. Compulsory for those who plan to teach Spanish. A thorough study of the verbs and the structure of the language. Based on the Royal Academy Grammar.

**SPA 523. Don Quixote de la Mancha.** (3-0-3); on demand. A study of the masterpiece of Spanish literature.

**SPA 532. Contemporary Spanish and Spanish American Literature.** (3-0-3); on demand. A survey of significant characteristics of twentieth century Hispanic literature, including the novel, short story, drama, essay, and poetry.

**SPA 540. Seminar in Hispanic Literature.** (3-0-3); on demand. Group instruction and practices in research methods peculiar to Hispanic literature.

**SPA 545. Spanish Drama from the Generation of 1898 to the Present.** (3-0-3); on demand. A study of the major dramatists of dramatic trends from Benavente and his contemporaries through Garcia Lorca, Casona, and Buero Vallejo.

**SPA 550. The Spanish Essay from the Eighteenth Century to the Present.** (3-0-3); on demand. A study of the major essayists from Feijoo through Madariaga.

**SPA 555. Lope de Vega.** (3-0-3); on demand. A study of the major dramatic and nondramatic works of Lope de Vega.

## SPEECH

**SPCH 100. Voice and Articulation.** (3-0-3); I, II. Essentials of distinct utterance, phonetic transcription, and uses of the vocal mechanism.

**SPCH 101. Voice Production I.** (1 to 3 hrs.); upon demand. Competency-based individual voice production experiences and study with goals of increasing proficiency of student vocal production.

**SPCH 102. Voice Production II.** (1 to 3 hrs.); upon demand. Continued competency-based individual voice production experiences and study with goals of increasing proficiency of student vocal production.

**SPCH 110. Basic Speech.** (3-0-3); I, II, III. Development of proficiency in the use of oral language presentations.

**SPCH 200. Oral Interpretation.** (3-0-3); I. Communicating the meanings of prose, poetry, and dramatic literature through the use of body, voice, thought, and emotion.

**SPCH 210. Listening.** (3-0-3); I, II. The study and practice of skills in both retentive and empathic listening.

**SPCH 220. Introduction to Communication Theory.** (3-0-3); I (alternate years). A survey of communication theory with emphasis on the interpersonal aspects.

**SPCH 300. Oral Communications.** (3-0-3); upon demand. Development of appropriate classroom voice through study, exercise, practice in reading, describing, and motivating. Designed for elementary teaching majors.

**SPCH 301. Advanced Voice and Articulation.** (3-0-3); II (alternate years). Prerequisite: SPCH 100. Advanced training in voice production for the purpose of developing professional proficiency and flexibility beyond the scope of the prerequisite first course. Students may be assessed a fee for materials distributed in class.

**SPCH 305. Readers Theatre.** (3-0-3); (alternate years). Prerequisite SPCH 200 or permission of the instructor. Applying the theories of oral interpretation to an audience-oriented production.

**SPCH 310. Interpersonal Communication.** (3-0-3); I. Conceptual elements and dynamics of informal person-to-person communication in both theory and practice. Students may be assessed a fee for materials distributed in class.

**SPCH 315. Verbal Survival.** (3-0-3); upon demand. The process of communication "action-reaction." Specific skills for recognition and defense from forms of daily manipulative communication.

**SPCH 318. Nonverbal Communication.** (3-0-3); II (alternate years). Components of nonverbal communication.

**SPCH 320. Introduction to Corrective Speech.** (3-0-3); I, II. Speech Correction for the classroom teacher.

**SPCH 342. Instructional Communication.** (3-0-3); upon demand. Study and practice of the oral communication skills required for effective secondary school teaching.

**SPCH 370. Business and Professional Speech.** (3-0-3); I, II, III. Study and practice in techniques of committee work, interview, and other speech forms required in business and the professions.

**SPCH 380. Debate Practicum.** (0-2-1); upon demand. Prerequisite: consent of the instructor. Activity and research for students involved in intercollegiate debate. May be repeated for a total of 6 hours credit.

**SPCH 382. Argumentation and Debate.** (3-0-3); II (alternate years). Making rational decisions through the debate process. Analysis, evidence, briefing, and refutation.

**SPCH 383. Group Discussion.** (3-0-3); I (alternate years). Analysis of the roles of participants and leaders in problem solving with experience in conducting formal and informal groups.

**SPCH 385. Persuasion.** (3-0-3); II. Nature and methods of persuasion for influencing group opinion and action. Recommended for business majors.

**SPCH 388. Speech Practicum.** (1-2-2); I, II. Prerequisite: approval of the 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 6 hours credit.

**SPCH 470. Interviewing for Employment.** (1-0-1); II. Theory and practice of preparing for and responding to employment interviewing.

**SPCH 471. Speech-Dramatic Arts Seminar.** (1-0-1); upon demand. Resources and research techniques in speech and dramatic arts.

**SPCH 510. Advanced Public Speaking.** (3-0-3); upon demand. Preparation and delivery of longer and more complex speeches.

**SPCH 521. Classical Rhetorical Theory.** (3-0-3); upon demand. In-depth study of the rhetorical theory of Plato, Aristotle, Cicero, and other writers of the Greek and Roman periods.

**SPCH 522. Contemporary Rhetorical Theory.** (3-0-3); upon demand. Prerequisite: SPCH 521 or permission of the instructor. Development of rhetorical and communication theory from the Renaissance to the present.

**SPCH 523. Rhetorical Criticism.** (3-0-3); upon demand. Application of classical and modern rhetorical theory; analysis and criticism of selected speeches.

**SPCH 527. American Public Address.** (3-0-3); upon demand. Major speeches, speakers, and movements in America from the Colonial Period to the New Deal.

**SPCH 530. Contemporary Public Address.** (3-0-3); upon demand. Major speeches, speakers, and movements from the 1930s to the present.

**SPCH 567. Organizational Communication.** (3-0-3); II. A study of the dynamic function of communication which occurs within various organizational structures and related professional environments. Students may be assessed a fee for material distributed in class.

**SPCH 570. Parliamentary Procedure.** (3-0-3); II (alternate years). Theory and application of procedures used by profit and non-profit organizations.

**SPCH 571. Interviewing.** (3-0-3); II (alternate years). A detailed study of the various business interview types, coupled with role-playing experiences.

**SPCH 583. Small Group Communication.** (3-0-3); upon demand. Prerequisite: SPCH 383 or permission of instructor. Current theory and related concepts regarding the discussion process.

**SPCH 595. Administering the Communications Program.** (3-0-3); I (alternate years). Development and management of communications programs, including co-curricular activities. Students may be assessed a fee for materials distributed in class. (Lab fees will be assessed for each student.)

**SPCH 597. Administering and Supervising the Co-Curricular Communication Arts Program.** (3-0-3); upon demand. Prerequisite: SPCH 110. Nature, objectives, and values of a forensics program. Traditional high school forensic events with a laboratory experience in each. Students may be assessed a fee for materials distributed in class.

## THEATRE

**THEA 100. Fundamentals of the Theatre.** (2-2-3); I, II. An introduction to the theatre as an art form, its historic and organizational structure. For theatre majors and minors.

**THEA 110. Introduction to the Theatre.** (3-0-3); I, II. Acting, set design, costume design, theatre architecture, lighting, playwriting, and make-up. For non-theatre majors and minors.

**THEA 130. Summer Theatre I.** (4-0-4); III. May be repeated. Prerequisite: acceptance to summer theatre or by permission. Practical experience in production with work in laboratory environment. A limit of four hours may be credited toward a degree program. Credit hours earned which exceed the limit may be applied to the minimum requirements for the A.B. degree.

**THEA 200. Introduction to Dramatic Literature.** (3-0-3); I, II. Representative dramatic literature from Greek antiquity to the present.

**THEA 208. Beginning Ballet.** (1-4-3); I. 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 284. Acting Techniques.** (3-0-3); I. A study of acting from both the aesthetic and the practical viewpoints; exercises in pantomime and vocal techniques.



**THEA 300. Elements of Play Production.** (3-0-3); I. Problems of play production; choice of script, casting production and backstage organization, and directing.

**THEA 308. Intermediate Ballet.** (1-4-3); II. Prerequisite: THEA 208 or permission of instructor. A further study of ballet techniques and profiles of famous dancers.

**THEA 309. Tap Dancing.** (1-4-3); I. A study and application of tap dance techniques.

**THEA 310. Stage Movement.** (2-0-2); upon demand. The study and practice of stage fighting and movement in various historical periods.

**THEA 311. Theatre Practicum I.** (1 to 3 hrs.); upon demand. May be repeated. Prerequisite: THEA 100 or approval of instructor. To provide independent guided study for the development of specialization in specific areas of the theatre.

**THEA 312. Theatre Practicum II.** (1 to 3 hrs.); upon demand. May be repeated. Prerequisite: THEA 311. A continuation of Theatre 311.

**THEA 313. Theatre Practicum III.** (1 to 3 hrs.); upon demand. May be repeated. Prerequisite: THEA 312. A continuation of Theatre 312.

**THEA 315. Stage Make-up.** (2-2-3); upon demand. Study and application of make-up and techniques for the stage.

**THEA 316. Stage Properties.** (2-2-3); upon 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); upon demand. The study and practice of paints and painting techniques as they apply to the scenic artist.

**THEA 320. Sceneographic and Drawing Techniques.** (2-2-3); I. Prerequisite: THEA 210 or consent of instructor. The study and practice of basic drawing techniques which uniquely apply to theatrical design and mechanical working drawing for stage scenery.

**THEA 321. Stage Lighting.** (2-2-3); upon demand. Prerequisite: THEA 210 and 320. The mechanical and artistic approach to stage lighting; study of electrical theory and instrument utilization.

**THEA 322. Scene Design.** (2-2-3); II. Prerequisite: THEA 210 and 320. The study of design theories with the creation and development of scene design projects and rendering techniques.

**THEA 325. Stage Costume and History I.** (1-4-3); upon demand. Creation of costume design with emphasis on the principles of design and rendering techniques related to historic design.

**THEA 326. Stage Costume and History II.** (1-4-3); upon demand. Creation of costume design with emphasis on the principles of design and rendering techniques related to historic design.

**THEA 327. Creative Sewing for the Theatre I.** (1-4-3); upon demand. A course in creating original patterns for stage costumes and construction techniques.

**THEA 328. Creative Sewing for the Theatre II.** (1-4-3); upon demand. An advanced course in creating original patterns for stage costumes.

**THEA 330. Summer Theatre II.** (4-0-4); III. Prerequisite: THEA 130 and acceptance to summer theatre company. Crew assignments in areas other than those completed in THEA 130. May be repeated. A limit of four hours may be credited towards a degree program. Credit hours earned which exceed the limit may be applied to the minimum requirements for the A.B. degree.

**THEA 354. Theatre History.** (3-0-3); I. A study of the origins and development of theatre.

**THEA 375. Creative Dramatics.** (3-0-3); I, II. An analysis and application of principles of creative dramatics as applied to classroom curricular activities.

**THEA 380. Play Directing.** (3-0-3); II. Prerequisite: THEA 100 and 210 or permission of instructor. Theories and principles of directing; director's interpretation; casting; planning action and making the prompt-book.

**THEA 408. Advanced Ballet.** (1-4-3); upon demand. Prerequisite: THEA 308 or permission of instructor. Advanced study of ballet techniques and profiles of historic dances.

**THEA 512. Playwriting.** (3-0-3); on demand. Prerequisite: THEA 200, THEA 100, or by permission of instructor. An analysis of the structure of plays and the writing of original scripts.

**THEA 513. 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 530. Summer Theatre III.** (4-0-4); may be repeated. Prerequisites: THEA 300 and acceptance to summer theatre company. Advanced assignments in set and costume design or advanced acting and directing.

**THEA 552. Early Dramatic Literature.** (3-0-3). A detailed study of representative plays from the Greeks to mid-nineteenth century.

**THEA 553. Modern Dramatic Literature.** (3-0-3); II. A detailed study of the drama from the growth of realism to the present day.

**THEA 555. Dramatic Criticism.** (3-0-3); on demand. Prerequisite: THEA 200, THEA 100, THEA 554, or by permission of instructor. Dramatic theory and criticism as developed through Aristotle, Horace, the middle ages, the Renaissance, and the twentieth century.

**THEA 562. Advanced Acting.** (3-0-3); II. Prerequisite: THEA 284. Advanced study of acting, including analysis and development of characters in acting situations.

**THEA 563. Advanced Costuming.** (2-2-3); I. Prerequisite: THEA 326 or permission of instructor. Designing costumes for theatrical production, making patterns, and the fabrication of garments for the stage.

**THEA 564. Advanced Scene Design.** (2-2-3); II. Prerequisite: THEA 210, 320, and 322 or permission of instructor. To develop greater proficiency in the skills of scenic design as applied to specific problems and theatrical productions.

**THEA 565. Advanced Stage Lighting.** (2-2-3); II. Prerequisite: THEA 210, 320, and 322 or permission of instructor. To develop proficiency in the skills of lighting specific productions; to research topics and special problems pertaining to stage lighting.

**THEA 570. Children's Theatre.** (3-0-3); II. Prerequisite: THEA 100. A concentrated study of the problems involved in organization and production of plays for and with children.

## VETERINARY TECHNOLOGY

**VET 102. Introduction to Veterinary Technology.** (2-3-3); I. Prerequisite: Program acceptance. Introduction to Veterinary Technology and its relationship to Veterinary Medicine, including professional ethics, jurisprudence and medical terminology. The laboratory emphasizes performance of basic clinical tasks, including client education, physical exams, restraint and animal care.

**VET 105. Anatomy of Domestic Animals.** (2-2-3); I. Prerequisite: Program acceptance. A study of the anatomical structures of the animal body, including normal and abnormal cell and tissue types, organs and organ systems of small, large and laboratory animals. The cat will be used for dissection.

**VET 106. Animal Science and Breeds Identification.** (2-2-3); I. Prerequisite: Program acceptance. A study of large and small animal science related to the practice of Veterinary Medicine including breeds identification and recognition, practical feeding, breeding, genetics, conformation and animal sheltering. 60% small animal-40% large animal.

**VET 107. Laboratory Techniques I.** (2-2-3); I. Prerequisite: Program acceptance. A study of the principles and practices of clinical pathology, designed to develop manual dexterity and clinical accuracy in collecting and processing pathological specimens. Includes comparative hematology, heartworm and fecal exams, with emphasis on theory of tests utilized in the veterinary laboratory.

**VET 206. Physiology of Domestic Animals.** (2-2-3); II. Prerequisite: VET 105. A study of the basic normal and abnormal life processes and functions of the animal body with emphasis on the body systems. Practical laboratory application of lecture theory will be included.

**VET 208. Laboratory Techniques II.** (2-3-3); II. Prerequisite: VET 107. A continuation of the study of clinical pathology; including theory and skill development of blood chemistries, serological tests, urinalysis, cytology, and semen evaluation necessary to provide accurate laboratory results for the practicing veterinarian. Collection and shipment of laboratory specimens to reference laboratories is emphasized.

**VET 210. Parasitology and Entomology.** (2-0-2); III. Prerequisite: VET 107. A study of common internal, external and blood parasites of domestic animals including etiology, life cycles, clinical manifestation, diagnosis, treatment and control. Public health concerns of animal parasites are included.

**VET 215. Clinical Practices I.** (1-3-2); II. Prerequisite: VET 102. A study of the essential clinical tasks related to handling, care and treatment of small and laboratory animals. Surgical nursing and surgery room procedures will be emphasized.

**VET 220. Clinic Rotation I.** (0-6-1); II. Prerequisite: VET 102 and 107. This course provides 90 hours of supervised clinical experience in veterinary clinical pathology, office management, and surgical assisting.

**VET 221. Clinic Rotation II.** (0-6-1); III. Prerequisite: VET 220. This course provides 90 hours of supervised clinical experience in pharmacy management, anesthesia administration, and surgical assisting.

**VET 222. Clinic Rotation III.** (0-6-1); I. Prerequisite: VET 221. This course provides 90 hours of supervised clinical experience in large animal surgical assisting, herd preventive medicine and regulatory control procedures.

**VET 308. Laboratory Techniques III.** (2-2-3); III. Prerequisite: VET 208. A study of the clinical application of microbiology in veterinary medicine focusing on bacteriology and mycology with an introduction to virology, including collecting, culturing, identifying and sensitivity testing of veterinary medical specimens.

**VET 315. Clinical Practices II.** (1-3-2); I. Prerequisite: VET 215. A study of the restraint, treatment, and surgical procedures in large animal medicine, including regulatory requirements, mastitis control, meat inspection and necropsy.

**VET 333. Small Animal Diseases and Nutrition.** (2-0-2); I. Prerequisite: VET 206, and VET 308. A study of canine and feline disease processes with emphasis on zoonosis, client education, and nutrition of diseased animals.

**VET 339. Pharmacology for the Veterinary Technician.** (2-2-3); III. Prerequisite: VET 206. A study of the nomenclature and classification of therapeutic, anesthetic and nutritional agents used in current veterinary medicine. Pharmacy maintenance, dispensing and dosage calculations will be emphasized. The laboratory will include administration of anesthesia to large and small animals.

**VET 340. Radiology.** (2-3-3); II. Prerequisite: VET 105. A study of the radiographic principles of veterinary medicine, including operation of the X-Ray machine, positioning of the patient, film identification, film processing and safety procedures necessary to produce radiographs of diagnostic value.

**VET 346. Large Animal Diseases and Nutrition.** (3-0-3); I. Prerequisite: VET 206, and VET 308. A study of the disease processes of the equine, bovine, por-

cine, ovine and caprine species, with emphasis on client communication pertaining to zoonosis, control, and nutritional support of diseased animals.

**VET 350. Laboratory Animal Medicine.** (2-0-2); III. Prerequisite: VET 206, and VET 215. A study of laboratory animal medicine and care including restraint, housing, breeding, common diseases and nutrition of rabbits, rats, mice, guinea pigs, hamsters, primates and avian species to prepare the student for the American Association for Laboratory Animal Science (AALAS) provisional Certification Examination.

**VET 360. Preceptorship.** (0-40-10-); II. Prerequisite: Satisfactory completion of all other Vet. Tech. Associate degree requirements. The preceptorship consists of 14 weeks (600 hours) of supervised work experience with selected graduate licensed veterinarians. Weekly written reports by the student, supervisor evaluation reports and visitation by the program coordinator to monitor the student's progress. A two week seminar at the completion of the supervised work experience is conducted upon return to MSU campus.

## WELDING TECHNOLOGY

**WEL 101. Oxyacetylene Welding.** (3-0-3); I. Instruction on equipment, material, and supplies needed for oxyacetylene welding, including chemistry of gases, torches, regulators, and required techniques needed for ferrous and nonferrous materials.

**WEL 101A. Oxyacetylene Welding Laboratory.** (0-9-3); I. Application of theory, including preparation of equipment and welding of different materials in both in-position and out-of-position joints.

**WEL 102. Arc Welding.** (3-0-3); II. Principles of stick electrode welding, including power supplies, polarities, type electrodes, and techniques required for ferrous and nonferrous materials.

**WEL 102A. Arc Welding Laboratory.** (0-9-3); II. Application of theory, including weld joint design and fabrication techniques in the development of several required weld joint coupons and other media.

**WEL 201. Inert Gas Welding.** (3-0-3); I. Basic theory of inert gas consumable and nonconsumable welding techniques, including necessary equipment, power supplies, and inert gas.

**WEL 201A. Inert Gas Welding Laboratory.** (0-9-3); I. Application of theory through development of welds requiring machine set-up for proper techniques and required adjustments. Students will prepare joints on several types of metals using proper techniques.

**WEL 202. Weld Joint Design and Testing.** (3-0-3); II. Basic static and dynamic calculation for development of standard butt, fillet, t-joints, and others commonly used in industrial fabrication and manufacturing product design.

**WEL 204. Welding Codes and Blueprint Reading.** (3-0-3); II. Study of A.W.S. standard welding symbols and A.S.T.M. codes normally used in weld design engineering. Common engineering graphic techniques associated with weld joint design and structural engineering.

**WEL 205. Welding Metallurgy.** (3-0-3); I. Physical and chemical metallurgical characteristics commonly associated with phase changes during and after fusion techniques of ferrous and nonferrous metals.

**WEL 307. Automated Welding Technology.** (0-6-3); II. 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.

**WEL 386. Welding I.** (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.

Administrative Directory

Board of Regents

Robert M. Duncan, Inez  
Lloyd Cassity, Ashland  
Walter Carr, Morehead  
Eunice Caston, Winchester  
Forest M. Skaggs, Lynch  
Harry LaViers Jr., Irvine  
Patricia Ann Burchett, Paintsville  
James M. Richardson, Owingsville  
John R. Duncan, Faculty  
Margaret Holt, Student

Officers of the Board

Robert M. Duncan, Chairman  
James M. Richardson, Vice Chairman  
Porter Dailey, Treasurer  
Carol Johnson, Secretary

Office of the President

Herb. F. Reinhard Jr., President  
Richard L. Baxter, Executive Assistant to the President  
William H. Walker Jr., University Attorney

Academic Affairs

Roberta T. Anderson, Vice President for Academic Affairs  
D. Michael Mincey, Assistant to the Vice President for Academic Affairs  
Dean of Graduate Programs and Academic Services (to be named)  
Patty Watts, Coordinator of Graduate Programs  
John Kleber, Director of Honors Program  
Director of Libraries (to be named)  
Stephen Taylor, Director of Academic Assessment  
Gene Ranvier, Registrar  
Albert Bowen, Director of Admissions  
George W. Eyster, Director of Continuing Education  
Don Fogus, Director of Appalachian Development Center  
Carole Morella, Director of Research, Grants and Contracts  
George Troutt, Coordinator of In-Service Education  
Betty Moran, Director of Trio Programs

Applied Sciences and Technology, College of

Charles Derrickson, Dean  
Head, Department of Agriculture and Natural Resources (to be named)  
Michael J. Shaner, Head, Department of Home Economics  
Robert Newton, Head, Department of Industrial Education and Technology  
Betty M. Porter, Head, Department of Nursing and Allied Health Sciences

Arts and Sciences, College of

Robert Burns, Dean  
Thomas Sternal, Head, Department of Art  
Jerry Howell, Head, Department of Biological and Environmental Sciences  
Jack Wilson, Head, Department of Communications  
Ronald Dobler, Head, Department of English, Foreign Languages, and  
Philosophy  
Broadus Jackson, Head, Department of Geography, Government, and  
History  
Glenn Johnston, Head, Department of Mathematics  
Christopher Gallaher, Head, Department of Music  
John Philley, Head, Department of Physical Sciences

Professional Studies, College of

Dean (to be named)  
Bernard Davis, Head, Department of Business and Economics

Paul McGhee, Head, Department of Education  
Earl Bentley, Head, Department of Health, Physical Education, and  
Recreation  
Alan Baldwin, Professor of Military Science  
George Tapp, Head, Department of Psychology  
Head, Department of Sociology, Social Work, and Corrections (to be  
named)

Administrative and Fiscal Services

Porter Dailey, Vice President for Administrative and Fiscal Services  
Joe Planck, Acting Director of Physical Plant  
Nida Saavedra, Director of Food Services  
Michael R. Walters, Director of Business Services  
Ronald W. Moss, Director of Personnel Services  
Jane Howell, Personnel Officer  
William Rosenberg, Director of Communication Services  
Gary Messer, Director of Safety and Security  
Norma Froehlich, Budget/Policy Analyst  
Linda Higginbotham, Coordinator of Institutional Research  
Frank Burns, Property Accounting Officer  
Virginia Caudill, Payroll Officer  
Robert W. Stokes, Purchasing Officer  
Larry Netherton, General Manager of WMKY  
K. Martin Huffman, Manager of Printing Services  
John Collis, Manager of University Store  
Tim Rhodes, Bursar  
Jim Wells, Manager, University Golf Course  
Debbie Atkinson, Acting Director of Computing Services  
William Mahaney, Manager of Computing Applications

Athletics

G.E. Moran Jr., Director of Athletics  
John Allen, Assistant Director of Athletics

Student Development

G. Gary Grace, Vice President for Student Development  
Larry Stephenson, Acting Director of University Center/Student Activities  
and Director of Administrative Services  
Jack Henson, Manager of University Center Services  
Clyde James, Coordinator of Greek Affairs and Student Organizations  
Susette Redwine, Coordinator of University Center Programs and Special  
Events  
Robert M. (Mickey) Wells, Director of Intramurals and Recreation  
Gary Silker, Director of University Counseling Center  
International Student Advisor (to be named)  
Dan Anderson, Counselor  
Anna Mae Riggle, Counselor for Non-Traditional Students  
Jerry Gore, Director of Minority Student Affairs  
Jane Blair, Director of Student Health Services  
Ronald Walke, Director of Financial Aid  
Ellen Carscaddon, Associate Director of Financial Aid  
Madonna Huffman, Director of Residence Life  
Jim Morton, Director of Student Housing  
Kenny White, Associate Director of Student Housing  
Director of Career Planning and Placement (to be named)

University Relations

Keith Kappes, Assistant to the President for University Relations and  
Director of Conferences  
Judith Casto, Director of Public Information  
George Burgess, Manager of Photographic Services  
Mary Bragg, Publications Editor  
William Redwine, Director of Development  
Tami Blong, Planned Giving Officer  
Don Young, Director of Alumni Relations  
Lois Howell, Alumni Activities Officer  
Pauline Davis, Alumni Records Specialist  
David Brunk, Director of the Eagle Athletic Fund



## Faculty

*The date in parentheses after the name is that of first appointment to a position on the faculty of this university.*

### College of Applied Sciences and Technology

#### Department of Agriculture and Natural Resources

Donald Lyn Applegate, associate professor (1984), D.V.M., Auburn University  
 Joe F. Bendixen, professor (1971), Ph.D., Iowa State University  
 J. Wesley Blakely, chairholder in mining (1983), B.A., Concord College  
 Andrew C. Boston, professor (1982), Ph.D., Oklahoma State University  
 Gene D. Carswell, instructor (1978), B.S., Middle Tennessee State University  
 Charles M. Derrickson, professor (1965), Ph.D., Michigan State University  
 Barbara Krakoff, instructor (1981), B.A., A.H.T., State University College of New York at Buffalo  
 James C. Martin, associate professor (1975), Ph.D., University of Missouri  
 Tamara A. McMillan, instructor (1979), B.S., William Woods College  
 Martha Norris, associate professor (1976), Ed.S., Morehead State University  
 Charles Brent Rogers, assistant professor, Ph.D., University of Arkansas  
 Scott W. Rundell, assistant professor (1984), D.V.M., Michigan State University  
 Vivian S. Trent, instructor (1984), B.S., Morehead State University  
 Judith G. Willard, associate professor (1977), Ph.D., University of Kentucky  
 Robert H. Wolfe, associate professor (1967), M.S., Virginia Polytechnic Institute and State University

#### Department of Home Economics

Jane C. Ellington, assistant professor (1981), M.S., University of Kentucky  
 Carolyn Flatt, instructor (1971), M.A., Morehead State University  
 Nancy Graham, R.D., assistant professor (1975), M.S., University of Kentucky  
 J. Michael Shaner, associate professor (1984), Ph.D., University of North Carolina at Greensboro  
 Carolyn Taylor, assistant professor (1974), Ed.S., Morehead State University  
 Betty Fritz Woodard, instructor (1980), M.S., University of Kentucky

#### Department of Industrial Education and Technology

Gerald T. Baron, associate professor (1985), Ed.D., Arizona State University  
 Robert T. Hayes, assistant professor (1974), M.S., Eastern Kentucky University  
 Richard Jinbo, assistant professor (1981), M.S., Bowling Green State University  
 Dennis Karwatka, associate professor (1970), M.S., Indiana State University  
 Wayne Morella, assistant professor (1971), Ph.D., Southern Illinois University  
 Jeff Murphy, instructor (1980), M.S., Morehead State University  
 Edward G. Nass, associate professor (1963), M.S.Ed., Northwestern State College of Louisiana  
 Robert E. Newton, professor (1963), Ed.D., Texas A & M University  
 Meade S. Roberts, associate professor (1966), M.Ed., University of Cincinnati  
 Ronald Tucker, professor (1968), Ed.D., Oklahoma State University  
 Pepper A. Tyree, assistant professor (1973), M.S., Murray State University  
 John VanHoose, assistant professor (1976), M.S., Morehead State University

#### Department of Nursing and Allied Health Sciences

Alta Blair, instructor (1984), B.S.N., University of Kentucky  
 Janice Brumagen, assistant professor (1972), M.A.C.E., Morehead State University  
 Barbara Crisp, instructor (1982), B.U.S., R.T.(R)A.R.R.T., Morehead State University  
 Jacklynn K. Darling, instructor (1979), M.S., R.T.(R)A.R.R.T., Morehead State University

Janet Gross, assistant professor (1983), M.S.N., University of Kentucky  
 Sheryl Luchtefeld, instructor (1980), B.S.N., Southern Illinois University  
 Barbara S. Moore, assistant professor, M.S.N., University of Kentucky  
 Betty Porter, associate professor (1971), M.S.N., University of Kentucky  
 Pauline Ramey, assistant professor (1973), Ed.S., Morehead State University  
 Rae P. Smith, assistant professor (1983), B.S.R.T.(R)A.R.R.T., Alderson-Broadus College  
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### College of Arts and Sciences

#### Department of Art

David Bartlett, associate professor (1980), M.F.A., University of Michigan  
 Bill R. Booth, professor (1970), Ph.D., University of Georgia  
 Dixon Ferrell, associate professor (1980), M.F.A., University of Mississippi  
 Robert Franzini, associate professor (1980), M.F.A., University of Iowa  
 Ryan Howard, professor (1972), Ph.D., University of Michigan  
 Roger H. Jones, professor (1965), Ed.D., Indiana University  
 Joe D. Sartor, assistant professor (1968), M.A., University of Missouri  
 Thomas Sternal, professor (1984), M.F.A., University of Montana  
 Stephen Tirone, assistant professor (1982), M.F.A., University of Wisconsin

#### Department of Biological and Environmental Sciences

David M. Brumagen, professor (1965), Ph.D., University of Kentucky  
 Fred M. Busroe, associate professor (1967), M.A., University of Virginia  
 Gerald L. DeMoss, professor (1968), Ph.D., University of Tennessee  
 Richard G. Eversole, assistant professor (1965), M.A., Morehead State University  
 Jerry F. Howell Jr., professor (1972), Ph.D., University of Tennessee  
 David T. Magrane, professor (1976), Ph.D., University of Arizona  
 David L. McNeely, assistant professor, (1983), Ph.D., Oklahoma State University  
 Leslie E. Meade, associate professor (1971), M.S., Morehead State University  
 Ted Pass II, professor (1972), Ph.D., Virginia Polytechnic Institute and State University  
 Madison E. Pryor, professor (1964), Ph.D., University of Tennessee  
 David J. Saxon, professor (1967), Ph.D., Southern Illinois University  
 Howard L. Setser, professor (1964), Ph.D., University of Kentucky  
 Craig T. VanBell, assistant professor (1984), Ph.D., University of Iowa

#### Clinical Faculty

Harry G. Browne (1956), M.D., Cornell University Medical College  
 Victor Y. Cabanas (1966), M.D., Cebu City, Philippines  
 Martha J. Cope, M.T. (ASCP) (1972), B.S., Murray State University  
 LaVerne Floyd (1972), M.A., Tennessee Technological University  
 Marie M. Keeling, M.D. (Medical Director)  
 Helen Layman, M.T. (ASCP) (1960), B.S., Spalding College  
 Kirit T. Patel (1968), M.D., University of Baroda  
 Helen Pater, M.T. (ASCP) (1962), B.A., Mt. St. Joseph College  
 James Richard Roush (1970), M.D., University of Indiana  
 Henry T. Russell (1972), Ph.D., Purdue University  
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#### Department of Communications

Narain D. Batra, associate professor (1981), Ph.D., Gujarat University  
 Michael Biel, associate professor (1978), Ph.D., Northwestern University  
 William David Brown, associate professor (1966), M.A., Louisiana State University  
 George Burgess, assistant professor (1964), M.A., Morehead State University  
 David Collins, instructor (1981), M.A., Marshall University  
 Larry Dales, assistant professor (1974), M.A., Brigham Young University  
 Richard Dandeneau, professor (1981), Ph.D., Southern Illinois University  
 Dale Greer, instructor (1982), M.A., Morehead State University

Charles E. Grimsley Sr., assistant professor (1984), Ph.D., Northwestern University  
 Earlan Hamm, associate professor (1965), M.A., Bowling Green State University  
 Travis Lockhart, assistant professor (1982), Ph.D., University of Texas  
 Phil Martin, instructor (1983), M.A., Ohio University  
 Robert Paige, associate professor (1983), Ph.D., Southern Illinois University  
 James E. Quisenberry, professor (1968), Ph.D., Ohio University  
 Tom E. Scott III, assistant professor (1976), M.A., Morehead State University  
 Joyce E. Whiting, assistant professor (1975), M.A., Morehead State University  
 Jack E. Wilson, professor (1967), Ph.D., Michigan State University  
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## Department of English, Foreign Languages, and Philosophy

### English and Foreign Languages

Robert L. Burns, professor (1983), Ph.D., University of Louisville  
 Lenna E. Campbell, associate professor (1966), M.A., Morehead State University  
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 Barbara Dale Dillinger, assistant professor (1983), Ph.D., Indiana University  
 Ronald Dobler, professor (1972), Ph.D., University of Iowa  
 Marc D. Glasser, professor (1972), Ph.D., Indiana University  
 Bernard G. Hamilton, assistant professor (1963), A.M., University of Mississippi  
 Frances L. Helphinstine, professor (1966), Ph.D., Indiana University  
 Joyce C. LeMaster, associate professor (1961), M.A., Morehead State University  
 Ma M. Lowe, assistant professor (1970), M.A., Morehead State University  
 George A. Mays, assistant professor (1969), M.H.E., Morehead State University  
 Edward E. Morrow, assistant professor (1961), A.M., George Peabody College  
 Mary M. Netherton, associate professor (1964), M.A., University of Kentucky  
 Rose Orlich, professor (1970), Ph.D., Notre Dame University  
 Jessie C. Payne, assistant professor (1966), A.M., Auburn University  
 Charles Pelfrey, professor (1962), Ph.D., University of Kentucky  
 Betty H. Peters, assistant professor (1975), M.H.E., Morehead State University  
 Glenn C. Rogers, professor (1967), Ph.D., University of North Carolina  
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 K. Thomas, professor (1964), Ed.D., Tulsa University  
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### Philosophy

Betty R. Gurley, professor (1969), Ph.D., Southern Illinois University  
 George M. Luckey, professor (1961), Ph.D., Southern Illinois University  
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## Department of Geography, Government, and History

### Geography

Roland L. Burns, professor (1972), Ed.D., University of Southern Mississippi  
 William T. Clark, professor (1964), Ph.D., University of Kentucky  
 Mary C. Cox, professor (1970), D.A., University of Northern Colorado  
 Robert B. Gould, professor (1963), Ph.D., University of Tennessee  
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### Government

Indsey R. Back, professor (1974), Ph.D., University of Tennessee  
 Jack E. Bizzel, professor (1966), Ph.D., Southern Illinois University  
 William Green, assistant professor (1984), Ph.D., State University of New York at Buffalo  
 Kenneth E. Hoffman, associate professor (1968), M.A., University of Nebraska  
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## History

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 James Gifford, adjunct associate professor (1978), Ph.D., University of Georgia  
 John J. Hanrahan, professor (1969), Ph.D., Fordham University  
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 Victor B. Howard, professor (1966), Ph.D., Ohio State University  
 Broadus B. Jackson, professor (1969), Ph.D., Indiana University  
 John E. Kleber, professor (1968), Ph.D., University of Kentucky  
 Perry E. LeRoy, professor (1961), Ph.D., Ohio State University  
 Stuart S. Sprague, professor (1968), Ph.D., New York University  
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## Department of Mathematical Sciences

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 Glenn E. Johnston, professor (1969), Ph.D., Texas Tech University  
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 Robert J. Lindahl, professor (1970), Ph.D., University of Oregon  
 Nell F. Mahaney, assistant professor (1963), M.A., Morehead State University  
 James D. Mann, associate professor (1966), M.M., University of South Carolina  
 Dixie M. Moore, assistant professor (1963), M.A., Marshall University  
 Gordon Nolen, associate professor (1967), M.S., University of Kentucky  
 Ted M. Pack, instructor (1980), A.M.E.D., Morehead State University  
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## Department of Music

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 Anne Beane, instructor (1978), M.M., Morehead State University  
 James R. Beane, associate professor (1959), M.M., Louisiana State University  
 William M. Bigham, professor (1965), Ph.D., Florida State University  
 Harold Leo Blair, associate professor (1975), M.F.A., Ohio University  
 Suanne Blair, assistant professor (1969), M.M., University of Southern California  
 James W. Bragg, associate professor (1963), M.M., New England Conservatory of Music  
 R. Jay Flippin, associate professor (1969), M.M., Morehead State University  
 E. Glenn Fulbright, professor (1960), Ph.D., Indiana University  
 Christopher S. Gallaher, professor (1972), Ph.D., Indiana University  
 JoAnne Keenan, instructor (1976), M.M., Morehead State University  
 Larry W. Keenan, associate professor (1967), M.M., Indiana University  
 Milford Kuhn, associate professor (1976), M.M., Miami University  
 Earle L. Louder, professor (1968), D.M., Florida State University  
 Edward Malterer, associate professor (1977), D.A., Ball State University  
 Frederick A. Mueller, professor (1967), D.M., Florida State University  
 Eugene C. Norden, assistant professor (1968), M.M., Morehead State University  
 Frank Oddis, assistant professor (1977), M.M., East Carolina University  
 Robert D. Pritchard II, assistant professor (1972), M.M., Duquesne University  
 Raymond Ross Jr., assistant professor (1978), M.M., North Texas State University  
 John K. Stetler, associate professor (1959), M.M., Wichita State University  
 Lucretia M. Stetler, assistant professor (1964), M.M., Morehead State University  
 Vasile J. Venettozzi, associate professor (1966), M.M., Eastman School of Music

## Department of Physical Sciences

### Chemistry

H. Wade Cain, assistant professor (1982), Ph.D., Auburn University  
 Herbert C. Hedgecock Jr., assistant professor (1980), Ph.D., University of Tennessee  
 Richard L. Hunt, associate professor (1980), Ph.D., University of Chicago  
 Lamar B. Payne, professor (1962), Ph.D., University of Alabama

### Geosciences

David K. Hylbert, professor (1963), Ph.D., University of Tennessee  
 Charles E. Mason, assistant professor (1983), M.S., George Washington University  
 John C. Philley, professor (1960), Ph.D., University of Tennessee

## Physics

Russell M. Brangelman, professor (1967), Ph.D., Georgia Institute of Technology  
David R. Cutts, professor (1968), Ph.D., University of Tennessee  
Charles J. Whidden, professor (1968), Ph.D., Virginia Polytechnic Institute and State University

## Science Education

Maurice E. Esham, associate professor (1968), Ed.D., Virginia Polytechnic Institute and State University  
William R. Falls, professor (1961), Ed.D., Indiana University  
Ronald L. Fiel, professor (1972), Ed.D., Indiana University  
Carl V. Ramey, associate professor (1973), Ed.D., Indiana University

## College of Professional Studies

### Department of Business and Economics

John M. Alcorn, associate professor (1976), M.B.A., Georgia State University  
Bonnie H. Bailey, instructor (1979), M.B.A., Morehead State University  
Ray Bernardi, professor (1984), Ph.D., University of Oklahoma  
Herbert Berry, associate professor (1980), Ph.D., New York University  
Roland Buck, assistant professor (1983), Ph.D., Texas A&M University  
Everett Cambell, professor (1983), Ph.D., Temple University  
Rodger D. Carlson, professor (1983), Ph.D., Claremont University College  
C. Dale Caudill, instructor (1980), M.B.A., Morehead State University  
Alex D. Conyers, associate professor (1958), M.B.A., University of Kentucky  
William Counts, systems analyst (1961), B.S., Morehead State University  
Bernard Davis, professor (1978), Ph.D., University of Kentucky  
John Graham III, assistant professor (1967), M.H.E., Morehead State University  
Jack Henson, assistant professor (1970), M.S.E., Arkansas State University  
Clifford S. Hunt, instructor (1984), M.B.E., Morehead State University  
Sue Y. Luckey, professor (1963), Ph.D., Southern Illinois University  
Louis S. Magda, professor (1966), Ph.D., Josef Nador University  
Eugene Martin, professor (1972), Ed.D., University of Cincinnati  
Teresa McGlone, assistant professor (1984), M.B.A., Marshall University  
Vernon McGlone, assistant professor (1984), M.B.A., University of Kentucky  
Robert E. Meadows, professor (1982), D.B.A., Kent State University  
Green R. Miller, assistant professor (1979), M.A., University of Oregon  
Carole C. Morella, assistant professor (1966), M.A., Morehead State University  
Thomas C. Morrison, professor (1969), Ph.D., North Carolina State University  
Paul J. Mulcahy, systems analyst (1981), B.B.A., Morehead State University  
Helen A. Northcutt, assistant professor (1966), A.M., Morehead State University  
John W. Osborne, assistant professor (1977), M.B.A., Eastern Kentucky University  
Mary Peggy Osborne, assistant professor (1979), M.B.A., Morehead State University  
Gail C. Ousley, assistant professor (1969), M.B.E., Morehead State University  
Rosemary Peavler, assistant professor (1983), M.B.A., University of Kentucky  
Jack W.R. Peters, associate professor (1979), Ph.D., University of North Dakota  
Bill B. Pierce, professor (1964), Ed.D., Wayne State University  
Margaret Robbins, assistant professor (1984), M.B.A., East Tennessee State University  
William A. Rodgers, professor (1982), Ed.D., University of Virginia  
William Sharp, instructor (1970), M.B.E., Morehead State University  
Larry Stephenson, assistant professor (1967), M.A., Morehead State University  
David L. Turnipseed, assistant professor (1983), M.B.D., University of Alabama  
Gary L. VanMeter, associate professor (1976), M.B.A., Southern Illinois University  
William M. Whitaker III, professor (1975), Ph.D., University of Kentucky  
Lowell K. Williams, assistant professor (1982), M.B.A., Miami University

### Department of Education

Reedus Back, professor (1962), Ed.D., University of Kentucky  
Shirley Blair, assistant professor (1970), A.M., Morehead State University  
Frank Burns, assistant professor (1973), M.A., Morehead State University  
Diane Cox, assistant professor (1978), Ed.S., Morehead State University  
Richard Daniel, professor (1976), Ed.D., North Carolina State University  
Gretta Duncan, assistant professor (1968), A.M., Morehead State University

John R. Duncan, professor (1964), Ed.D., Indiana University  
George W. Eyster, associate professor (1968), Ed.S., Michigan State University  
Dennis L. Edinger, professor (1979), Ph.D., University of Florida  
Jerry Franklin, assistant professor (1969), M.Ed., Xavier University  
Kent Freeland, professor (1977), Ph.D., University of Iowa  
Carol Ann Georges, assistant professor (1970), M.A., University of Kentucky  
Lawrence E. Griesinger, professor (1965), Ed.D., University of Cincinnati  
Coletta Grindstaff, assistant professor (1969), A.M., East Tennessee State University  
Karen Hammons, instructor (1972), M.A., Morehead State University  
Coleene Hampton, instructor (1973), A.M., Morehead State University  
Katherine Herzog, associate professor (1979), Ed.D., Florida State  
Charles Hicks, professor (1971), Ph.D., Southern Illinois University  
Gregory A. Horsky, assistant professor (1984), Ph.D., University of Iowa  
Lois Huang, assistant professor (1968), M.A., University of Michigan  
John S. Klein, assistant professor of education (1982), Ph.D., Teachers College of Columbia University  
Jessie Mangrum, assistant professor (1968), A.M., Morehead State University  
Harry C. Mayhew, associate professor (1963), Ed.D., Ball State University  
Paul R. McGhee, professor (1983), Ph.D., Syracuse University  
Arden Thomas Miller, assistant professor of education (1982), Ph.D., Purdue University  
Rodney Don Miller, professor (1966), Ed.D., Indiana University  
Bill F. Moore, associate professor (1970), Ph.D., University of Iowa  
Robert C. Needham, professor (1961), Ed.D., University of Kentucky  
Morris L. Norfleet, professor (1962), Ph.D., Purdue University  
Dean Owen, associate professor (1977), Ph.D., University of Florida  
John W. Payne, professor (1969), Ed.D., University of Kentucky  
Mary Ann Pollock, assistant professor (1977), A.M.E.D., Morehead State University  
Dreama D. Price, assistant professor (1974), A.M., Morehead State University  
Robert L. Prickett, assistant professor (1984), Ed.D., East Texas State University  
Gene A. Ranvier, instructor (1977), M.A., Ball State University  
Diane Ris, S.P., professor (1977), Ed.D., Arizona State University  
Harold Rose, professor (1968), Ph.D., Florida State University  
Barbara E. Russell, assistant professor (1983), Ed.D., Arizona State University  
Layla Sabie, associate professor (1965), Ed.D., George Peabody College  
Stephen Taylor, professor (1973), Ph.D., Florida State University  
Dan Thomas, professor (1969), Ph.D., University of Southern Mississippi  
Patricia H. Turnipseed, assistant professor of education (1982), Ed.D., The University of Alabama  
William Weikel, professor (1975), Ph.D., University of Florida  
Randall Wells, professor (1968), Ph.D., Union Graduate School  
Sue Wells, assistant professor (1968), A.M., Morehead State University  
Jean Wilson, associate professor (1978), Ed.D., Indiana University  
Stephen Young, associate professor (1968), Ed.D., Indiana University

### Department of Health, Physical Education, and Recreation

Palmer Adkins, assistant professor (1979), M.A., Morehead State University  
John E. Allen, assistant professor (1954), M.A., Morehead State University  
Earl J. Bentley, professor (1959), Ed.D., University of Southern Mississippi  
Laradean Brown, assistant professor (1972), M.A., Morehead State University  
W. Michael Brown, associate professor (1966), Ph.D., University of Southern Mississippi  
Rex Chaney, associate professor (1961), R.E.D., Indiana University  
Buford Crager, assistant professor (1967), M.H.E., Morehead State University  
Steve Hamilton, instructor (1976), M.A., Morehead State University  
Edward Lucke, professor (1969), Ed.D., George Peabody College  
Sue Lucke, assistant professor (1969), M.A., Morehead State University  
Michael Mincey, instructor (1975), M.A., Morehead State University  
G.E. Moran, associate professor (1974), M.A., West Virginia University  
Elizabeth Nesbitt, assistant professor (1973), M.Ed., University of Southern Mississippi  
Howard Nesbitt, professor (1973), Ed.D., Columbia University  
Gretta Gaye Osborne, assistant professor (1965), M.A., Ball State University  
James Osborne, assistant professor (1967), M.A., Morehead State University  
Paul A. Raines, professor (1966), Ph.D., University of Iowa  
Mohammed Sabie, professor (1964), Ed.D., George Peabody College  
Harry F. Sweeney, associate professor (1969), Ed.D., University of Tennessee



Charles B. Thompson, professor (1963), Ed.D., University of Southern Mississippi  
Robert M. Wells, assistant professor (1966), M.A., Morehead State University

## Coaches

Bill J. Baldridge, head football coach (1983), M.A., Morehead State University  
Wayne Martin, head basketball coach (1978), M.A., Morehead State University

## Department of Military Science

Gerald Adams, Major, assistant professor (1983), B.S., Cameron State University  
Alan Baldwin, Lieutenant Colonel, professor (1985), B.A., Eastern Kentucky University  
Roger Cline, Captain, assistant professor (1983), M.S., Morehead State University  
Robert Estes, Master Sergeant, primary instructor (1985)  
Harold Exum, Sergeant Major, chief instructor (1985), Sergeant Major Academy  
Michael Fugate, Staff Sergeant, Supply Sergeant (1984)  
Thomas Jones, Captain, assistant professor (1984), B.A., Indiana University  
Fred Soward, Captain, assistant professor (1984), University of Wisconsin

## Department of Psychology

L. Bradley Clough, professor (1966), Ph.D., University of Connecticut  
Anna Lee Demaree, associate professor (1971), Ph.D., University of Kentucky  
James E. Gotsick, professor (1968), Ph.D., Syracuse University  
Bruce A. Mattingly, associate professor (1980), Ph.D., University of Kentucky  
Charles Morgan, associate professor (1979), Ph.D., University of Florida  
Francis Osborne, professor (1967), Ph.D., Syracuse University  
Russell A. Radenhausen, assistant professor (1984), Ph.D., University of South Florida  
George S. Tapp, professor (1968), Ph.D., University of Kentucky

## Department of Sociology, Social Work, and Corrections

Robert A. Bylund, associate professor (1979), Ph.D., Penn State  
Lola R. Crosthwaite, assistant professor (1968), M.S.W., University of North Carolina  
Ted A. Marshall, associate professor (1977), M.S.W., University of Kentucky  
Thomas B. Munson, associate professor (1976), Ph.D., University of Kentucky  
Margaret D. Patton, associate professor (1960), A.M., University of Mississippi  
Edward Reeves, assistant professor (1984), Ph.D., University of Kentucky  
David R. Rudy, professor (1980), Ph.D., Syracuse University  
J. Michael Seelig, assistant professor (1983), J.D., Capital University  
Alban L. Wheeler, professor (1972), Ph.D., Mississippi State University  
Patsy R. Whitson, associate professor (1970), M.S.W., University of Kentucky  
S. Mont Whitson, professor (1970), Ph.D., Texas A&M University

## Camden-Carroll Library

Mary Arnett, librarian III (1969), M.A., Morehead State University  
Carrie Back, librarian III (1968), M.A., Morehead State University  
Faye Belcher, associate director of libraries, librarian IV, associate professor of curriculum and instruction (1965), M.S.L.S., University of Kentucky  
LeMerle Bentley, librarian III (1969), M.A., Morehead State University  
Roberta J. Blair, librarian III (1968), M.A., Morehead State University  
Margaret C. Davis, librarian I (1967), B.A., Centre College  
Albert H. Evans Jr., librarian III (1973), M.S.L.S., University of Kentucky  
Juanita J. Hall, librarian IV, assistant professor of curriculum and instruction (1967), M.L.S., University of Kentucky  
Linda Lowe, librarian I (1979), M.S.L.S., University of Kentucky  
Alton B. Malone, librarian III (1976), M.S.L.S., University of Illinois  
Claude E. Meade, Access Center coordinator (1971), M.A., Morehead State University

Betty Morrison, librarian III (1975), M.A.C.E., Morehead State University  
Carol Nutter, librarian III, coordinator of regional library services (1978), M.S.L.S., University of Kentucky  
Elsie Pritchard, librarian III (1982), M.L.S., University of Pittsburgh  
Margaret Stone, librarian IV (1965), M.S.L.S., University of Kentucky  
Neal Wheeler, coordinator of audio visual services, M.A., Morehead State University  
Helen Williams, librarian III, instructor of information sciences (1978), M.S.L.S., University of Kentucky  
Betty Jean Wilson, librarian III (1976), M.S.L.S., University of Kentucky

## Faculty Emeriti

Mary T. Anderson, assistant professor of education, supervising teacher  
Lewis W. Barnes, professor of English  
Ruth Barnes, professor of English  
Mabel Barber, assistant professor of psychology  
Woodrow W. Barber, associate professor of biology  
Thelma Bell, professor of home economics  
M. Adele Berrian, professor of psychology  
Patti V. Bolin, associate professor of home economics  
Leonard Burkett, professor of education  
Dorothy Conley, assistant professor of elementary education  
Alice E. Cox, associate professor of business  
Paul Ford Davis, professor of education  
Lorene S. Day, assistant professor of English  
Adron Doran, president emeritus  
Mignon Doran, director emeritus of Personal Development Institute  
Johnson E. Duncan, professor of music  
Thelma B. Evans, assistant professor of education  
Wilhelm Exelbirt, professor of history  
Linus A. Fair, registrar, associate professor of mathematics  
Octavia Graves, associate professor of education  
Palmer Hall, professor of education  
Oval Hall, assistant professor of education  
Margaret Heaslip, professor of biology  
Edmund Hicks, professor of history  
Keith Huffman, associate professor of music  
Elaine R. Kirk, assistant professor of education  
Allen Lake, associate professor of biology  
Robert G. Laughlin, professor of health, physical education, and recreation and athletic director  
Noah Logan, associate professor of education  
William Mack, assistant professor of health, physical education and recreation  
Hildreth Maggard, instructor of English  
Jose M. Maortua, professor of art  
Elizabeth E. Mayo, associate professor of mathematics  
Ethel J. Moore, assistant professor of Latin  
Olga Mourino, professor of Spanish  
Hazel Nollau, assistant professor of education  
John W. Oakley, assistant professor of sociology  
Floy Patton, assistant professor of home economics  
Robert E. Peters, associate professor of education  
Toney C. Phillips, associate professor of chemistry  
Roscoe H. Playforth, professor of sociology and dean of the School of Social Sciences  
Sibbie Playforth, assistant librarian  
James Powell, professor of education  
Mary Powell, professor of education  
Richard M. Reser, professor of sociology  
Virginia H. Rice, assistant professor of education  
Norman N. Roberts, professor of industrial education  
Adolfo E. Ruiz, associate professor of Spanish  
George Sadler, associate professor of health, physical education, and recreation  
Violet Cavell Severy, assistant professor of music  
Lawrence R. Stewart, professor of education  
Stellarose M. Stewart, instructor of education  
Maurice D. Strider, associate professor of art  
Norman Tant, professor of library science and instructional media  
Nona Burriss Triplett, associate professor of education  
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## Abbreviations (Course Prefixes)

ACCT	Accounting	MFT	Manufacturing Technology
AGR	Agriculture	MIN	Mining Technology
AHS	Allied Health Sciences	MKT	Marketing
ART	Art	MNGT	Management
BIOL	Biology	MS	Military Science
CHEM	Chemistry	MSCI	Marine Science
COMM	Communications	MUSC	Music Conducting
CON	Construction Technology	MUSE	Music Education
COR	Corrections	MUSG	Class Applied Music
DATA	Data Processing	MUSH	Music History & Literature
ECON	Economics	MUSM	Music Ensembles
EDAD	Education Administration	MUSP	Private Applied Music
EDAH	Adult and Higher Education	MUST	Music Theory
EDEC	Early Childhood Education	MUSW	Music Research
EDEL	Elementary Education	NUR	Nursing
EDF	Education Foundations	OADM	Office Administration
EDGC	Guidance and Counseling	PDI	Personal Development Institute
EDSE	Secondary Education	PHED	Physical Education
EDSP	Special Education	PHIL	Philosophy
EDUC	Professional Education	PHYS	Physics
EET	Electricity-Electronics Technology	PSY	Psychology
ENG	English	RAD	Radiologic Technology
FIN	Finance	RCL	Reclamation Technology
FNA	Fine Arts	REAL	Real Estate
FRN	French	REC	Recreation
GCT	Graphics Communications Technology	REL	Religion
GEO	Geography	ROB	Robotics
GEOS	Geoscience	R-TV	Radio-Television
GER	German	RUS	Russian
GOVT	Government and Public Affairs	SCI	Science
HEC	Home Economics	SOC	Sociology
HIS	History	SPA	Spanish
HLTH	Health	SPCH	Speech
IET	Industrial Education Technology	SWK	Social Work
JOUR	Journalism	THEA	Theatre
LAT	Latin	VET	Veterinary Technology
LSIM	Library Science and Instructional Media	VOC	Vocational Education
MATH	Mathematics	WEL	Welding Technology