Catalog 1971-72

Eastern Kentucky University

BULLETIN • VOLUME 62 • NUMBER 1
MEMBER OF
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American Association of State Colleges and Universities
National Association for Business Teacher Education
Association for Field Services in Teacher Education
American Association of Junior Colleges
American Association of University Women
American Council on Education
American Technical Education Association

ACCREDITED BY
American Chemical Society
Southern Association of Colleges and Schools
National Council for Accreditation of Teacher Education
National Association of Schools of Music
National League for Nursing

BULLETIN
Vol. 62 July 1971 No. 1

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### 1971—UNIVERSITY CALENDAR—1972

#### FIRST SEMESTER

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<tr>
<th>Date</th>
<th>Day</th>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>August 21</td>
<td>Saturday</td>
<td>9:00 a.m.</td>
<td>Assembly of faculty, administrative staff and other employees.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10:30 a.m.</td>
<td>College and departmental meetings.</td>
</tr>
<tr>
<td>August 22</td>
<td>Sunday</td>
<td>10:00 a.m.</td>
<td>Dormitories open for new students.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3:30 p.m.</td>
<td>President's greeting to parents, Hiram Brock Auditorium</td>
</tr>
<tr>
<td>August 23</td>
<td>Monday</td>
<td>8:00 a.m.</td>
<td>Orientation new and transfer students, Alumni Coliseum</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1:00 p.m.</td>
<td>Orientation meeting transfer students Hiram Brock Auditorium</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1:00 p.m.</td>
<td>Math test for prospective majors in biology, chemistry, geology,</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>mathematics, physics, pre-engineering, pre-forestry, pre-medical</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>science, and pre-optometry in Ferrell and Grise Rooms, Combs Building.</td>
</tr>
<tr>
<td></td>
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<td></td>
<td>ACT will be administered in Combs 318 to all freshmen who have</td>
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<td></td>
<td></td>
<td>not previously taken ACT and had scores reported to Eastern.</td>
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<tr>
<td></td>
<td></td>
<td>1-4:00 p.m.</td>
<td>Registration of students in upper division colleges and graduate</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>students.</td>
</tr>
<tr>
<td>August 24</td>
<td>Tuesday</td>
<td>8-10:00 a.m.</td>
<td>Registration of students in upper division colleges and graduate</td>
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<td></td>
<td></td>
<td>students.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10:30-12 noon</td>
<td>Previously enrolled Central University College students whose</td>
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<td></td>
<td>schedules were not approved in the spring should see advisors in</td>
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<td></td>
<td></td>
<td></td>
<td>their offices.</td>
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<tr>
<td></td>
<td></td>
<td>1-3:00 p.m.</td>
<td>Registration of Central University College students.</td>
</tr>
<tr>
<td>August 25</td>
<td>Wednesday</td>
<td>8-10:30 a.m.</td>
<td>Registration of Central University College students.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1-3:00 p.m.</td>
<td></td>
</tr>
<tr>
<td>August 26</td>
<td>Thursday</td>
<td>8:00 a.m.</td>
<td>Classes begin on MWF pattern.</td>
</tr>
<tr>
<td>August 28</td>
<td>Saturday</td>
<td>8:00-10:00 a.m.</td>
<td>Registration of evening and Saturday students.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10:30-11:30 a.m.</td>
<td>All Saturday classes meet.</td>
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<tr>
<td>August 26—September 1</td>
<td></td>
<td></td>
<td>Late registration and schedule changes.</td>
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<tr>
<td>Date</td>
<td>Day</td>
<td>Event Description</td>
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<td></td>
</tr>
<tr>
<td>September 2</td>
<td>Thursday</td>
<td>Last day to enter a class. Last day to change from audit to credit.</td>
<td></td>
</tr>
<tr>
<td>September 6</td>
<td>Monday</td>
<td>Labor Day—no classes.</td>
<td></td>
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<tr>
<td>September 10</td>
<td>Friday</td>
<td>Last day to apply for student teaching in the spring semester, 1972.</td>
<td></td>
</tr>
<tr>
<td>September 15</td>
<td>Wednesday</td>
<td>Last day to: drop a class without a grade. —change to or from “pass-fail.” —change from credit to audit.</td>
<td></td>
</tr>
<tr>
<td>October 9</td>
<td>Saturday</td>
<td>Undergraduate record examination for first semester graduates in Ferrell Room, Combs Building.</td>
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</tr>
<tr>
<td>October 11</td>
<td>Monday</td>
<td>Columbus Day—No Classes</td>
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<tr>
<td>October 22</td>
<td>Friday</td>
<td>Mid-semester reports to Registrar.</td>
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<tr>
<td>October 23</td>
<td>Saturday</td>
<td>Graduate Record Examination</td>
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<tr>
<td>October 29</td>
<td>Friday</td>
<td>May and August, 1972, graduates must apply for graduation by this date in their college dean's office.</td>
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<tr>
<td>November 19</td>
<td>Friday</td>
<td>Last day to drop a course.</td>
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<tr>
<td>November 24</td>
<td>Wednesday</td>
<td>School closes for Thanksgiving holiday.</td>
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<tr>
<td>November 29</td>
<td>Monday</td>
<td>Class work resumes.</td>
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<tr>
<td>December 6-8</td>
<td></td>
<td>Pre-registration for spring semester.</td>
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<tr>
<td>December 13-18</td>
<td></td>
<td>Final examinations.</td>
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<td>December 18</td>
<td></td>
<td>Close of first semester.</td>
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**SECOND SEMESTER**

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<tr>
<td>December 6-8</td>
<td></td>
<td>Pre-registration for second semester.</td>
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<tr>
<td>January 9</td>
<td>Sunday</td>
<td>Dormitories open for all students.</td>
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<tr>
<td>January 10</td>
<td>Monday</td>
<td>Registration of students in upper division colleges and graduate students.</td>
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<tr>
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<td>Central University College advisers will be available in their offices. Advisers will be assigned to students not enrolled fall semester, 1971, in Room 112, Combs Building.</td>
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<td>January 11</td>
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<td>January 12</td>
<td>Wednesday</td>
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<tr>
<td>January 13</td>
<td>Thursday</td>
<td>8:00 a.m.</td>
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<td>January 13-19</td>
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<td>January 15</td>
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<td>10:30-11:30 a.m.</td>
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<td>March 4</td>
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<td>May 14</td>
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<td>May 15-June 9</td>
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CATALOG

The University

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Purpose ......................... 13

1971-72
All statements in this publication are announcements of present policies only and are subject to change at any time without prior notice. They are not to be regarded as offers to contract.

This bulletin was prepared by Eastern Kentucky University, edited by the Offices of Academic Affairs and Public Affairs and paid from state funds.
EASTERN KENTUCKY UNIVERSITY . . .

Dedicated to Serving Kentucky Since 1906

INTRODUCTION

Eastern Kentucky University is a coeducational public institution of higher education offering general and liberal arts programs, pre-professional and professional training in education and various other fields at both the undergraduate and graduate levels. Located in Richmond, Madison County, Kentucky, Eastern has a distinguished record of more than six decades of educational service to the Commonwealth. The institution is recognized as one of the nation’s leading producers of teachers with over seventy per cent of its 20,000 graduates having entered the teaching profession.

Richmond is on the main line of the L & N Railroad, 112 miles south of Cincinnati, Ohio. Situated twenty-six miles southeast of Lexington, Kentucky, Richmond is conveniently reached by automobile over Interstate 75 from Northern Kentucky and Cincinnati to the North and over U. S. Route 25 (Dixie Highway) from Southeastern Kentucky. Richmond is also served by U. S. Route 227 and Kentucky Route 52. Combinations of major highways in the state with these highways make Richmond easily accessible from Eastern and Northeastern Kentucky as well as the Bluegrass and Central Kentucky area and the Metropolitan area of Louisville.

Completion of Interstate Highways, I-64 (East-West) and I-75 (North-South), and the Eastern Kentucky Turnpike, provide even greater convenience in automobile travel to Richmond, since the city is located near the convergence of these three arterial highways.

Richmond, the county seat of Madison County, is an expanding community of approximately 15,000 population. Served by fine churches representing most Christian faiths, the community provides an excellent environment for the University student.

In and around Richmond are many areas of historic and scenic interest. Boonesborough State Park, birthplace of Kentucky, is located twelve miles to the north. Many other historical places are within easy driving distance. Scenic and recreational areas surround this section of the state.
HISTORY

The General Assembly of 1906 enacted legislation establishing the Eastern Kentucky State Normal School. Governor J. C. Beckham signed the bill into law on March 21, 1906, and on May 7 of that year, the Normal School Commission, meeting in Louisville, selected the campus of the old Central University in Richmond, Kentucky, as the site of the new school. On June 2, 1906, Ruric Nevel Roark was chosen President of the Normal school and the training of teachers was initiated.

In 1922, Eastern became a four-year institution known as the Eastern Kentucky State Normal School and Teachers College. The first degrees were awarded by this institution in 1925. In 1928, the College was accredited by the Southern Association of Colleges and Secondary Schools. In 1930, the General Assembly renamed the school as the Eastern Kentucky State Teachers College.

In 1935, a graduate program was approved at Eastern, leading to the Master of Arts in Education. In 1948, the General Assembly removed the word "Teachers" from the name of the College and granted the College the right to award non-professional degrees.

The most significant day since its founding came for Eastern February 26, 1966, when Governor Edward T. Breathitt signed into law a bill renaming the institution Eastern Kentucky University and sanctioning the awarding of graduate degrees in academic fields other than education.

During this period of time, Eastern Kentucky University has increased rapidly in size and stature. Beginning with a few students engaged in short review and certificate courses, the University today serves thousands of Kentucky's young men and women by offering a curriculum leading to the Bachelor of Arts, or Bachelor of Science degree in teacher education, or in general or professional areas, and an expanding graduate program that presently offers degrees at the Master's level in many other fields as well as the already well-established Master of Arts degree in Education and the various fifth- and sixth-year leadership programs in education. Specialist degree programs have been implemented in Education and Technology. In addition to these programs, Eastern offers a joint doctoral program with the University of Kentucky leading toward the Ed.D degree in education.

Ever-mindful of the purpose of its founding, Eastern continues to recognize its historic function of preparing quality teachers for the elementary and secondary schools of the Commonwealth. However, a strong liberal arts curriculum leading to appropriate degrees, together with pre-professional courses in several areas and graduate programs, enable Eastern to serve the Commonwealth as a general university.
PURPOSE

The purpose of Eastern Kentucky University is to provide for its students those intellectual and cultural pursuits which will develop in them habits of scholarship and intellectual curiosity; which will provide for them a deep understanding of American democracy and their role in maintaining its strength and vitality; which will imbue them with an understanding of man and his aspirations; and which will enable them to communicate effectively and efficiently.

Within this general purpose, the University has three more specific purposes: (1) to provide instruction in the arts and sciences, in business, in professional education, and in technical subjects; (2) to provide service to the community and region through the faculty serving as consultants in their fields of specialization and engaging in research dealing with problems of our society, and (3) engage in research to advance knowledge in the subject matter areas with which the various colleges of the University are concerned.

These purposes of the University are accomplished through the Central University College, College of Arts and Sciences, College of Business, College of Education, College of Applied Arts and Technology, and the Graduate School.

The Central University College has responsibility for students during the first two years of the four-year undergraduate program. It organizes and maintains a centralized advising program to assist students in selecting an appropriate curriculum, it implements a well integrated general education program, and it administers selection of beginning course work in preparation for the student's major field.

The College of Arts and Sciences, in cooperation with the Central University College, provides general education courses for all undergraduate students in the University. It also provides advanced study in various disciplines and offers courses which are intended to prepare the student for later study in professional fields such as medicine, dentistry, medical technology, engineering, law, social work and the ministry. It provides the academic specialization for students working for teacher certification in elementary and secondary education.

The College of Business provides programs for students preparing to enter business occupations. The curricula is based upon a liberal education as a foundation for personal and career development throughout the student's working life. Students are expected to take a group of courses built around the functional areas of business to attain a strong foundation in business procedures, policies, and forms of analysis. They may specialize in several areas of business, such as accounting, business teaching, economics, finance, management, marketing and secretarial work.
The College of Education assumes major responsibility for the preparation of students majoring in elementary education, library science, physical education, public health, recreation, rehabilitation education, school health, and speech pathology and audiology; cooperates with the Colleges of Arts and Sciences, Business, and Applied Arts and Technology in programs designed to prepare secondary education majors; cooperates with the Graduate School in providing programs for the advanced preparation of elementary teachers, secondary teachers, special education teachers, guidance counselors, supervisors, school principals, school business administrators, and superintendents; assists local school districts in in-service education programs; and provides professional leadership (through teaching, research, publication, workshops, conferences, and consultant services) in education at the local, state, and national levels.

The College of Applied Arts and Technology prepares teachers of technical subjects within the fields of industrial arts and home economics and offers programs of study to prepare individuals for technical occupations and professions in agriculture, nursing, industrial technology, home economics, law enforcement and crafts. These programs range in length from two to four years. In addition, the College houses the Traffic Safety Institute and the Kentucky Law Enforcement Council. Its faculty is sensitive to emerging, as well as existing technical occupations and professions that require college-trained personnel. New curricula are developed, in keeping with the resources of the institution to meet such demands.

The Graduate School administers programs leading to the degrees of Master of Arts, Master of Science, Master of Business Administration, Master of Music Education, Master of Public Administration and Master of Arts in Education. Standard certification programs are offered for school principals and supervisors. Sixth-year programs are available for school leaders, guidance counselors, and in most teaching fields. Specialist degree programs in education and technology are offered. The Graduate School also directs the joint doctoral program offered cooperatively with the University of Kentucky leading to the Ed.D degree. Through its various programs, and in cooperation with the University's upper division colleges, the Graduate School provides advanced study to meet the needs of the region's teachers, business, and governmental agencies. Programs are developed within a philosophy which assumes that the foregoing general needs will be satisfied best by individualizing program planning to meet both the specific interests and professional requirements of students.

Continuing Education—The Division of Continuing Education, in cooperation with the five university colleges and the graduate school, provides educational opportunities for those who for various reasons do not find it possible or practical to enroll for the regular university program. These services are provided through extension classes, correspondence courses (both college and high school level), consultative services by the
faculty and staff, Saturday and evening classes, workshops, conferences, institutes, and other short term courses.

Richmond Community College—As a central coordinating office of Eastern's two-year programs, Richmond Community College provides information concerning all associate degree programs offered by the University. It also offers guidance to students or prospective students. Richmond Community College serves in cooperation with the Office of Continuing Education and the various College of the University.
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1971-72
EXPENSES AND LIVING ACCOMMODATIONS

REGISTRATION FEES AND OTHER EXPENSES

The following list of fees is required of students. All fees must be paid at the time of registration. Incidental fees paid each semester entitle the student to use of the library, to use of the Student Union Building, and to other services as directed by the Board of Regents.

REGISTRATION FEES AND OTHER EXPENSES (Per Semester)

In effect 1971-72 Academic Year

<table>
<thead>
<tr>
<th>Registration and Incidental Fees (Per Semester)</th>
<th>Kentucky Resident</th>
<th>Out-of-State Resident</th>
</tr>
</thead>
<tbody>
<tr>
<td>Registration Fee:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full-time—Graduate and Undergraduate</td>
<td>$120.00</td>
<td>$370.00</td>
</tr>
<tr>
<td>Part-time—Undergraduate (Fewer than 12 Semester Hours), Per Hour</td>
<td>11.00</td>
<td>32.00</td>
</tr>
<tr>
<td>Part-time—Graduate (Fewer than 9 Semester Hours), Per Hour</td>
<td>14.00</td>
<td>42.00</td>
</tr>
<tr>
<td>Incidental Fee:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full-time</td>
<td>30.00</td>
<td>30.00</td>
</tr>
<tr>
<td>Part-time</td>
<td>2.50</td>
<td>2.50</td>
</tr>
<tr>
<td>Student Activity Fee</td>
<td>4.00</td>
<td>4.00</td>
</tr>
</tbody>
</table>

Registration and Incidental Fees (Summer Term)

| Registration Fee:                               |                   |                       |
| Full-time—Graduate and Undergraduate            | 60.00             | 185.00                |
| Part-time—Undergraduate (Fewer than 6 Semester Hours), Per Hour | 11.00         | 32.00                  |
| Part-time—Graduate (Fewer than 6 Semester Hours), Per Hour | 14.00          | 42.00                  |
| Incidental Fee:                                 |                   |                       |
| Full-time                                       | 15.00             | 15.00                 |
| Part-time                                       | 1.25              | 1.25                  |
### Special Fees:

<table>
<thead>
<tr>
<th>Course</th>
<th>Per Course</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Regular Semester</td>
</tr>
<tr>
<td>Home Economics</td>
<td>$ 7.50</td>
</tr>
<tr>
<td>204, 215, 302</td>
<td>5.00</td>
</tr>
<tr>
<td>Health and Physical Education</td>
<td></td>
</tr>
<tr>
<td>Locker Fee</td>
<td>4.00</td>
</tr>
<tr>
<td>Music</td>
<td></td>
</tr>
<tr>
<td>Music Major—Full Time</td>
<td>35.00</td>
</tr>
<tr>
<td>Music Major—Part Time</td>
<td>17.50</td>
</tr>
<tr>
<td>Non-Music Major—Full Time</td>
<td>30.00</td>
</tr>
<tr>
<td>Military Science</td>
<td></td>
</tr>
<tr>
<td>Uniform Deposit</td>
<td>12.00</td>
</tr>
<tr>
<td>Other Expenses</td>
<td>2.00</td>
</tr>
<tr>
<td>Nursing</td>
<td></td>
</tr>
<tr>
<td>Nur 103, 104, 201, 202, 202, 203, 204</td>
<td>12.50</td>
</tr>
</tbody>
</table>

Other Expenses (Uniform for either regular semester or summer session)

- Late Registration Fee (per day late) $ 1.00
- Voluntary Change of Schedule 2.00
- Transcript Fee (after initial copy) 1.00
- Graduation Fee (includes cost of diploma, cap and gown rental, and other graduation expenses)
  - Baccalaureate Degree 8.50
  - Master's Degree 21.00
- Post Office Box Rent 1.00
- Returned Check Assessment 5.00

(All fees are subject to change without notice)

### DEFINITION OF RESIDENT STUDENT FOR FEE ASSESSMENT PURPOSES

(Approved July 22, 1968)

Every student who is not a resident of Kentucky as defined below is required to pay non-resident registration and/or entrance fees.

The following policy, adopted by the Council on Public Higher Education, Commonwealth of Kentucky, in accordance with Section 164.020 (3) of the Kentucky Revised Statues, is applied to determine a student's eligibility for fees assessed Kentucky residents who enroll at any of the state-supported institutions of higher learning in the Commonwealth of Kentucky. This determination is made at the time of initial enrollment and shall not be changed thereafter except as provided below.
A student under eighteen years of age is eligible to enroll as a resident of Kentucky if his parent or legal guardian has established or has maintained residence in the Commonwealth immediately preceding his original enrollment. No student under eighteen years of age shall be considered to have gained residence in the Commonwealth while a student unless or until his parent or guardian moves into the Commonwealth and acquires residence. If a student under eighteen years of age is enrolled as a resident of the Commonwealth and his parent or legal guardian thereafter moves out of the Commonwealth, the student will become a non-resident at the beginning of his next enrollment. If the parents have different residences, the residence of the parent who has legal custody of the student's person or the residence of the parent who provides the main financial support shall be considered the residence of the student.

An adult student from out-of-state who seeks Kentucky residence status must assume the burden of proving conclusively that he is a resident of the Commonwealth with the present intention of making his permanent home in this state. In general, it is assumed that the intent to remain indefinitely in Kentucky is evidenced not only by what a person states but what a person has actually done. The following criteria may be among those used by authorities of the institution in ascertaining the legal residence of a student: Obtaining full-time employment, establishing a home, buying property, filing state income tax returns, transferring or establishing church membership, affiliating with local organizations, and various other actions which give evidence of intent to remain indefinitely within the Commonwealth. Compliance with any one or more of these criteria does not in itself constitute Kentucky resident status for the student or his parents.

Any student or prospective student in doubt concerning his residence status must bear the responsibility for securing a ruling by stating his case in writing to the Admissions Officer. The student who, due to subsequent events, becomes eligible for a change in residence classification, whether from out-of-state to in-state, or the reverse has the responsibility of immediately informing the Office of Admissions of this circumstance in writing.

The Council recommends that each institution establish a Non-Resident Fees Committee to consider changes in resident status based on the above criteria. Application for change of residence classification should be made in writing to the person who has been designated by the Board of Trustees or Regents as the Chairman of the Non-Resident Fees Committee. The Chairman may present each case to the Committee for a final decision, and the student will be notified in writing as to the disposition of his application.

This policy shall be applicable with exceptions allowable for possible conflicts with state and federal laws relating to residency such as the Federal Soldiers and Sailors Relief Act.
LIVING ACCOMMODATIONS

Eastern Kentucky University maintains a number of residence halls for single students under 21 years of age. Graduate students, married students and single undergraduate students over 21 years of age at the time of registration must secure special permission from the office of the Dean of Women/Dean of Men if they wish to occupy a room in a residence hall. All dormitory students are responsible for reading and complying with Campus Housing Policies which are placed in all dormitories at the beginning of each semester.

The University furnishes sheets, pillows, pillowcases, and mattress covers for residence halls. All other items are to be furnished by the student. Most of the men's and women's residence halls have modern coin-operated laundry and drying machines. Several laundries and dry cleaning establishments are located a short distance from the campus.

<table>
<thead>
<tr>
<th>Residence Halls for Women</th>
<th>Rent for Semester (Includes Linen Service)</th>
<th>Rent for Summer (Includes Linen Service)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Burnam</td>
<td>$135.00</td>
<td>$67.50</td>
</tr>
<tr>
<td>Case</td>
<td>135.00</td>
<td>67.50</td>
</tr>
<tr>
<td>Combs</td>
<td>145.00</td>
<td>72.50</td>
</tr>
<tr>
<td>Keith</td>
<td>135.00</td>
<td>67.50</td>
</tr>
<tr>
<td>McGregor</td>
<td>145.00</td>
<td>72.50</td>
</tr>
<tr>
<td>Sidney Clay</td>
<td>145.00</td>
<td>72.50</td>
</tr>
<tr>
<td>Sullivan</td>
<td>135.00</td>
<td>67.50</td>
</tr>
<tr>
<td>Telford Hall</td>
<td>145.00</td>
<td>72.50</td>
</tr>
<tr>
<td>Walters</td>
<td>145.00</td>
<td>72.50</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Residence Halls for Men</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Commonwealth</td>
<td>145.00</td>
<td>72.50</td>
</tr>
<tr>
<td>Dupree</td>
<td>145.00</td>
<td>72.50</td>
</tr>
<tr>
<td>Keene</td>
<td>145.00</td>
<td>72.50</td>
</tr>
<tr>
<td>Martin</td>
<td>135.00</td>
<td>67.50</td>
</tr>
<tr>
<td>Mattox</td>
<td>135.00</td>
<td>67.50</td>
</tr>
<tr>
<td>Miller, Beckham, and McCreary</td>
<td>135.00</td>
<td>67.50</td>
</tr>
<tr>
<td>O'Donnell</td>
<td>135.00</td>
<td>67.50</td>
</tr>
<tr>
<td>Palmer</td>
<td>145.00</td>
<td>72.50</td>
</tr>
<tr>
<td>Todd</td>
<td>145.00</td>
<td>72.50</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Telephone Service (if available) Per Student</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>12.00</td>
</tr>
<tr>
<td></td>
<td>6.00</td>
</tr>
</tbody>
</table>

All charges are subject to change without notice.
RESIDENCE HALLS

POLICIES

All students desiring housing at Eastern Kentucky University should complete an application for a room reservation and forward it to the Bursar's Office, Office of Business Affairs, Eastern Kentucky University, Richmond, Kentucky.

An advance rental payment of $50.00 should accompany the application. This payment is necessary before a reservation will be made. It will be applied to the rent for the first semester following enrollment. The advance payment will be refunded in full if cancellation is received by July 15 for the fall semester, December 15 for the spring semester, or May 15 for the summer term respectively.

Reservations will be held only through the day preceding the first day of classes, unless students have made arrangements with the Residence Hall Director for late arrival.

Partial refunds of rentals after a room is accepted may be made only in exceptional instances. In no case shall a refund of rent be made to students moving from University housing at their convenience.

Room rent is paid by the semester, and is due and payable at registration.

REFUND POLICY

Refunds on fees and room rental charges, when authorized, shall be made on a schedule based on the time elapsed during the semester or summer term. During the semester, refund of a portion of the fees and room rental paid shall be made as follows: first and second weeks, 75%; third and fourth weeks, 50%; fifth and sixth weeks, 25%. After six weeks no refunds will be made. During the summer term, the following schedule will determine the portion refunded: first week, 75%; second week, 50%; third week, 25%. After three weeks, no refund will be made. (For the purpose of this calculation, the week will begin with the first day of registration for the semester or summer term.)

The percentage of refunds shall apply to all fees and room rentals paid, except that no refund can be made on fees collected for student insurance premiums, class dues, and similar fees.

No refund will be made for reduction of course load unless it results from cancellation of a class or the student having been permitted to enroll in a course for which he was not eligible. Refunds for reduction of course load must be approved by the Vice President for Academic Affairs.

FOOD SERVICE

The University operates several food service facilities on the campus. Large, air-conditioned cafeterias in the Johnson Student Union Building, Martin Hall, and Sidney Clay Hall serve attractive, wholesome meals at reasonable prices. Students purchase food on an individual meal basis. In addition, snack bars are located in the Johnson Student Union Building, Case Hall, Martin Hall, Mattox Hall, and Weaver Health Building.
OFFICE OF STUDENT AFFAIRS

Through the Office of Student Affairs, the University relates to students the various aspects of campus life. Some of the more specific areas are: (1) admission and re-admission; (2) orientation of freshmen and transfer students; (3) physical and mental health of students; (4) coordination of student activities and clubs; (5) on-campus and off-campus living (6) maintenance of personnel records; (7) operation of a student counseling center; (8) registration; (9) foreign student advisement; (10) social programs; (11) veterans affairs; and (12) student financial assistance.

The entire University faculty and administrative staff assists in various aspects of student personnel work co-ordinated through the Office of the Vice President for Student Affairs. Students are encouraged to become responsible citizens not only at Eastern but also in later life as citizens of communities, citizens of a democracy, and professional people. Immediate emphasis is directed toward those activities which assist students in attaining maximum personal, social, and academic growth in a stimulating environment.

STUDENT HEALTH SERVICES

The mental and physical health of Eastern students is administered by the University Physician and his staff. The Infirmary is open during regular school hours, and a nurse is available for emergencies which might arise after regular office hours. The Infirmary has 10 beds for short-term illness or overnight care, when required. Serious illness or required surgery will be referred to the new Pattie A. Clay Hospital, adjacent to the campus, at the patient’s expense.

All new students must have a physician perform a complete physical examination and complete a medical record which is furnished the student when admissions information is being filed. The Medical Record is a part of admissions; and after the student is admitted to the University, the Medical Record becomes a part of the student’s health folder and is filed at the University Infirmary. With this information, it is possible to be of greater assistance to all full-time students who use the Infirmary services.

In addition to Student Health Services, the University provides instruction in first aid, personal hygiene, safety, and community hygiene.

COUNSELING CENTER

The University Counseling Center has a staff of full-time counselors to assist students with problems of educational-vocational goal planning, curricular choice, personal-social adjustments and serves as a referral agent for the University Psychiatric Services.

Counseling is a professional consultation and may include tests of intelligence, vocational interest, personality, aptitudes and/or educational skills. The Center is equipped to administer the various tests at no cost to the individual. The Center also maintains a file of vocational information which is easily accessible to the interested student.

Students may come to the Center on their own initiative or may be referred by teachers, advisors, or other University staff members.
Counseling records are considered professional information and are protected accordingly. Personal confidences are respected.

FINANCIAL ASSISTANCE

Scholarships

The William Davis Scholarship. Under the provisions of the will of the late William Davis of Newport, Kentucky, a sum of money was left for the benefit of the student living in the Lona Estella Davis school district of Rowan County. Scholarships of $200.00 each are awarded by the Superintendent of Rowan County schools and the President of Eastern Kentucky University. A student desiring to secure one of these scholarships should write to the Chairman of Student Aid Committee, Eastern Kentucky University, or make application to the Superintendent of Rowan County Schools.

The Lily Christopher Ogg McWhorter Memorial Fund was established in 1959, in memory of Mrs. Nina Ogg Peake and William Emery Ogg, graduates of Eastern, by their sister, Mrs. Lily Christopher Ogg McWhorter. They were all residents of Madison County. The income from this fund is to provide financial aid for persons of good ability but of little money.

In the field of Music there are three scholarships awarded annually to those students who make the most satisfactory progress in piano, voice, and violin.

Phi Delta Kappa Scholarship. The Eastern Kentucky University Chapter of Phi Delta Kappa, an education fraternity for men in education, awards a full tuition scholarship each year to a full-time male graduate student. Applications and information may be secured by writing to the Graduate Office. Applications must be submitted by July first of each year.

ROTC Scholarships. Under the provisions of Public Law 88-647 a limited number of two-year ROTC scholarships are available for award to outstanding military students who have completed the basic ROTC course. These scholarships provide for payment of tuition, fees, book costs, laboratory expenses and subsistence pay of fifty dollars ($50.00) per month. Selection of individuals will be based on criteria established by the Secretary of the Army and by action of an on-campus board consisting of the Professor of Military Science and other representatives from the faculty.

Nursing Scholarship Program. The purpose of this program is to assist students of exceptional financial need to undertake courses of study leading to careers in Nursing.

The maximum scholarship that may be received for any school year is $1,500, or the amount of your financial needs, whichever is the lesser.

For application forms, write the Office of Student Financial Assistance.
Student Loans

The National Defense Student Loan
This program provides loans for students whose family income and total assets place a limitation upon resources for educational purposes.

This is a low-interest bearing, long-term loan, interest free while in school, serving with the Peace Corps, Vista, and serving in the Armed Forces for loans prior to June 1, 1970, with a 3% interest charge during the repayment period.

The borrower may discount 12.5% of the loan per year up to a period of 4 years for serving in the Armed Services for loans received after June 30, 1970. The borrower may also discount 10% of the loan each year up to 50% of the total borrowed by teaching in any public, non-profit school. A 15% discount per year up to 100% of the loan is allowed for teaching services in an economically deprived area.

Educational Opportunity Grants Program. The Higher Education Act of 1965 initiates a program of Educational Opportunity Grants to assist in making available the benefits of higher education to qualified high school graduates of exceptional financial need, and who would not be able to obtain the benefits of education without such aid. To qualify for the program, the student must be taking at least twelve semester hours of course work each semester and be an undergraduate in good standing.

This program is combined with other programs of financial assistance (the National Defense Loan Fund and the Work-Study Program) to the extent necessary to enable the student to meet his educational expenses.

It is the policy of the administration that prospective students should have a high school scholastic standing of "C" or better in order to apply for student financial aid. A statement from the student's principal or guidance counselor should accompany the application to verify the high school scholastic standing.

For further information and an application form, write to the Office of Student Financial Assistance.

Federally Insured Loan. Eastern Kentucky University is a participant in the Federally Insured Loan plan which endorses loans made by home town financial institutions to deserving individuals who are either currently enrolled or have been accepted for admission to Eastern Kentucky University. The application for such a loan must be endorsed by Eastern Kentucky University before submission to the bank or other financial institution.

Under this program a student may borrow up to $1,500 per academic year. To qualify for the interest free benefit a student must be from a family whose adjusted income does not exceed $15,000 per year. Applications and further information for the Federally Insured Loan may be obtained from the student's hometown lending institution or by writing the Office of Student Financial Assistance.

Loans: The Law Enforcement Student Loan Program makes available a ten-year interest bearing (7%) note of up to $1,800 per academic year to full-time students enrolled in undergraduate or graduate programs leading to degrees in areas directly related to law enforcement. The loans may be cancelled at the rate of 25 percentum for each year of full-time employment in a public, state, local, or Federal law enforcement agency.

Grants: The Law Enforcement Student Grant Program makes available payment for direct expenses and may not exceed cost of tuition, fees, and cost of books. Beneficiaries must be full-time employees of a publicly funded law enforcement agency and must agree to remain in the service of the employing agency for a period of two years following completion of any course of study granted by a grant.

For further information and application, write the Office of Student Financial Assistance.

The Student Aid Society Inc. Loan Fund. This fund is designed to help worthy students complete their education. It has been augmented from time to time by gifts from different individuals and organizations and is being increased annually. Small loans are available to upper-class students who are currently enrolled. Those having high scholastic records will be given preference in the granting of loans. This fund makes it possible for a student to borrow a small amount of money on a personal note at a legal rate of interest. Students who desire further information concerning this fund should get in touch with the Chairman of the Student Aid Committee.

Nursing Student Loan Program. This program is intended to assist full-time students to achieve careers in Nursing by providing long-term, low-interest (3%) loans to help meet the cost of education.

A student may borrow up to $1,500 for an academic year, or the amount of their financial need.

This loan program carries a cancellation clause which would permit a full-time employed nurse to cancel up to 50% and up to 100% if employed in an area which has a substandard shortage of nurses.

Student Employment

There is opportunity for student employment, whereby a limited number of students may earn part of their expenses by working in the cafeteria, library, bookstore, post office, dormitories, administrative offices, University dairy and farm, maintenance department, and faculty offices. Some students may also secure part-time employment in Richmond stores, restaurants, and other businesses.

Student labor should be limited so that work hours will not take too much of the student’s study time. While ten hours per week is an average labor load, circumstances may permit a student to work more hours. No
student, however, should enter the University without sufficient money for the semester unless there is a definite guarantee of work to support him. For further information and application forms, write to the Office of Student Financial Assistance, Eastern Kentucky University.

The Work-Study Program. Under a grant from the Federal Government, made possible by the Economic Opportunity Act of 1964, eligible students may be employed on a part-time basis while in full-time employment at Eastern. This program supplements the part-time Institutional Program which has been in effect at Eastern for many years.

A student or prospective student from a low-income family is eligible for employment under the Federal Work-Study Program. The student must enroll for a minimum of twelve semester hours of course work each semester and maintain at least a “C” average.

Placement in jobs will depend upon the financial needs, skills, interests, and aptitudes of the student and the availability of positions open at a given time. Students may work up to 15 hours per week depending upon his needs. Payments are made to the student employee on a semi-monthly basis.

Other Financial Assistance
The Veterans Program at Eastern Kentucky University is approved by the Veterans Administration for the education of veterans and their eligible dependents. Students concerned with veterans training should have, at the time of registration, a Certificate of Eligibility. This is secured from the Regional office of the Veterans Administration. The University is responsible for the completion of certain Veterans Administration forms and for the other necessary information about students who receive this aid.

If you have completed courses while in the Armed Forces, ask the Registrar about the possibility of receiving credit for such courses.

Vocational Rehabilitation
Vocational Rehabilitation for students with physical handicaps of various kinds may be approved. They may receive financial benefits as approved by the Department. Students who wish to consult with a representative relative to vocational rehabilitation should write the Department of Education, Department of Vocational Rehabilitation, Frankfort, Kentucky, for specific instructions.

Veterans Administration Benefits
War Orphans, Widows, Children, and Wives of Deceased and Disabled Veterans should contact the Veterans Administration, 600 Federal Place, Louisville, Kentucky. Application forms are available in the Student Financial Aid Office.
STUDENT ORGANIZATIONS AND ACTIVITIES

With its concern for the whole student, the University provides many services and activities. The mental and physical health, the social and academic well-being, and the desire to provide a more meaningful life experience for the student are goals of the entire faculty and staff.

The changing nature of the University community in its phenomenal growth precludes a complete listing of all organizations and activities that will be available during the year in this catalogue. Students will find the available organizations and activities listed in official campus publications such as the Student Handbook and in notices posted on bulletin boards and in the Eastern Progress.

SOCIAL ACTIVITIES

The University Center Board arranges a variety of social activities for the benefit of Eastern's students. Such activities as movies, dances, concerts, and parties are planned so the student can achieve maximum enjoyment. The School Calendar lists all approved social activities. The Director of Student Activities and Organizations and Dean of Women coordinate the activities on campus. Students have the opportunity to participate in a variety of leisure time activities.

STUDENT IDENTIFICATION CARD

Each full-time student who has paid the full fees for his first semester will be issued a personal identification card. This card, properly validated, entitles the student to admission to all University athletic contests on the campus and to certain other programs by the University. It must be carried by the student at all times for official identification on the campus, and all full-time students must have a validated ID card before registration is completed.

Each part-time student is issued a non-laminated card for identification purposes only. It is not valid as an activity card.

If a student ID card is lost before graduation, application for replacement is made at the Office of Student Affairs. A replacement fee of $10 is charged for a full-time student ID card.

ATHLETICS AND RECREATION

Eastern offers a fine and varied athletic and recreational program for both men and women students. It consists of three major programs: Intercollegiate Athletics, Intramurals for Men, and Women's Recreation Association activities for women.

Eastern Kentucky University is a member of the Ohio Valley Athletic Conference and the National Collegiate Athletic Association. The Ohio Valley Conference annually produces teams that have top ranking among universities and colleges in the United States. In addition to these conferences, representative teams from other parts of the country are scheduled. Intercollegiate competition is carried on in eight different sports. They are: football, basketball, swimming, tennis, golf, track, cross country, and baseball.
STUDENT ORGANIZATIONS

The student organizations, societies and clubs form an intrinsic part of the program of Eastern Kentucky University that fulfills academic, social and religious functions. The student organizations at Eastern offer varied activities to encompass the interests of all students.

Honor Societies: Alpha Phi Gamma, Alpha Phi Sigma, Alpha Psi Omega, Collegiate Pentacle, Cwens, Delta Sigma Rho, Eta Gamma Sigma, Iota Lambda Sigma, Kappa Delta Pi, Kappa Iota Epsilon, Kappa Mu Epsilon, Omicron Alpha Kappa, Phi Alpha Theta, Pi Omega Pi, Pi Tau Chi, Polity Society, Psi Chi, Scabbard and Blade, Sigma Delta Pi, Sigma Tau Pi.


Class Organizations: Freshman Class, Sophomore Class, Junior Class, Senior Class.

Activity Organizations: Catalina Club, College Republican Club, “E” Club, Eastern Dance Theatre, Eastern Progress Staff, EKU Grotto Club, EKU Soccer Club, KYMA Club, Milestone Staff, Sin the Karate Club, University Ensemble, College Democrats Club.


Interest Groups: Alpha Sigma Upsilon, Campus Gold, Black Student Union of Eastern Kentucky University, Council of International Relations and United Nations Affairs (Ciruna), International Students Association.


Social Sororities: Alpha Delta Pi, Alpha Gamma Delta, Alpha Kappa, Chi Omega, Delta Sigma Theta, Kappa Delta, Kappa Phi Delta.

Social Fraternities: Beta Omicron Gamma, Beta Theta Pi, Delta Upsilon, Kappa Alpha, Omega Psi Phi, Phi Delta Theta, Pi Kappa Alpha, Sigma Chi, Sigma Nu, Tau Kappa Epsilon, and Theta Chi.
CULTURAL ACTIVITIES

Every effort is made at Eastern to surround the students with cultural advantages. The programs presented are planned as part of the student's education and much time and effort is put forth to provide programs that will be of benefit to students.

Assemblies are held regularly and special assemblies are held when the occasion warrants. While programs at these assemblies are designed primarily for the students and faculty, visitors to the campus are welcome to attend. Programs planned for these assembly periods include appearances by nationally recognized lecturers and artists. Programs are provided on other occasions by lecturers or musical groups which have relationship to the University. Many fine programs are furnished by the Music Department of the University. Important University matters are officially presented to the student body by the President.

Freshmen are required to attend assembly as a part of their orientation course.

Concert Series are presented through the University Center Board. Some concerts are done in co-operation with the Community Concert Association. Students are admitted to these excellent programs without charge, but they must present identification cards for admission. These programs feature some of the outstanding individuals and groups in the nation.

Art Exhibits, arranged by the Art Department, are on continuous exhibition in the Art Gallery, Cammack Building. Every effort is made to include in the exhibits the works of major artists, past and present, from across America and around the world. Also included are the works of art students, art majors, and faculty. In addition, special exhibits are sometimes arranged for showing in the Student Union Building.

Church Affiliation is recognized as an important factor in the life of any student. Eastern is a state-supported institution and is, therefore, non-denominational. The University has a basic objective in helping to develop ethical character among all students. There is close cooperation between the institution and several fine churches in Richmond. Students are encouraged to attend church services in town. Eastern makes spaces available for several student church organizations to meet on the campus.

Presently, three downtown churches have student centers adjoining the campus. Other student centers will be built in the near future on sites which have already been purchased.

Plays presented by University players are a significant contribution to Eastern's cultural life. Three major productions each year, along with studio productions, and a drama program in the summer, provide numerous opportunities in acting, directing, and technical theatre. Participation in every aspect of the theatre program is open to all students.

STUDENT PUBLICATIONS

THE EASTERN PROGRESS, weekly student newspaper, is the official student publication of the University, and all students are encouraged to take advantage of the journalism training offered by the Progress.
THE MILESTONE is the University yearbook. Published annually, this publication contains photographic and statistical records of events of the University year. The book is distributed during the last two weeks of the spring semester.

Both the PROGRESS and the MILESTONE have received numerous national awards in recent years and are ranked annually among the top student publications in the nation.

AURORA (formerly BELLES LETTRES) is a magazine of student writing published by its student staff in cooperation with the English Canterbury Club, an organization of English majors and minors who meet monthly to encourage interest in literary activity.

AURORA accepts poems, one-act plays, short stories, prose sketches, and essays from any Eastern student. Cash prizes are awarded for the best works at the time of the spring publication.

STUDENT AWARDS

The Delta Alpha Chapter of Kappa Delta Pi annually presents two cash awards to the outstanding sophomore man and woman with the highest scholastic standing who plan to enter the teaching profession.

The Dr. Russell I. Todd Award is presented annually at the June commencement to the Eastern student judged to have made the most worthy and constructive use of his or her academic and leisure time. A faculty committee appointed by the President will select the recipient of this monetary award.

The Friendship Cup is awarded each year at Honors Day ceremonies by an anonymous donor. The award is a mint julep cup on which is inscribed the student's name under the words "Friendship Cup." The Student Senate makes the selection each year of the most friendly student on campus.

The Gladys Perry Tyng Award for excellence in elementary education is presented annually by the College of Education to a senior man and woman. The certificates of award are given in honor of Mrs. Tyng, who was associated with the elementary education program at Eastern as professor of education from 1920 to 1961.

The Charles F. Weaver Fund is a fund of $1,000.00 established by the late Charles F. Weaver, long-time member of the Board of Regents, to encourage proficiency in oratory and home economics. The income from the fund is used to provide prizes to be awarded annually to the male student who excels in oratory and to the female student who has made the greatest advance in the field of home economics. The recipients are selected by a faculty committee.

The W. L. Keene Award for Oratory was established by Eastern in 1964. The award is given to the woman student who excels in oratory. The award is comparable to the Weaver Oratorical Award for men. Any woman student at Eastern may enter the oratorical contest. The award was named in honor of W. L. Keene, professor of English at Eastern.
The Roy B. Clark Award is made possible by the will of the late Roy B. Clark, head of the English department for many years. The income from money left by Dr. Clark is to be awarded annually to the student who writes the best prose fiction published in Aurora.

The Anna D. Gill Award is a fund established in memory of Miss Anna D. Gill, long-time faculty member of the College of Business. The income from this fund will be awarded annually to the outstanding senior business student.

A Student Service Award is presented annually by members of the Young Women's Christian Association to that member of the graduating class who, during his or her four years at Eastern, has given the greatest measure of service to fellow students.

The Yeager, Ford & Warren Award is for the purpose of stimulating an interest in the study of accounting and related subjects and encouraging the entrance of young men in the field of professional accounting. The $100.00 award is given at the end of the junior year to the student selected by the College of Business as most likely to succeed in the practice of public accounting.

STUDENT AUTOMOBILES

Space limitations for parking at the University require that all motor vehicles operated at the University be registered. Students registered as sophomores, juniors, seniors, and graduate students who have an overall academic standing of 2.0 or above may be granted the privilege of registering and operating an automobile at the University. Students registered as freshmen, regardless of the number of terms they have attended college, are forbidden to possess and/or operate motor vehicles at the University. All students on academic probation, regardless of their classification, are forbidden to possess or operate motor vehicles at the University. Exceptions to motor vehicle regulations may be granted only with special permission from the Director of Safety and Security in order to avoid hardship based upon physical handicap, necessary commuting to classes, the use of car for essential work, or other proven need. An eligible person desiring to register a motor vehicle must present the following documents: a valid operator's license for the type of vehicle to be registered, proof of insurance against public liability claims and property damage in accordance with the standards of minimum coverage set by the Bureau of Insurance of Kentucky, proof of ownership must be presented, and the motor vehicle must meet the safety standards prescribed by the Kentucky Department of Public Safety. Students who violate the motor vehicle regulations are subject to assessment for violating the policy and in the more serious cases are subject to possible suspension from the University.
PLACEMENT OFFICE

The Placement Office is maintained by the University and is a free service to assist students and alumni in obtaining positions in schools, business, and industry. Its concept is that it only helps job candidates to meet employers; it does not guarantee a job for the candidate.

Each year, schools, industry, business, and government agencies come to this office searching for graduates with specific background, experience, and ability to fill their positions and vacancies.

The Placement Office has available up-to-date job listings in numerous fields. It offers the applicant opportunities to have interviews with numerous prospective employers.

The Placement Office prepares and distributes bulletins to those alumni who have filed a request. The bulletins list employment opportunities supplied by employers by letter, telephone, telegraph, or through their own placement bulletins.

Students receive the information via campus bulletin boards, department heads, and Alumni receive the listings by mail which they receive every two weeks.

THE ALUMNI ASSOCIATION

The Alumni Association of Eastern has as its purpose to promote fellowship among the graduates and to stimulate mutual interest and concern between the University and the Alumni. Eastern now has nearly 16,000 graduates. Many of these men and women hold more than one degree from the University. All Eastern graduates are members of the Eastern Alumni Association, "with all the rights and privileges appertaining thereto." All former students who have as much as a semester's work at Eastern, former faculty and staff members, are eligible for associate membership. The Alumni Association encourages all alumni to make an annual gift to the Alumni Fund each year. The minimum gift is $3.00, which serves as the "dues" for active membership in the Association. This is used by the Association's Alumni Office to help defray operating expenses. The remainder of any contribution will be used for the specific purpose designated by the contributor. Annual active membership is obtained by making an annual contribution of at least $5.00. Life memberships are $75.00 for single and $100.00 for joint memberships.

The Alumni Association sponsors Homecoming in the fall, KEA breakfast in the spring, and Alumni Day at commencement time. The latter features an Alumni Dinner honoring the 15, 25, 40, 50 and 60 year classes, and the presentation of an Outstanding Alumnus Award. In addition, active Alumni Chapters at Louisville, Greater Cincinnati, Ashland-Huntington-Ironton (Tri-State) area, Pulaski County, Pike County, Perry County, Harlan County, Breathitt County, Fayette County, McCreary County, Dayton and Hamilton, Ohio, Washington, D. C., and
three in Florida, have numerous meetings throughout the year open to all alumni and former students in the area. Many more Eastern Alumni Chapters are expected to be installed in the future.

The Eastern Alumni Association is a member of the American Alumni Council and the Joint Alumni Council of Kentucky an organization made up of the alumni of the six state-supported institutions: Eastern Kentucky University, Morehead State University, Murray State University, Western Kentucky University, University of Kentucky and Kentucky State College.

The Eastern Alumnus, official magazine of the Alumni Association, is published each fall and spring by the Association for its members. Subscription is included in the membership dues.

The Alumni Office is conveniently located in the Mary Frances Richards Alumni House just off the campus on Lancaster Avenue where alumni and students may get bulletins and information. This is a good place for former students to find the addresses of their colleagues. Graduates, former students and faculty members are always welcome at the Alumni Office.

Alumni and Faculty are eligible for membership in the Arlington Association, a social and recreational club.
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1971-72
ADMISSION TO THE UNIVERSITY

I. Methods of Admission.—Candidates for admission to Eastern may be approved in any of the following ways:

A. High School Graduation.
   1. Students who graduate from an accredited high school may be admitted to the freshman class on the basis of an official transcript and a recommendation from the principal.

B. By Special Approval.
   1. Students who have one unit less than the number required for high school graduation, with superior grades, may be admitted provided the high school principal recommends that the student is qualified to do college work.
   2. Veterans who have a minimum of twelve units of high school work and have successfully passed the G.E.D. tests may be admitted provided their test at Eastern shows that they rank as high as the average freshman entering college.
   3. Persons over 21 years of age who wish to pursue courses as special students without reference to graduation may be granted the privilege if they have adequate preparation for the courses desired.

C. With Advanced Standing.
   1. Students who have attended other colleges or universities are admitted to the University upon presentation and approval of credits from accredited institutions. So that proper evaluation and acceptance can be made, applicants transferring from other colleges and universities should present their applications at least ten days prior to the day of registration for the semester or summer term in which they plan to attend.
   2. Credits earned at an accredited institution are evaluated on the basis of 2.0 ("C") average, and the maximum hours allowed are assigned on this basis. All courses attempted are recorded and the evaluation of such courses is at the discretion of the college dean. Only two hours of physical education activity courses may be accepted toward graduation.
   3. A maximum of 67 semester hours may be accepted from an accredited junior college. The 67 hours shall include any work already completed in other institutions (including senior colleges) previous to the date of completion of work in the junior college. When a student has a total of 67 semester hours from one institution or from a combination of institutions, no additional work may be accepted for credit from a junior college. The student is advised to check with the Registrar of this institution before enrolling for work in any junior college after he has earned 60 semester hours.
   4. Students transferring to Eastern Kentucky University beginning with the fall semester, 1970, shall be required to earn at Eastern
a minimum of six (6) semester hours of credit in the major and
to complete at least one course in the minor, if a minor is re-
quired.

5. CEEB Advanced Placement Program Credit—In cooperation with
the College Entrance Examination Board's Advanced Placement
Program, Eastern Kentucky University grants credit for CEEB ap-
proved high school advanced placement courses when a score of
three (3) or higher is achieved on the appropriate CEEB EXAM-
INATIONS. Credit may be awarded in: American History, biology,
chemistry, French, German, Latin, mathematics, physics, and
Spanish.

II. Applications for Admission.—Applications for admission to the
Eastern Kentucky University cannot be unconditionally approved
until transcripts of credits are filed in the Admissions Office. As
soon as possible after an Application for Admission and a Transcript
of Credits are received, the candidate will be notified whether or
not he is accepted.

It is the responsibility of the applicant to have the following items
sent to the Admissions Office prior to the opening date of a term:

A. An application for admission, properly filled out by the appli-
cant, should be made upon a regulation blank furnished by the
Dean of Admissions.

B. All entering freshmen must submit scores on the American Col-
lege Test (ACT). The American College Test should be taken on
one of the five national testing dates during the student's senior
year in high school. Each student should use the appropriate sec-
tion of the ACT answer sheet to designate Eastern as a recipient
of his scores. A student who fails to designate Eastern as a recipi-
ent of his scores at the time he takes the test may do so at a later
date by writing the American College Testing Program and pay-
ing the late score transmitted fee. If an entering freshman has
failed to take the ACT, he must take the ACT at the time desig-
nated during orientation week. This may delay his registration
process.

C. A transcript of the secondary school credit, issued after graduation,
should be mailed directly by the principal to the Dean of Admis-
sions.

D. An official transcript of any college or university credits and a
statement of honorable dismissal, regardless of whether or not
the student received credit for the work, should be mailed directly
to: The Dean of Admissions, Eastern Kentucky University, Rich-
mond, Kentucky 40475.

E. Admission to graduate study is a process distinct from admission
to an undergraduate program. Persons interested in graduate
matriculation including Eastern Kentucky University Alumni,
should make application to: Dean, The Graduate School, Eastern
Kentucky University. Two official transcripts of credits not earned
at Eastern Kentucky University should be mailed to The Graduate
School to support application for admission.
ACADEMIC PROGRAMS

COLLEGE OF APPLIED ARTS AND TECHNOLOGY

Baccalaureate Degree Programs

Areas of Concentration

- Home Economics (teaching and non-teaching)
- Industrial Education (Manual Arts Therapy, Industrial Arts Teacher Education, Vocational-Industrial and Technical Teacher Education)
- Industrial Technology (Drafting, Electronics, Graphic Arts, Metals)
- Interior Design
- Nursing

Majors

- Agriculture
- Corrections

- Home Economics (*General; Child Development: teaching and non-teaching; *Dietetics: administrative and therapeutic; *Food Service Administration; *Textiles and Design)
- Industrial Education (Industrial Arts Teacher Education)
- Industrial Technology (Drafting, Electronics, Graphics Arts, Metals)
- Law Enforcement

Associate Degree Programs

- Agriculture (Dairy Science, Agriculture Mechanization, Horticulture)
- Home Economics (Child Care, Food Service Technology, Homemaking Supervision, Interior Decoration)
- Industrial Technology (Applied Electronics, Broadcast Engineering, Drafting and Design, Electronics, Printing, Instructional Media)
- Industrial Education (Vocational-Industrial and Technical Teacher Education)
- Law Enforcement (General, Industrial Security, Juvenile, Corrections)
- Medical Assistant (Administrative, Clinical)
- Medical Record Technology
- Nursing

*non-teaching programs
COLLEGE OF ARTS & SCIENCES

Baccalaureate Degree Programs

Areas of Concentration

Art (non-teaching, BFA)
Art (teaching)
English (teaching only)
Fisheries Management (non-teaching)
Medical Technology (non-teaching)
Music
Pre-Medical Sciences (non-teaching)
Regional Planning (non-teaching)
Social Science (teaching only)
Wildlife Management (non-teaching)

Majors:

*Anthropology
Art
Biology
Broadcasting
Chemistry
*Drama
Earth Science (teaching only)
Economics
English
French
Geography
*Geology
German
History
*Journalism
Latin
Mathematics
Music
Physics
*Philosophy
Political Science
Psychology (second major for teaching)
*Russian (teaching certificate with second major)
Spanish
Speech
Speech and *Drama
*Social Work
Sociology

*non-teaching only
COLLEGE OF BUSINESS

Baccalaureate Degree Programs
Bachelor of Business Administration degree (four-year)

Major:
*Accounting
*Economics
*Electronic Data Processing
*Finance
*General Business
*Management
*Marketing
*Office Administration (secretarial)

Bachelor of Science
Area in Business Education
Area in Distributive Education

Majors:
Business Education—Accounting
Business Education—General Business
Business Education—Secretarial
Distributive Education

Associate Degree Program
*Executive Secretarial Program

*non-teaching

COLLEGE OF EDUCATION

Baccalaureate Degree Programs
Areas of Concentration:
***Elementary Education (teaching only)
Health, Physical Education and Recreation (teaching only)

Majors:
Library Science (teaching only)
**Physical Education
*Public Health
*Recreation
*Rehabilitation Education
School Health (teaching only)
Speech Pathology and Audiology

*non-teaching only
**A Corrective Therapy emphasis (teaching only) is also available for male students
***Dual certification programs are available in special education, kindergarten education, and library science.

Associate Degree Program:
Recreation Supervision
THE GRADUATE SCHOOL

**Master of Arts Degree**
- English
- French
- History
- Geography
- Non School Counseling & Guidance
- Student Personnel Services in Higher Education
- Political Science
- Psychology
- Spanish

**Master of Arts in Education Degree**
- Elementary Education
- Elementary Education—Reading
- Guidance and Counseling
- Library Science
- School Health
- School Social Work
- Secondary Education
  - Art
  - Biological Sciences
  - Business Education
  - Chemistry
  - Earth Science
  - English
  - French
  - Geography
  - History
  - Home Economics
  - Industrial Education
  - Mathematics
  - Music
  - Physics
  - Physical Education
  - Political Science
  - Reading
  - Spanish
  - Special Education

**Master of Business Administration Degree**

**Master of Music Education Degree**

**Master of Public Administration Degree**

**Master of Science Degree**
- Biological Sciences
- Chemistry
- Criminal Justice
- Geology
- Industrial Education
- Industrial Technology
Mathematics
Physical Education
Physics
Psychology, Clinical and School

**Specialist in Education Degree**
Educational Administration & Supervision
Elementary Education
Physical Education
School Counseling & Guidance
Student Personnel Services in Higher Education

**Specialist in Technology Degree**
Fifth and Sixth Year Certification Programs for Teachers and School Service Personnel

**Joint Doctoral Program in Education (Ed.D. and Ph.D. with the University of Kentucky)**

**PRE-PROFESSIONAL CURRICULA**

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**PRE-LAW CURRICULUM**

No fixed, comprehensive pre-law curriculum is prescribed. However, prospective law students should keep in mind that a broad, basic and liberal education will equip one to study law and also prepare him for a vital role in the community once he has acquired his professional training. Courses in accounting, economics, English, history, Latin or a modern foreign language, mathematics, the natural sciences, philosophy, political science, psychology, sociology and speech lend themselves to the breadth of background needed by a law student and a lawyer.

The importance of a sound background in use of the English language cannot be stressed too greatly. A fundamental knowledge of grammar, a good vocabulary, an ability to read rapidly with understanding, an ability to express one's thoughts in a clear and organized fashion, are all absolutely essential to success in the study of law.

Pre-law students can major in the following areas: accounting, anthropology, economics, English, foreign language, history, management, political science, psychology and sociology. Admission to an accredited law school is dependent upon a satisfactory undergraduate record and completion of the Law School Admission test. Students must have earned baccalaureate degrees prior to entering law school.

Academic advising is done by the departments involved, however, the contact person for the Association of American Law Schools is the chairman of the Department of Political Science.
OTHER PRE-PROFESSIONAL CURRICULA

The University affords courses for students who plan to do specialized work in nursing, library science, theology, and other professional fields.

In addition to standard four-year pre-professional curricula, Eastern may approve specially arranged combined curricula. In these curricula, the student completes three years as outlined at Eastern to meet basic requirements and then transfer a year of successful work from a highly rated professional school in order to secure a B. S. or A. B. degree from Eastern Kentucky University. This plan may shorten by one year the time needed for obtaining both a baccalaureate and a professional degree.
GENERAL EDUCATION REQUIREMENTS

BACCALAUREATE DEGREE PROGRAMS

AREA I. English Composition—the following six semester hours are required:
   1. GSE 101—3 semester hours
   2. GSE 102—3 semester hours

AREA II. Humanities—twelve semester hours in one of the patterns (A, B, or C) shown below:
   A. Literature, language, fine arts, and/or philosophy.
      1. Six semester hours of literature.
         a. ENG 209 or 211—3 semester hours
         b. ENG 210 or 212—3 semester hours
      2. Six semester hours from the following.
         ART 200..................3 semester hours
         ART 390..................3 semester hours
         ART 391..................3 semester hours
         DRA 100..................3 semester hours
         Foreign language.........6 semester hours
         HIS 398..................3 semester hours
         HIS 399..................3 semester hours
         MUS 271..................3 semester hours
         MUS 371..................3 semester hours
         MUS 372..................3 semester hours
         PHI 110..................3 semester hours
         PHI 130..................3 semester hours
         PHI 240..................3 semester hours
         PHI 300..................3 semester hours
         PHI 301..................3 semester hours
   B. General Humanities:
      GSH 124—3 semester hours
      GSH 126—3 semester hours
      GSH 228—3 semester hours
      GSH 230—3 semester hours
   C. Combinations of A and B as indicated below.
      1. ENG—6 semester hours; fine arts and/or philosophy—3 semester hours; GSH—3 semester hours
      2. ENG—6 semester hours; GSH—6 semester hours
      3. ENG—3 semester hours; GSH—9 semester hours

AREA III. Social Sciences—twelve semester hours:
   A. The following six semester hours are required.
      1. GSS 246 or HIS 202—3 semester hours.
      2. GSS 247 or HIS 203—3 semester hours.
   B. Six semester hours from the following as specified by departments.
1. One course from the following group:
   ANT 202; ECO 230; GSS 142; GEO 101, 102, 210, or 345; POL 100; SOC 131.
2. One course from the following group:
   ANT 110; ECO 231; GSS 144 or 248; GEO 346, 402, or 422; POL 101; SOC 335 or 337.

AREA IV. Mathematics and natural science—twelve semester hours from the following as specified by departments:
2. Chemistry: CHE 101, 102, 111, or 112.
3. Geology: GLY 108, 109, 210, 302**, or 390**.
4. Mathematics: MAT 107, 109, 200, 207, or 211.
5. Physical Science: GSC 171, 172, or 173**.
6. Physics: PHY 101, 131, 132, 201, 202, or 230**.
7. Non-specialized science: ANT 201**; GSC 280**; SCI *310**.

*A student must complete at least 3 semester hours in biological science and 3 semester hours in physical science. At least 6 of the 12 hours must afford the student laboratory experience.

**Non-laboratory courses.

AREA V. Physical Education and Health—the following 5 semester hours are required:
1. GSP 180—1 semester hour
2. GSP 181—1 semester hour
3. GSP 281—3 semester hours

AREA VI. Military Science (Male Students)

Male students attending the University full time must be enrolled in courses meeting the military science requirement until that requirement is completed. The following regulations apply.

A. Definition of the requirement.
1. Male students who enter the University with less than 30 earned semester hours at the time of entry are required to complete MIL 101, 102, 201 and 202 or designated optional courses (see section below dealing with options).
2. Male students who enter the University with 30-44 earned semester hours are required to complete MIL 101 and 102 or optional courses (see below).
3. Male students who enter with 45 or more earned semester hours are exempted from the requirement.

B. Options to military science.
1. Any course(s) listed above under Areas II, III, and IV not being applied to other general education, major, or minor requirements.
2. Any of the courses listed below which are not being applied to major or minor requirements:
   EDF 200, ENG 214, ENG 215, GEO 341, GEO 343,
   HEA 315, HIS 305, MAT 111, MAT 272, NFA 201,
   PHI 350, PHI 360, PHY 100, POL 201, POL 202,
   PSY 212, SOC 355, SPE 100, SWK 210.

3. Restrictions on Options to military science courses.
   a. Must yield at least 8 semester hours credit.
   b. Must be taken in the semester(s) in which military science courses would otherwise be required.
   c. Must be identified as options at the time of registration.
   d. Cannot be taken on a "Pass-Fail" basis.

C. Excuses from the requirement may be granted under the following circumstances:
   1. If student is not a citizen of the United States.
   2. If student is under 14 years of age; or if he cannot qualify for appointment as second lieutenant prior to reaching 28 years of age.
   3. If student has performed prior military service. This may include ROTC in high school or at another college or university. Students in this category will enroll at the level for which previous training qualifies them, or be excused from enrollment, as determined by the Professor of Military Science.

ASSOCIATE OF ARTS DEGREE PROGRAMS

All programs of study leading to the Associate of Arts degree include at least twelve (12) semester hours of general education courses. These include GSE 101 and GSE 102, English Compositions, plus six (6) additional hours to be selected from the courses approved for general education.

These six additional hours must represent two different areas (see Central University College General Education Requirements—Areas II, III, IV, and V). SPE 100, Oral Communication, may be counted as a general education requirement in Associate Degree programs. All male students not otherwise exempt are subject to the military science requirement.
### COURSE PREFIXES

<table>
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<td>EPG</td>
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<td>EPY</td>
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<td>ESH</td>
<td>Secondary and Higher Education</td>
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<td>FRE</td>
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<tr>
<td>GBU</td>
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<tr>
<td>GEO</td>
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<td>GSE</td>
<td>English Composition</td>
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<td>GSH</td>
<td>Humanities</td>
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<td>GSL</td>
<td>Learning Laboratory</td>
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<td>GSO</td>
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<td>GSP</td>
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<tr>
<td>GSS</td>
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<tr>
<td>INT</td>
<td>Industrial Technology</td>
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<td>Journalism</td>
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<tr>
<td>LAT</td>
<td>Latin</td>
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<td>LEN</td>
<td>Law Enforcement</td>
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<td>MAS</td>
<td>Medical Assistant</td>
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<td>MAT</td>
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<td>Management</td>
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<td>Military Science</td>
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<td>Marketing</td>
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<td>MRS</td>
<td>Medical Records</td>
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<td>Music</td>
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<td>NFA</td>
<td>Nutrition Foods and Food Administration</td>
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<td>OAD</td>
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<td>OHO</td>
<td>Ornamental Horticulture</td>
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<td>Russian</td>
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<td>Science</td>
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<td>SPA</td>
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<td>SPE</td>
<td>Speech</td>
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<tr>
<td>TRS</td>
<td>Traffic Safety</td>
</tr>
</tbody>
</table>

### COURSE NUMBERING

Courses are numbered according to the following plan:

- Courses numbered 100 to 199 are primarily for freshmen.
- Courses numbered 200 to 299 are primarily for sophomores.
- Courses numbered 300 to 399 are primarily for juniors.
- Courses numbered 400 to 499 are primarily for seniors.
- Courses numbered 500 to 599 are for senior and graduate students.
- Courses numbered 600 to 699 are for graduate students only.

A student may not take a course numbered more than one year below or above his classification level except with special permission from his advisor and the chairman of the department offering the course.
SEMESTER WHEN COURSES ARE OFFERED

I, II, and A used in the description of a course indicates the course will be offered the fall semester, spring semester, and by announcement, respectively.

ACADEMIC REGULATIONS

Catalogue Applicable.—A student will be governed by the catalogue in force during the school year in which he enters unless he interrupts his resident status at this institution for more than one calendar year, in which case he comes under the requirements of the catalogue in force at the time of re-admission. A student may elect to comply with the catalogue currently in force. Exceptions to this policy must be approved by the dean of the college in which the student is enrolled and by the Vice President for Academic Affairs.

Classification of Students.—Students shall be classified as indicated below upon the completion of the respective number of hours, provided that the student has removed all entrance conditions:

- Freshman—Entrance requirements
- Sophomore—30 semester hours
- Junior—60 semester hours
- Senior—90 semester hours
- Graduate—Baccalaureate degree

Grading System.—Grades are indicated by letters, to each of which is given a certain value in "grade points". The following is the interpretation placed upon the grading system:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Meaning</th>
<th>Grade Points Per Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Excellent</td>
<td>4</td>
</tr>
<tr>
<td>B</td>
<td>Good</td>
<td>3</td>
</tr>
<tr>
<td>C</td>
<td>Average</td>
<td>2</td>
</tr>
<tr>
<td>D</td>
<td>Poor</td>
<td>1</td>
</tr>
<tr>
<td>F</td>
<td>Failure</td>
<td>0</td>
</tr>
<tr>
<td>I</td>
<td>Incomplete</td>
<td>0</td>
</tr>
<tr>
<td>S</td>
<td>Passing</td>
<td>0</td>
</tr>
<tr>
<td>U</td>
<td>Failure</td>
<td>0</td>
</tr>
<tr>
<td>W</td>
<td>Withdrew</td>
<td>0</td>
</tr>
<tr>
<td>WP</td>
<td>Withdrew passing</td>
<td>0</td>
</tr>
<tr>
<td>WF</td>
<td>Withdrew failing</td>
<td>0</td>
</tr>
<tr>
<td>CR</td>
<td>Credit only</td>
<td>0</td>
</tr>
</tbody>
</table>

A grade of "D" gives credit toward a certificate or a degree, if with such credits the student's standing is 2.0 or more. A grade of "I" shall be assigned if in the opinion of the instructor the student has been unable to complete the course on time because of unavoidable conditions. A grade of "I" must be made complete within one month after the student re-enters the University. A grade of "I" automatically becomes "F" if the course is not completed at the end of a year.
A student's point average is obtained by dividing the total number of points earned by the total number of semester hours attempted, exclusive of courses when "S" or "U" grades are assigned. Courses in which the marks are "CR", "W", or "WP" are recorded but are not figured in computing the point average. In order for a student to fulfill the requirements for a certificate or a degree, he must offer a number of "grade points" at least twice as great as the number of semester hours attempted.

**Pass-Fail ("S" - "U") Option**—The Pass-Fail option is made available to encourage students to take courses they might otherwise avoid because of lack of background or concern for lowering grade point standings:

1. Students who have earned 30 or more semester hours of credit with a minimum grade point average of 2.0 may choose the Pass-Fail ("S" - "U") option for a total of 15 hours of free electives. Courses taken under the Pass-Fail option must be exclusive of general education, major, minor, and other course requirements for graduation. Eligible courses must belong to the exclusive category, free electives. Hours attempted under the Pass-Fail option will not be used in the computation of grade-point averages.

2. Students may choose the Pass-Fail option for no more than one course with a maximum of five credit hours per semester.

3. Students may choose the Pass-Fail option or choose to make a change from the Pass-Fail option to the usual grading procedure only during preregistration, registration, or up to the last date given in each semester's schedule when courses may be dropped without a grade.

4. Students may choose the Pass-Fail option for free electives as indicated above, but the instructors for these courses will not be informed when students in their classes are under the Pass-Fail option. Instructors for all classes will turn in, as usual, the designated end-of-course grades, and the Registrar will convert the assigned letter grade to an "S" or "U" grade, as applicable.

**Repeating Courses**—The following regulations apply to repeated courses:

1. The credits attempted and quality points earned will be counted only for the last taking of a repeated course.

2. The grade which is counted in a course that has been repeated is the last grade awarded regardless of whether it is higher or lower.

3. A student may enroll in the same course for a third, or subsequent, time only under unusual circumstances and with the written permission of the dean of his college.

4. Courses failed at Eastern may be repeated elsewhere for equivalent credit but such repeats do not affect the Eastern grade-point average.

5. A transferred course which has been taken more than two times will not be accepted for credit.

**Minimum Scholastic Standards for Baccalaureate and Associate Degree Programs**—A student will be placed on academic probation anytime his cumulative grade point average falls below 2.0 on the 4.0 scale.
If a student’s grade point average falls below the following levels he will be denied the privilege of reenrollment for at least one semester:

- 24-35 hours attempted
- 36-63 hours attempted
- 64-95 hours attempted

1.4 grade point average
1.6 grade point average
1.8 grade point average

A student who has attempted 96 or more hours in a baccalaureate degree program with a grade point average below 2.0 will be allowed to attempt a maximum of 32 additional hours to bring his average up to 2.0. A student who has attempted 96 or more hours in an associate degree program with a grade point average below 2.0 will not be permitted to reenroll.

A student who has been out of college for at least 12 months who has been pursuing a baccalaureate program and wishes to reenroll in an associate degree program may be permitted to enroll with the provision that grades for previous courses not applicable to the associate degree requirements will not be considered in determining his grade point average. If the student subsequently is permitted to enter a baccalaureate program, grades in all courses attempted will be included in the computation of the grade point average for the baccalaureate degree program.

Student Load.—The normal semester load for undergraduate students is 16 credit hours. The minimum load to be a full-time student is 12 credit hours. A student who has established superior records may be permitted to enroll for more than 18 hours by the dean of the college in which he is majoring. The maximum load is 21 hours.

A correspondence course taken while in residence is counted as a part of the student’s load regardless of the institution with which the student does correspondence work. Six to nine semester hours is considered a normal load for a summer session, less than six being a part-time load and more than ten not normally permitted.

Auditing a Course.—A course may be audited, taken without credit, by permission of the instructor and the dean of the college. Registration procedures and fees are the same as for courses taken for credit.

Credit by Examination.—To recognize competence attained through educational experiences other than university instruction, it is possible to earn academic credit by examination in certain undergraduate courses designated by the departmental faculty. Conditions which apply to credit by examination are:

1. Only regularly enrolled undergraduate students are eligible for credit by examination. Although an examination may be taken at any time specified by the department chairman, credit earned will not be officially recorded until the student has completed at least 12 credit hours at Eastern with a minimum grade point average of 2.0.

2. The request for credit by examination is to be initiated by the student and approved by his adviser and by the chairman of the department offering the course.

3. Credit earned by examination may not be counted toward residence requirements.
4. Credit earned by examination is recorded without a letter grade; hence, it has no effect upon overall grade point average.

5. A student may attempt to earn credit by examination in a particular course only once.

6. Credit may not be earned by examination in a course which has been failed without the approval of the dean of the college offering the course.

7. A special fee of $10.00 per examination must be paid prior to taking an examination for credit.

Schedule Changes.—Changes in schedule which involve adding courses must be accomplished before the end of the first week of classes in a semester or within the first three days of classes in a summer session. Such changes must be approved by the adviser and the dean of the student’s college.

With advisor’s approval, a course can be dropped without a grade until the mid-point of the third week of classes in a semester or until the mid-point of the second week of classes in a summer session. Later dropping will result in the assignment of a “WP” or “WF” grade. No official dropping of classes is permitted within one month of the close of a semester or within two weeks of the close of a summer session.

If a student stops attending a class without officially withdrawing, he or she is subject to being assigned a grade of “F”.

Withdrawal from the University.—Students who find it necessary to leave the university during a semester under any circumstances must visit the Office of the Dean of Students and secure an Official Withdrawal card. This card must be carried by the student to several campus offices, where records must be cleared. Unless the student follows this procedure, the permanent records in the Registrar’s Office are incomplete. Therefore, students receive grades of “F” for the semester’s work and will not be eligible for re-admission. Students failing to complete a Withdrawal Card within fifteen days will receive an unofficial withdrawal.

Class Attendance.—Faculty members have full responsibility for dealing with student absences from class, within the following limitations:

Any student with more than twenty per cent absences in a course shall be assigned an “F” grade. This policy may be waived for individuals in 100 and 200 level courses by approval of the instructor, department chairman and college dean. In courses above the 200 level, waiver may be effected by the instructor for individuals.

A student who presents the instructor with an adequate and documented reason for an absence normally will be given an opportunity to make up the work missed, if this is feasible. Adequate reasons involve circumstances beyond the student’s control, such as personal illness, critical illness or death in the immediate family, or participation in an approved University activity. The responsibility for initiating the request to make up class work missed is vested in the student.
General Requirements for the Baccalaureate Degrees.—The minimum amount of credit required for the bachelor's degree is 128 semester hours 43 of which must be in courses numbered above 299. A minimum grade point average of 2.0 is required on all work attempted at Eastern. Not more than 32 semester hours of work required for a degree may be earned by extension and/or correspondence. A student who wishes to apply correspondence credit toward graduation must have all course work completed and the final examination taken as follows: December graduates by October 1 preceding May graduates by February 1 preceding, and August graduates by June 1 preceding. A candidate for a degree must have been in residence a minimum of 36 weeks and must have earned a minimum of 32 hours while in residence. At least 30 of the last 36 hours required for a degree must be earned in residence at Eastern. Transfer students may count toward a degree at Eastern only those credits approved by the dean of the college awarding the degree.

The curriculum which the student expects to follow for the completion of the requirements for the bachelor's degree must be filed in the office of the dean of the college in which the student is majoring not later than the end of the junior year. The curriculum must be approved by the major professor and the dean of the college. Students who change their major shortly before graduation may find that in the process their graduation may be delayed. A curriculum cannot be changed after fifteen days following the semester in which a student makes application for graduation.

Credits more than eight (8) years old may not be counted toward a Baccalaureate Degree without being validated by the dean of the college awarding the degree.

Requirements for a Second Baccalaureate Degree.—To be eligible for a second baccalaureate degree the student must meet all requirements for the second degree sought. Beyond the requirements for the first degree, he must complete a minimum residence requirements of 36 weeks and earn a minimum of 32 credit hours in residence with an average of at least 2.0.

Application for Graduation.—Students completing requirements for graduation in December should apply before the end of the preceding April; May and August graduates should apply by the end of the preceding October.

Commencement.—Commencements are held at the close of the spring semester and at the end of the summer session. Students who are candidates for degrees are required to participate in the commencement exercises unless excused by the President. A student who completes the requirements for a degree during the fall semester will receive the degree at the following spring commencement.

Commencement Honors.—Students are graduated "With High Distinction" who attain a standing of 3.6 or higher for at least three years of residence work.

Students are graduated "With Distinction" who attain a standing of 3.4 up to 3.6 for at least three years of residence work.

A student who completes only two years of work at Eastern may receive the appropriate commencement honors if he attains a standing of 0.2 greater than the above.
HOW TO USE THIS CATALOG

Each four-year academic program offered by Eastern Kentucky University is divided into a pair of two-year increments for listing in this catalog.

The first two years of each program are listed in alphabetical order in the Central University College portion immediately following this card. The second two years of each curriculum are to be found in the section of the College which administers the degree program.

In order to facilitate the location of the second two years of each program the page number on which they appear is listed where the first two years of the program is printed.

Academic programs are designated by two page numbers in the index of this catalog. The first, bold face, number is the location of the first two years, the second number indicates the page where the second two years are printed.
COURSE PREFIXES

ACC—Accounting
AGR—Agriculture
ANT—Anthropology
ART—Art
BED—Business Education
BIO—Biology
CHE—Chemistry
CRJ—Criminal Justice
DED—Distributive Education
DRA—Drama
EAD—Educational Administration
ECO—Economics
EDF—Educational Foundations
EDP—Electronic Data Processing
ELE—Elementary Education
ENG—English
EPG—Guidance
EPY—Educational Psychology
ESH—Secondary and Higher Education
FIN—Finance
FRE—French
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his classification level except with special permission from his advisor and the chair-
man of the department offering the course.
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CENTRAL UNIVERSITY COLLEGE

Clyde J. Lewis, Dean

L. L. Barlow, Associate Dean and Director of Advising

STRUCTURE AND FUNCTIONS

Central University College functions at the lower division level in directing academic advising, supervising academic programs, and offering various curricular services for its students.

Curricular Services.

These curricular services reflect the role of the College in meeting the peculiar academic needs of freshman and sophomore students. The fundamental curricular units are the Learning Laboratory; the Departments of Military Science and Social Science; and the General Studies Programs, including Science (GSC), English Composition (GSE 101 and 102), Humanities (GSH), Basic Physical Education (GSP 180-181), Health (GSP 281), and Orientation (GSO 100). Because the curricular objectives are varied and general, these offerings are quite diverse. Faculty members are often drawn from different disciplines and from outside the College; experimental techniques are often employed; and course content is integrated where this would seem to increase relevance or efficiency in learning. Such features accent the curricular uniqueness and identity of the College.

The curricular function of Central University College is intimately related to the general education program of the University. That program requires 47 semester hours for graduation.* Some of the courses which may meet these requirements are offered by departments of the College of Arts and Sciences; these stand beside Central University College courses in the general education listings. Th University requirements comprise a combination of absolutes and variables, with the latter confined inside the limits of numerous options. These limits, in turn, may be further narrowed by departments in setting major requirements as described below. Finally, the student in consultation with an advisor, selects courses from the remaining choices. Hopefully the resulting experience provides a broad area of knowledge along the skills valuable to the individual and to society. The direct relationship between the University program and Central University College is primarily an administrative one. Policy, including approval of the general education listings, is made by academic committees representing all colleges; one of these, the General Education Committee, which initiates recommendations, is chaired by the Dean of Central University College.

Supervision of Student Programs.

In supervising student programs, the Records Office of the College maintains a constant surveillance of credits with a view toward certifying each student for advancement to an upper-division college. Periodic progress reports are furnished each student and advisor. Within the context of the system, every effort is made to move the student along in his program as quickly as possible. The ultimate purpose is to insure that each student follows a balanced curriculum during the crucial

*See pp. 44-46.
foundational years and that the later academic career may be relatively free for specialization in major field. In accordance with this purpose, students must meet all requirements in Central University College before they are permitted to register in an upper division college.

Transfers to upper division colleges and other academic procedures are governed by the following regulations:

1. All students entering the institution with less than 60 semester hours will be enrolled in Central University College. Those entering two-year and other less than baccalaureate degree programs sponsored by the other colleges will be enrolled for advising and record keeping only. Their other academic affairs will be administered by the colleges sponsoring the programs. Please see Richmond Community College for a listing of programs.

2. Central University College will be responsible for administering all academic affairs of its students who are preparing for four-year programs. Decisions involving academic probation, change of courses, student load, waiving of courses, granting credit by examination, etc., must be approved by the Dean of Central University College. Policy decisions in such matters, however, must be made in cooperation with the dean of the college offering the course or courses. The Dean of Central University College will be responsible for administering the academic advising of students enrolled in the College.

3. Students entering four-year programs and expecting to transfer to upper division colleges will be required to complete their work in Central University College within 22 hours attempted beyond the hours specified in their curricula for the first two years. Exceptions will require special approval from the Dean of Central University College. This approval may be recommended in specific terms by the Admissions Committee for students who are readmitted after having been previously dismissed for academic reasons.

4. Transfer from Central University College to an advanced college will require that students complete 60 semester hours with a 1.8 average, in addition to meeting the general education requirements of Central University College and the special admission requirements of the advanced colleges.

5. Central University College students will not be permitted to take courses in the upper division segment of their curriculum prior to their third semester of enrollment.

6. Transfer students who have earned less than 60 semester hours of credit or transfer students who do not meet other admission requirements for advanced colleges must enroll in Central University College until such requirements are met.

Academic Advising.

Guidance for the student in interpreting and following these regulations is provided by the Central University College advising office and a corps of advisors drawn primarily from the departments which offer degree programs. Each student, upon entering the College, is assigned to an advisor. At registration, all schedules must have the proper advisor approval; every important change in a student’s program, in-
cluding a change of major, or a request for change in an admission requirement for an advanced college, must be approved by the appropriate advisor. Students should understand that all questions concerning academic problems should be taken first to the advisor, and only later, when the problem remains unsolved, to the advising office or to the Dean.

**CURRICULAR REQUIREMENTS IN CENTRAL UNIVERSITY COLLEGE**

Each enrollee in the College, unless granted status as a "special student," must follow a "preparatory curriculum" in working toward acceptance as a major in an advanced college. Such curricula contain three components or requirement patterns.

**Military Science Requirements.**

The first of these is the military science requirement of 8 designated hours for men or 8 elective hours for women. Except for those who are exempted or excused*, all men enrolled full time in the University must also be enrolled in MIL 101, 102, 201, or 202, or in acceptable optional courses, until the requirement has been completed.** However, failure to complete the requirement will not prevent a student from being transferred to an upper-division college.

**Central University College Requirements.**

The second component of each "preparatory curriculum" is the group of Central University College requirements. These total 24 semester hours, including GSO 100 and the following general education courses:

- GSE 101 and 102 (6)
- GSP 180, 181, and 281 (5)
- GSS 246 and 247 or HIS 202 and 203 (6)
- General education laboratory science courses from the approved list (6)

These requirements must be met by all students prior to transferring from Central University College to an advanced college; no waivers or substitutions are permitted, although departments may change their own course specifications for the laboratory requirement.

The Central University College requirement also includes a pattern of courses during the freshman or "initial semester" for all preparatory curricula except Art and Music. The pattern comprises a core of absolute requirements (GSE; GSO; GSP; and MIL, option, or elective for women); two general education courses (general education options); and at least one elective course. The general education courses must be selected from two of the following categories: (1) science and mathematics; (2) humanities; (3) social science (restricted to ANT 110 or

*See p. 45 for an explanation of details.
**See pp 45-46 for listing and explanation of the options.
courses in Area III B 1 of the listing);* and (4) GSP 281. The elective course(s) in the initial semester are the student's choice, but students are advised to consider carefully the departmental suggestions for both the electives and the general education options. Progress through the preparatory curricula, particularly through the more crowded ones, is greatly facilitated if the suggested courses are taken. The course pattern for the initial semester is shown below:

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GSE 101</td>
<td>3</td>
</tr>
<tr>
<td>GSO 100</td>
<td>1</td>
</tr>
<tr>
<td>GSP 180</td>
<td>1</td>
</tr>
<tr>
<td>MIL 101, option, or elective (women)</td>
<td>2</td>
</tr>
<tr>
<td>General education options</td>
<td>6-8</td>
</tr>
<tr>
<td>General elective</td>
<td>3-6</td>
</tr>
</tbody>
</table>

16-19

Admission Requirements for Upper Division Colleges.

The third component of each "preparatory curriculum" consists of courses required for admission to the upper-division college and major department. These may include courses in the major field, courses in the minor field, supporting courses for the major, and/or general education courses other than those required by Central University College. Because these requirements are set by the upper-division departments, they may be waived or substitutions may be made upon authorization by the chairmen of specifying departments. Requests for such authorization may be initiated by students through their advisors; the request forms should be signed by the departmental chairmen and filed in the Central University College Records Office. Unless this is done, the student will be required to meet all published admission requirements before transfer to an upper-division college. Upper-division college admission requirements are shown just below the headings of the "preparatory curricula" which follow.

*See p. 45.
PREPARATORY CURRICULA

ACCOUNTING

Preparatory curriculum for a major in Accounting

Courses required for admission to the College of Business: ACC 108, 109, and 225; ECO 230 and 231; general education literature (6); general education social science (3); and the initial semester general education options (6-8). See page 294 for the third and fourth years of this program.

Recommended distribution of courses to meet all requirements in the preparatory curriculum:

First Year

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Hours</th>
<th>Second Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GSE 101</td>
<td>3</td>
<td>ACC 108 or 109</td>
<td>3</td>
</tr>
<tr>
<td>GSO 100</td>
<td>1</td>
<td>General education mathematics or</td>
<td>3</td>
</tr>
<tr>
<td>GSP 180</td>
<td>1</td>
<td>science*</td>
<td></td>
</tr>
<tr>
<td>MIL 101, option, or</td>
<td>2</td>
<td>General education social science,</td>
<td></td>
</tr>
<tr>
<td>elective (women)</td>
<td></td>
<td>GSS 246 or HIS 202*</td>
<td>3</td>
</tr>
<tr>
<td>Suggested general education options:</td>
<td></td>
<td>GSE 102</td>
<td>3</td>
</tr>
<tr>
<td>General education mathematics or</td>
<td></td>
<td>GSP 181</td>
<td>1</td>
</tr>
<tr>
<td>science*</td>
<td>3</td>
<td>MIL 102, option, or</td>
<td>2</td>
</tr>
<tr>
<td>Social Science</td>
<td>3</td>
<td>elective (women)</td>
<td></td>
</tr>
<tr>
<td>ACC 108</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>16</td>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>

Second Year

| ACC 109 or 225                      | 3     | ACC 225 or 226                       | 3     |
| ENG 209 or 211                      | 3     | ECO 231                              | 3     |
| ECO 250                             | 3     | ENG 210 or 212                       | 3     |
| GSP 281                             | 3     | General education mathematics or     | 3     |
| GSS 246 or 247, HIS 202 or 203      | 3     | science*                             |       |
| MIL 201, option, or                | 2     | GSS 247, HIS 203*, or general        |       |
| or elective (women)                |       | education social science             | 3     |
|                                      | 17    | MIL 202, option, or                  | 2     |
|                                      |       | or elective (women)                  |       |

*GSS 246 and 247 or HIS 202 and 203, and six hours of general education laboratory science must be completed in Central University College.

AGRICULTURE

Preparatory curriculum for a major in Agriculture (with a minor in Business)

Courses required for admission to the College of Applied Arts and Technology: AGR or OHO courses to be selected with approval of advisor (13-19); ACC 108 and 109; general education requirement (3); and the initial semester general education options (6-8). See page 110 for the third and fourth years of this program.
Recommended distribution of courses to meet all requirements in the preparatory curriculum:

**First Year**

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GSE 101</td>
<td>3</td>
</tr>
<tr>
<td>GSO 100</td>
<td>1</td>
</tr>
<tr>
<td>GSP 180</td>
<td>1</td>
</tr>
<tr>
<td>MIL 101, option, or elective (women)</td>
<td>2</td>
</tr>
</tbody>
</table>

Suggested general education options:
- Mathematics or science: 3
- GSP 281 or humanities: 3
- Suggested general electives: AGR or OHO**: 3-5

**Second Year**

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC 108</td>
<td>3</td>
</tr>
<tr>
<td>AGR or OHO**</td>
<td>4-7</td>
</tr>
<tr>
<td>General education requirement*</td>
<td>6</td>
</tr>
<tr>
<td>MIL 201, option, or elective (women)</td>
<td>2</td>
</tr>
</tbody>
</table>

Suggested general education options:
- ANT 110 or 201: 3
- GLY 108, 109, or 210: 3-4
- GSE 102: 3
- GSP 181: 1
- MIL 102, option, or elective (women): 2

**Elective**: 3

*The following must be completed in Central University College: GSP 281; GSP 246 and 247 or HIS 202 and 203; and six semester hours of laboratory science.

**Anthropology**

Preparatory curriculum for a major in Anthropology (non-teaching)

Courses required for admission to the College of Arts and Sciences:
- ANT 110 or SOC 131; ANT 201 and 202; GLY 108, 109, or 210 (meets 3 hours of the general education laboratory requirement in Central University College); PSY 211, 213, and/or general education electives (6); general education literature (6); and the initial semester general education options (6-8). See page 182 for the third and fourth years of this program.

Recommended distribution of courses to meet all requirements in the preparatory curriculum:

**First Year**

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GSE 101</td>
<td>3</td>
</tr>
<tr>
<td>GSO 100</td>
<td>1</td>
</tr>
<tr>
<td>GSP 180</td>
<td>1</td>
</tr>
<tr>
<td>MIL 101, option, or elective (women)</td>
<td>2</td>
</tr>
<tr>
<td>Suggested general education options: ANT 110</td>
<td>3</td>
</tr>
<tr>
<td>BIO 141 or 162</td>
<td>3-4</td>
</tr>
</tbody>
</table>

Suggested general elective: Foreign language: 3

**Second Semester**

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGR or OHO**</td>
<td>4-6</td>
</tr>
<tr>
<td>General education requirements*</td>
<td>6</td>
</tr>
<tr>
<td>GSE 102</td>
<td>3</td>
</tr>
<tr>
<td>GSP 181</td>
<td>1</td>
</tr>
<tr>
<td>MIL 102, option, or elective (women)</td>
<td>2</td>
</tr>
</tbody>
</table>

**Elective**: 3

*The following must be completed in Central University College: GSP 281; GSP 246 and 247 or HIS 202 and 203; and six semester hours of laboratory science.
Second Year

<table>
<thead>
<tr>
<th>Course</th>
<th>First Semester</th>
<th>Hours</th>
<th>Course</th>
<th>Second Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANT 201 or 202</td>
<td>3</td>
<td>ANT 202 or SOC 131</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG 209 or 211</td>
<td>3</td>
<td>ENG 210 or 212</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GSP 231</td>
<td>3</td>
<td>GSS 247 or HIS 203</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GSS 246 or HIS 202</td>
<td>3</td>
<td>MIL 102, option, or elective (women)</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MIL 201, option, or elective (women)</td>
<td>2</td>
<td>PSY 213 or general education elective*</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elective*</td>
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<td>Elective</td>
<td>3</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>17</td>
<td></td>
<td>17</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*To be selected in consultation with advisor. Six hours of general education laboratory science must be completed in Central University College.

ART

Preparatory curriculum for the Bachelor of Arts with an area in Art (teaching); a major in Art (teaching); a major in Art (non-teaching); or Bachelor of Fine Arts (non-teaching)

Courses required for admission to the College of Arts and Sciences: ART 100, 101, 102, and 103; required ART to be selected with approval of advisor (0-12); EDF 202 and PSY 211 (for teacher certification); general education science or literature (3); and general education social science (3). See page 190 for the third and fourth years of these programs.

Recommended distribution of courses to meet all requirements in the preparatory curriculum:

First Year

<table>
<thead>
<tr>
<th>Course</th>
<th>First Semester</th>
<th>Hours</th>
<th>Course</th>
<th>Second Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 100</td>
<td>3</td>
<td>ART 101</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ART 102</td>
<td>3</td>
<td>ART 103</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>General education social science elective (Area III B 1)</td>
<td>3</td>
<td>General education laboratory science</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GSE 101</td>
<td>3</td>
<td>GSE 102</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GSO 100</td>
<td>1</td>
<td>GSP 181</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GSP 180</td>
<td>1</td>
<td>GSS 246, HIS 202, or optional elective*</td>
<td>0-3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MIL 101, option, or elective (women)</td>
<td>2</td>
<td>MIL 102, option, or elective (women)</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>16</td>
<td></td>
<td>15-18</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Second Year

<table>
<thead>
<tr>
<th>Course</th>
<th>First Semester</th>
<th>Hours</th>
<th>Course</th>
<th>Second Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDF 202, PSY 211*, GSP 281**, or elective</td>
<td>3</td>
<td>EDF 202, PSY 211*, GSS 247, HIS 203, or elective</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>General education laboratory science** or literature</td>
<td>3</td>
<td>General education laboratory science** or literature</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GSS 246 or 247; HIS 202 or 203*</td>
<td>3</td>
<td>GSP 281** or elective</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MIL 201, option, or elective (women)</td>
<td>2</td>
<td>MIL 202, option, or elective (women)</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Required art*** and/or elective</td>
<td>6</td>
<td>Required art*** and/or elective</td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>17</td>
<td></td>
<td>17</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Students who expect to qualify for teaching certificates within four years must complete GSS 246 or HIS 202 in the second semester of the freshman year and complete both EDF 202 and PSY 211 in the sophomore year. GSS 246 and 247 or HIS 202 and 203 must be completed in Central University College.

**GSP 281 and six hours of general education laboratory science must be completed in Central University College.

***To be selected from ART 203, 204, 227, and 229, with approval of advisor.
BIOLOGY

Preparatory curriculum for major in Biology (teaching or non-teaching); Fisheries Management; or Wildlife Management.

Courses required for admission to the College of Arts and Sciences: BIO courses to be selected with approval of advisor (4-12); CHE or MAT courses (9-18); general education humanities or EDF 202 and PSY 211 (for teacher certification) (6); general education social science (3); and the initial semester general education options (6-8). See page 196 for the third and fourth years of these programs.

Recommended distribution of courses to meet all requirements in the preparatory curriculum:

### First Year

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Hours</th>
<th>Second Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GSE 101</td>
<td>3</td>
<td>Biology**</td>
<td>4</td>
</tr>
<tr>
<td>GSO 100</td>
<td>1</td>
<td>CHE or MAT*</td>
<td>3-5</td>
</tr>
<tr>
<td>GSP 180</td>
<td>1</td>
<td>GSE 102</td>
<td>3</td>
</tr>
<tr>
<td>MIL 101, option, or elective (women)</td>
<td>2</td>
<td>GSP 181</td>
<td>1</td>
</tr>
<tr>
<td>Suggested general education options: Social science</td>
<td>3</td>
<td>GSS 246. HIS 202, or general</td>
<td>3</td>
</tr>
<tr>
<td>BIO 131 or 141</td>
<td>4</td>
<td>MIL 102, option, or elective (women)</td>
<td>2</td>
</tr>
<tr>
<td>Suggested general elective: CHE or MAT*</td>
<td>3-5</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>17-19</td>
<td><strong>Total</strong></td>
<td>16-18</td>
</tr>
</tbody>
</table>

---

### Second Year

| Biology**       | 0-4   | Biology**       | 0-4   |
| CHE or MAT*     | 3-4   | CHE or MAT*     | 3-9   |
| General education humanities, EDF 202, or PSY 211*** | 3 | General education humanities, EDF 202, or PSY 211*** | 3 |
| GSP 281         | 3     | GSS 247***, HIS 203***, or other | 3 |
| GSS 246 or 247; HIS 202 or 203 | 3 | general education social science | 3 |
| MIL 201, option, or elective (women) | 2 | MIL 202, option, or elective (women) | 2 |
| **Total**       | 14-19 | **Total**       | 15-19 |

---

*To be selected with approval of advisor from the following: CHE 111, 112, 213; MAT 107, 109, 111, and 207.

**To be selected with approval of advisor from the following: BIO 131, 141, 211, 221, 242, 315, 316, 325, 330, or 381.

***EDF 202 and PSY 211 must be completed by students seeking teaching certificates.

****GSS 246 and 247 or HIS 202 and 203 must be completed in Central University College.

PRE-FORESTRY

Preparatory curriculum for a major in Pre-Forestry, Department of Biology

Courses required for admission to the College of Arts and Sciences: BIO 131 and CHE 111 (meets the 6 hour general education laboratory requirement in Central University College); BIO 211; CHE 112; MAT 109 and 111; general education literature (3); general education (social science (3); and the initial semester general education options (6-8). See page 179 for the third and fourth years of this program.
Recommended distribution of courses to meet all requirements in the preparatory curriculum:

**First Year**

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Hours</th>
<th>Second Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Semester Hours</td>
<td></td>
<td>Second Semester Hours</td>
<td></td>
</tr>
<tr>
<td>GSO 100</td>
<td>1</td>
<td>BIO 131 or 211</td>
<td>4</td>
</tr>
<tr>
<td>GSP 180</td>
<td>1</td>
<td>GSE 102</td>
<td>3</td>
</tr>
<tr>
<td>GSE 101</td>
<td>3</td>
<td>GSP 181</td>
<td>1</td>
</tr>
<tr>
<td>MIL 101, option, or elective (women)</td>
<td>2</td>
<td>GSS 246, HIS 202, or general education social science</td>
<td>3</td>
</tr>
<tr>
<td>Suggested general education options:</td>
<td></td>
<td>(Area III B 1)</td>
<td>4-5</td>
</tr>
<tr>
<td>BIO 131</td>
<td>4</td>
<td>MAT 109 or 111</td>
<td>3</td>
</tr>
<tr>
<td>Social science</td>
<td>3</td>
<td>MIL 102, option, or elective (women)</td>
<td>2</td>
</tr>
<tr>
<td>General elective</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>**</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>17</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Second Year**

| Second Year Hours |       | **                        |       |
|                  |       | **                        |       |
| BIO 211 or general education literature | 3-4 | **                        |       |
| CHE 111           | 4     | **                        |       |
| GSS 246 or 247; HIS 202 or 203 | 3 | **                        |       |
| MAT 111 or elective | 3-4 | **                        |       |
| MIL 201, option, or elective (women) | 2 | **                        |       |
| **                  | **15-17**| **                        | **16**|

*GSS 246 and 247 or HIS 202 and 203 must be completed in Central University College.

**PRE-VETERINARY MEDICINE**

Preparatory curriculum for a major in Pre-Veterinary Medicine,* Department of Biology

Courses required for admission to the College of Arts and Sciences: AGR 221; BIO 141 and CHE 111 (meets the 6 hour general education laboratory requirement in Central University College); BIO 211; CHE 112 and 361; MAT 109 or 111; general education (3); and the initial semester general education options (6-8). See page 181 for the third and fourth years of this program.

Recommended distribution of courses to meet all requirements in the preparatory curriculum:

**First Year**

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Hours</th>
<th>Second Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Semester Hours</td>
<td></td>
<td>Second Semester Hours</td>
<td></td>
</tr>
<tr>
<td>GSE 101</td>
<td>3</td>
<td>BIO 141 or 211</td>
<td>4</td>
</tr>
<tr>
<td>GSO 100</td>
<td>1</td>
<td>GSE 102</td>
<td>3</td>
</tr>
<tr>
<td>GSP 180</td>
<td>1</td>
<td>GSS 246, HIS 202, or general education social science</td>
<td>4-5</td>
</tr>
<tr>
<td>MIL, option, or elective (women)</td>
<td>2</td>
<td>(Area III B 1)</td>
<td>3</td>
</tr>
<tr>
<td>Suggested general options:</td>
<td></td>
<td>MAT 109 or 111</td>
<td>3</td>
</tr>
<tr>
<td>CHE 111</td>
<td>4</td>
<td>MIL 102, option, or elective (women)</td>
<td>2</td>
</tr>
<tr>
<td>Elective**</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Suggested general elective:</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>BIO 141</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>**</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>18</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*GSS 246 and 247 or HIS 202 and 203 must be completed in Central University College.
Second Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 211 or MAT 109</td>
<td>4-5</td>
</tr>
<tr>
<td>CHE 112 or 361</td>
<td>4-5</td>
</tr>
<tr>
<td>General education requirement**</td>
<td>6</td>
</tr>
<tr>
<td>MIL 201, option, or elective (women)</td>
<td>2</td>
</tr>
</tbody>
</table>

16-18
18

*Students interested in a two-year program which does not lead toward a degree from Eastern should follow the curriculum listed in this catalog under the Department of Agriculture in the College of Applied Arts and Technology.

**GSS 246 and 247 or HIS 202 and 203 and GSP 281 must be completed in Central University College. Students expecting to apply for admission to Auburn University must complete GSS 246 and GSS 247.

BROADCASTING
See DRAMA and SPEECH

BUSINESS ADMINISTRATION

Preparatory curriculum for majors in Electronic Data Processing, Economics, General Business, Finance, Management, Marketing, or Office Administration

Courses required for admission to the College of Business: ACC 108 and 109; ECO 230 and 231; general education science, mathematics, GSH, or non-business elective (3); general education literature or GSH (6); general education social science (3); and the initial semester general education options (6-8). See page 297 for the third and fourth years of these programs.

Recommended distribution of courses to meet all requirements in the preparatory curriculum:

First Year

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GSE 101</td>
<td>3</td>
</tr>
<tr>
<td>GSO 100</td>
<td>1</td>
</tr>
<tr>
<td>GSP 180</td>
<td>1</td>
</tr>
<tr>
<td>MIL 101, option, or elective (women)</td>
<td>2</td>
</tr>
<tr>
<td>Suggested general education options: General education science or mathematics* or GSH 124</td>
<td>3</td>
</tr>
<tr>
<td>Social science</td>
<td>3</td>
</tr>
<tr>
<td>Suggested general elective: ACC 108 or OAD 101</td>
<td>3</td>
</tr>
</tbody>
</table>

16

Second Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC 108 or 109</td>
<td>3</td>
</tr>
<tr>
<td>General education science or mathematics* or GSH 124 or 126</td>
<td>3</td>
</tr>
<tr>
<td>General education social science, GSS 246, or HIS 202*</td>
<td>3</td>
</tr>
<tr>
<td>GSE 102</td>
<td>3</td>
</tr>
<tr>
<td>GSP 181</td>
<td>1</td>
</tr>
<tr>
<td>MIL 102, option, or elective (women)</td>
<td>2</td>
</tr>
</tbody>
</table>

17-19
17

*Six hours of general education laboratory science, GSP 281, and GSS 246 and 247 or HIS 202 and 203 must be completed in Central University College.
BUSINESS EDUCATION

Preparatory curriculum for a major in Business Teacher Education

Courses required for admission to the College of Business: ACC 108 and 109; ECO 230; OAD (6-8, to be taken from 115, 116, 151, 152, and 253); EDF 202 and PSY 211; general education social science (3); and the initial semester general education options (6-8). See page 302 for the third and fourth years of this program.

Recommended distribution of courses to meet all requirements in the preparatory curriculum:

### First Year

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Hours</th>
<th>Second Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GSE 101</td>
<td>3</td>
<td>ACC 108 or 109</td>
<td>3</td>
</tr>
<tr>
<td>GSO 100</td>
<td>1</td>
<td>General education</td>
<td>3</td>
</tr>
<tr>
<td>GSP 180</td>
<td>1</td>
<td>laboratory science</td>
<td>1</td>
</tr>
<tr>
<td>MIL 101, option, or</td>
<td>2</td>
<td>General education</td>
<td>3</td>
</tr>
<tr>
<td>elective (women)</td>
<td></td>
<td>social science</td>
<td></td>
</tr>
<tr>
<td>Suggested general</td>
<td>3</td>
<td>GSS 246 or HIS 202*</td>
<td>3</td>
</tr>
<tr>
<td>education options:</td>
<td></td>
<td>General education</td>
<td></td>
</tr>
<tr>
<td>Social science</td>
<td>3</td>
<td>laboratory science</td>
<td></td>
</tr>
<tr>
<td>Laboratory science</td>
<td>3</td>
<td>GSS 102</td>
<td>3</td>
</tr>
<tr>
<td>Suggested general</td>
<td>3</td>
<td>EDF 202</td>
<td>3</td>
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<tr>
<td>electives:</td>
<td></td>
<td>PSY 211</td>
<td>3</td>
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<tr>
<td>ACC 108</td>
<td>2</td>
<td>MIL 102, option, or</td>
<td>2</td>
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<tr>
<td>OAD 151 or 152</td>
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<td>elective (women)</td>
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</table>

18

### Second Year

| ACC 109 or elective     | 3     | ECO 230 or 231          | 3     |
| ECO 230 or general      | 3     | EDF 202 or PSY 211      | 3     |
| education, laboratory   |       | GSP 281                 | 3     |
| science*                |       | GSS 247, HIS 203*, or   | 3     |
| EDF 202 or PSY 211      | 3     | general education       |       |
| GSS 246 or 247; HIS 202 | 3     | social science          |       |
| or 203*                 |       | laboratory science      |       |
| MIL 201, option, or     | 2     | MIL 202, option, or     | 2     |
| elective (women)        |       | elective (women)        |       |
| OAD 152, 253, 115, or   | 2-3   | OAD 253, 115, 116, or   | 2-3   |
| 116                    |       | 202                    |       |

16-17

*Six hours of laboratory science, GSS 246 and 247 or HIS 202 and 203 must be completed in Central University College.

DISTRIBUTIVE EDUCATION

Preparatory curriculum for a major in Distributive Teacher Education

Courses required for admission to the College of Business: ACC 108 and 109; ECO 230 and 231; EDF 202 and PSY 211; general education literature (6); and the initial semester options (6-8). See page 304 for the third and fourth years of this program.
Recommended distribution of courses to meet all requirements in the preparatory curriculum:

### First Year

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Hours</th>
<th>Second Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GSE 101</td>
<td>3</td>
<td>ACC 108 or 109</td>
<td>3</td>
</tr>
<tr>
<td>GSO 100</td>
<td>1</td>
<td>General education science or</td>
<td>3</td>
</tr>
<tr>
<td>GSP 180</td>
<td>1</td>
<td>mathematics*</td>
<td>3</td>
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<tr>
<td>MIL 101, option, or</td>
<td>2</td>
<td>GSE 102</td>
<td>3</td>
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<tr>
<td>elective (women)</td>
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<td>GSP 181</td>
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<tr>
<td>ECO 230</td>
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<td>MIL 102, option, or</td>
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<tr>
<td>General education science or mathematics*</td>
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<td></td>
</tr>
<tr>
<td>Suggested general elective:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACC 108</td>
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**Recommended distribution of courses to meet all requirements in the preparatory curriculum:**

### Second Year

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<th>First Semester</th>
<th>Hours</th>
<th>Second Semester</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>ACC 109 or GSP 281*</td>
<td>3</td>
<td>EDF 202 or PSY 211</td>
<td>3</td>
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<td>ECO 231 or general education humanities</td>
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<td>ENG 210 or 212</td>
<td>3</td>
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<tr>
<td>EDF 202 or PSY 211</td>
<td>3</td>
<td>General education science or</td>
<td>3</td>
</tr>
<tr>
<td>ENG 209 or 211</td>
<td>3</td>
<td>mathematics*</td>
<td>3</td>
</tr>
<tr>
<td>GSS 246 or HIS 202</td>
<td>3</td>
<td>GSP 281* or general</td>
<td>3</td>
</tr>
<tr>
<td>MIL 201, option, or</td>
<td>2</td>
<td>education Humanities</td>
<td>3</td>
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<tr>
<td>elective (women)</td>
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<td></td>
<td>3</td>
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<tr>
<td>General education options:</td>
<td>17</td>
<td></td>
<td>17</td>
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<tr>
<td>CHE 111</td>
<td>4-5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHE 111 or MAT 109</td>
<td>4-5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MIL 202, option, or</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>elective (women)</td>
<td></td>
<td></td>
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</tbody>
</table>

*Six hours of general education laboratory science, and GSP 281 must be completed in Central University College.

### CHEMISTRY

Preparatory curriculum for a major in Chemistry  
(teaching or non-teaching)

Courses required for admission to the College of Arts and Sciences: CHE 111 and 112 (meets the 6 hour general education laboratory requirement in Central University College); MAT 109 and 111; CHE 213 and MAT 112 or EDF 202 and PSY 211 (for teacher certification); PHY 131 and 132 or 201 and 202; and the initial semester general education options (6-8). See page 205 for the third and fourth years of this program.

Recommended distribution of courses to meet all requirements in the preparatory curriculum:

### First Year

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<thead>
<tr>
<th>First Semester</th>
<th>Hours</th>
<th>Second Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GSE 101</td>
<td>3</td>
<td>CHE 111 or 112</td>
<td>4-5</td>
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<tr>
<td>GSO 100</td>
<td>1</td>
<td>GSE 102</td>
<td>3</td>
</tr>
<tr>
<td>GSP 180</td>
<td>1</td>
<td>GSP 181</td>
<td>1</td>
</tr>
<tr>
<td>MIL 101, option, or</td>
<td>2</td>
<td>GSS 246 or HIS 202</td>
<td>3</td>
</tr>
<tr>
<td>elective (women)</td>
<td></td>
<td>MAT 109 or 111</td>
<td>4-5</td>
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<tr>
<td>General education options:</td>
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<td>MIL 102, option, or</td>
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<tr>
<td>CHE 111 or MAT 109</td>
<td>4-5</td>
<td>elective (women)</td>
<td>18</td>
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<tr>
<td>Social science or</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>biological science</td>
<td>3</td>
<td></td>
<td></td>
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<td>General elective:</td>
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<td></td>
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<tr>
<td>CHE 111 or MAT 109</td>
<td>4-5</td>
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Second Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>CHE 112, 213, or MAT 111</td>
<td>4-5</td>
</tr>
<tr>
<td>EDF 202, PSY 211*, MAT 111, or 213</td>
<td>3-4</td>
</tr>
<tr>
<td>or 112</td>
<td>3-4</td>
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<tr>
<td>GSS 247 or HIS 203</td>
<td>3</td>
</tr>
<tr>
<td>MIL 201, option, or elective (women)</td>
<td>2</td>
</tr>
<tr>
<td>PHY 131 or 201</td>
<td>5</td>
</tr>
<tr>
<td>EDF 202, PSY 211*, MAT 112, or 213</td>
<td>3-4</td>
</tr>
<tr>
<td>GSP 281</td>
<td>3</td>
</tr>
<tr>
<td>GER 101, CHE 112, or CHE 213</td>
<td>3-5</td>
</tr>
<tr>
<td>MIL 202 or option</td>
<td>2</td>
</tr>
<tr>
<td>MIL 202 option, or elective (women)</td>
<td>2</td>
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<tr>
<td></td>
<td>17-19</td>
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</tbody>
</table>

*EDF 202 and PSY 211 are required for teacher certification.

CHILD DEVELOPMENT
See HOME ECONOMICS

CORRECTIONS
See LAW ENFORCEMENT

DIETETICS
See HOME ECONOMICS

DISTRIBUTIVE EDUCATION
See BUSINESS EDUCATION

DRAMA AND SPEECH

Preparatory curriculum for majors in Broadcasting, Speech, Speech and Drama, and Drama (teaching or non-teaching)

Courses required for admission to the College of Arts and Sciences: SPE or DRA to be selected with approval of advisor (6); general education humanities (3) or EDF 202 and PSY 211 (for teacher certification); general education literature (6); general education social science (3); and the initial semester general education options (6-8). See page 210 for the third and fourth years of these programs.

Recommended distribution of courses to meet all requirements in the preparatory curriculum:

First Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GSE 101</td>
<td>2</td>
</tr>
<tr>
<td>GSO 100</td>
<td>1</td>
</tr>
<tr>
<td>GSP 180</td>
<td>1</td>
</tr>
<tr>
<td>MIL 101, option, or elective (women)</td>
<td>2-3</td>
</tr>
<tr>
<td>Suggested general education options: Laboratory science</td>
<td>3</td>
</tr>
<tr>
<td>Social science</td>
<td>3</td>
</tr>
<tr>
<td>Suggested general elective: SPE or DRA**</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>16-17</td>
</tr>
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</table>

Second Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>General education laboratory science*</td>
<td>3</td>
</tr>
<tr>
<td>General education social science or GSS 246 or HIS 202*</td>
<td>3</td>
</tr>
<tr>
<td>GSE 102</td>
<td>3</td>
</tr>
<tr>
<td>GSP 181</td>
<td>1</td>
</tr>
<tr>
<td>MIL 102, option, or elective (women)</td>
<td>2-3</td>
</tr>
<tr>
<td>SPE or DRA elective**</td>
<td>3</td>
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<tr>
<td></td>
<td>15-16</td>
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</table>
Second Year

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDF 202, PSY 211, or</td>
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<tr>
<td>humanities elective***</td>
<td>3</td>
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<tr>
<td>ENG 209 or 211</td>
<td>3</td>
</tr>
<tr>
<td>GSP 201</td>
<td>3</td>
</tr>
<tr>
<td>GSS 246 or 247; HIS 202 or 203*</td>
<td>3</td>
</tr>
<tr>
<td>MIL 201, option, or</td>
<td>2-3</td>
</tr>
<tr>
<td>elective (women)</td>
<td></td>
</tr>
<tr>
<td>SPE or DRA elective**</td>
<td>3</td>
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<tr>
<td></td>
<td>17-18</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Second Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDF 202. PSY 211 or elective***</td>
<td>3</td>
</tr>
<tr>
<td>ENG 210 or 212</td>
<td>3</td>
</tr>
<tr>
<td>General education science* or</td>
<td></td>
</tr>
<tr>
<td>humanities elective</td>
<td>3</td>
</tr>
<tr>
<td>GSS 247. HIS 203*, or general</td>
<td></td>
</tr>
<tr>
<td>education social science</td>
<td>3</td>
</tr>
<tr>
<td>MIL 202, option, or</td>
<td>2-3</td>
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<tr>
<td>elective (women)</td>
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<td>Elective**</td>
<td>3</td>
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<td></td>
<td>17-18</td>
</tr>
</tbody>
</table>

*Six hours of laboratory science and either GSS 246 and 247 or HIS 202 and 203 must be completed in Central University College.

**To be selected with approval of advisor.

***Students preparing for teaching must complete EDF 202 and PSY 211.

EARTH SCIENCE
See GEOLGY

ECONOMICS
See BUSINESS ADMINISTRATION

ELECTRONIC DATA PROCESSING
See BUSINESS ADMINISTRATION

ELEMENTARY EDUCATION

Preparatory curriculum for a major in Elementary Education
(with or without kindergarten certification)*

Courses required for admission to the College or Education: EDF 202 and PSY 211; MAT 201 or 203; geography requirement or general education humanities (3); general education humanities (6); geography requirement or general education humanities (3); general education humanities (6); general education humanities (6); general education humanities (6); and the initial semester general education science (3); and the initial semester general education science (3); and the initial semester general education science (3); and the initial semester general education science (3); and the initial semester general education science (3);

Recommended distribution of courses to meet all requirements in the preparatory curriculum:

options (6-8). See pages 324-325 for the third and fourth years of this program.

First Year

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GSE 101</td>
<td>3</td>
</tr>
<tr>
<td>GSP 100</td>
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</tr>
<tr>
<td>MIL 101, option, or elective (women)</td>
<td>2</td>
</tr>
<tr>
<td>Suggested general education options:</td>
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</tr>
<tr>
<td>Social science</td>
<td>3</td>
</tr>
<tr>
<td>Science*</td>
<td>3</td>
</tr>
<tr>
<td>Suggested general elective:</td>
<td></td>
</tr>
<tr>
<td>General education humanities</td>
<td>3</td>
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<tr>
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<td>16</td>
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Second Year

<table>
<thead>
<tr>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
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</tbody>
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General education humanities or geography requirement*** | 3 |
General education science** | 3 |
GSE 102 | 3 |
GSP 181 | 1 |
GSS 247. HIS 202**, or general education social science | 3 |
MIL 102, option, or elective (women) | 2 |
### Second Year

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Description</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDF 202 or PSY 211</td>
<td>General education literature, GSS 228, or geography requirement***</td>
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<td>GSE 102</td>
<td>General education literature or GSH 230</td>
<td>3</td>
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<tr>
<td>GSS 246 or 247; HIS 202 or 203**</td>
<td>General education science**</td>
<td>3</td>
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<td>MIL 201, option, or elective (women)</td>
<td>(Area III B 2)</td>
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<tr>
<td>MAT 201 or 203</td>
<td>General education social science</td>
<td>3</td>
</tr>
<tr>
<td>MIL 202, option, or elective (women)</td>
<td>*</td>
<td>2</td>
</tr>
<tr>
<td>**</td>
<td>**</td>
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</tr>
</tbody>
</table>

*Elementary education majors who wish to certify for teaching in kindergarten or in special education are urged to discuss these plans with their advisors early in the program of studies. Kindergarten certification is also available with the Child Development program. See page 79 and completed in Central University College.

**Six hours of general education laboratory science must be completed in Central University College. At least one course must be in biological science and at least one course must be in physical science. Also, GSS 246 and 247 or HIS 202 and 203 must be **

***One course to be selected with approval of advisor from the following: GEO 101, 102, 345, or 346.

### ENGLISH

Preparatory curriculum for a major in English (teaching or non-teaching)

Courses required for admission to the College of Arts and Sciences: general education literature (6); EDF 202 and PSY 211 (for teacher certification); general education social science (3); and the initial semester general education options (6-8). See page 215 for the third and fourth years of this program.

Recommended distribution of courses to meet all requirements in the preparatory curriculum:

<table>
<thead>
<tr>
<th>First Year</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GSE 101</td>
<td>3</td>
</tr>
<tr>
<td>GSO 100</td>
<td>1</td>
</tr>
<tr>
<td>GSP 100</td>
<td>1</td>
</tr>
<tr>
<td>MIL 101, option, or elective (women)</td>
<td>2</td>
</tr>
<tr>
<td>Suggested general education options:</td>
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</tr>
<tr>
<td>Laboratory science*</td>
<td>3-4</td>
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<tr>
<td>Social Science</td>
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<td>Suggested general elective:</td>
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<tr>
<td>Foreign language</td>
<td>3</td>
</tr>
<tr>
<td>**</td>
<td>16-17</td>
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<table>
<thead>
<tr>
<th>Second Year</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDF 202, PSY 211 or elective**</td>
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<tr>
<td>ENG 209 or 211</td>
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<td>Foreign language or elective</td>
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</tr>
<tr>
<td>GSS 246 or 247; HIS 202 or 203*</td>
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<tr>
<td>MIL 201, option, or elective (women)</td>
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</tr>
<tr>
<td>SPE 100, general education laboratory science*, or elective</td>
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</tr>
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<td>**</td>
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</tbody>
</table>

*Three hours of biological laboratory science, three hours of physical laboratory science, and GSS 246 and 247 or HIS 202 and 203 must be completed in Central University College.

**Students preparing for teaching must complete PSY 211 and EDF 202.
JOURNALISM

Preparatory curriculum for a major in Journalism (non-teaching)

Courses required for admission to the College of Arts and Sciences: JOU 200 and 201; foreign language (6); general education literature (6); general education social science (3); and the initial semester general education options (6-8). See page 220 for the third and fourth years of this program.

Recommended distribution of courses to meet all requirements in the preparatory curriculum:

First Year

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
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</tr>
<tr>
<td>GSP 180</td>
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</tr>
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<td>MIL 101, option, or elective (women)</td>
<td>2</td>
</tr>
<tr>
<td>Suggested general education options:</td>
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<tr>
<td>Social science</td>
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<tr>
<td>Science* or mathematics</td>
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<tr>
<td>Foreign language*</td>
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<td><strong>Total</strong></td>
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<table>
<thead>
<tr>
<th>Second Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foreign language* or other general education humanities</td>
<td>3</td>
</tr>
<tr>
<td>General education social science*</td>
<td>3</td>
</tr>
<tr>
<td>GSE 102</td>
<td>3</td>
</tr>
<tr>
<td>GSP 181</td>
<td>1</td>
</tr>
<tr>
<td>MIL 102, option, or elective (women)</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

Second Year

| ENG 209 or 211 | 3 |
| Foreign language* or elective | 3 |
| General education science* or mathematics | 3-4 |
| GSS 246 or 247; HIS 202 or 203* | 3 |
| JOU 200        | 3     |
| MIL 201, option, or elective (women) | 2 |
| **Total**      | **17-18** |

| ENG 210 or 212 | 3 |
| Foreign language* or elective | 3 |
| General education science* or mathematics | 3-4 |
| GSS 247, HIS 203, or other general educational social science* | 3 |
| JOU 201        | 3     |
| MIL 202, option, or elective (women) | 2 |
| **Total**      | **17-18** |

*Six semester hours of laboratory science, and GSS 246 and 247 or HIS 202 and 203 must be completed in Central University College; six to twelve semester hours of foreign language are required in Central University College, the amount of required credit depending upon the student's competency.

FINANCE

See BUSINESS ADMINISTRATION

FISHERIES MANAGEMENT

See BIOLOGY

FOOD SERVICE ADMINISTRATION

See HOME ECONOMICS
FOREIGN LANGUAGE

Preparatory curriculum for a major in Foreign Language (teaching or non-teaching)

Courses required for admission to the College of Arts and Sciences: foreign language (9); foreign language or EDF 202 and PSY 211 (for teacher certification) (6); general education literature (3); general education science or mathematics (3); general education social science (3); and the initial semester general education options (6-8). See page 222 for the third and fourth years of this program.

Recommended distribution of courses to meet all requirements in the preparatory curriculum:

<table>
<thead>
<tr>
<th>First Year</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Semester</td>
<td></td>
</tr>
<tr>
<td>GSE 101</td>
<td>3</td>
</tr>
<tr>
<td>GSO 100</td>
<td>1</td>
</tr>
<tr>
<td>GSP 180</td>
<td>1</td>
</tr>
<tr>
<td>MIL 101, option, or elective (women)</td>
<td>2-3</td>
</tr>
<tr>
<td>Suggested general education options: Mathematics or science*</td>
<td>3</td>
</tr>
<tr>
<td>Social science elective</td>
<td>3</td>
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<td>Suggested general elective: Foreign language</td>
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<tr>
<td>**</td>
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<tr>
<td>16-17</td>
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<table>
<thead>
<tr>
<th>Second Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foreign language</td>
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</tr>
<tr>
<td>General education mathematics or science*</td>
<td>3</td>
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<tr>
<td>GSE 102</td>
<td>3</td>
</tr>
<tr>
<td>GSP 181</td>
<td>1</td>
</tr>
<tr>
<td>GSS 246, HIS 202*, or general education social science</td>
<td>3</td>
</tr>
<tr>
<td>MIL 102, option, or elective (women)</td>
<td>2-3</td>
</tr>
<tr>
<td>**</td>
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<td>15-16</td>
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<table>
<thead>
<tr>
<th>Second Year</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>EDF 202, PSY 211**, or foreign language</td>
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<td>Foreign language</td>
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<tr>
<td>General education mathematics or science*</td>
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<tr>
<td>GSP 281</td>
<td>3</td>
</tr>
<tr>
<td>GSS 246 or 247; HIS 202 or 203*</td>
<td>3</td>
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<tr>
<td>MIL 201, option, or elective (women)</td>
<td>2-3</td>
</tr>
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<td>**</td>
<td>**</td>
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<tr>
<td>17-18</td>
<td></td>
</tr>
</tbody>
</table>

*Six semester hours of laboratory science, and GSS 246 and 247 or HIS 202 and 203 must be completed in Central University College.

**EDF 202 and PSY 211 must be completed in Central University College by students seeking teaching certificates.

FORESTRY

See PRE-FORESTRY listed with BIOLOGY

GENERAL BUSINESS

See BUSINESS ADMINISTRATION
GEOGRAPHY

Preparatory curriculum for a major in Geography (teaching or non-teaching)

Courses required for admission to the College of Arts and Sciences: GEO 210, 216, and 220; GLY 108 or 210 (meets 3 hours of the general education laboratory requirement in Central University College); EDF 202 and PSY 211 (for teacher certification); general education literature (6); general education social science (3); and the initial semester general education options (6-8). See page 231 for the third and fourth years of this program.

Recommended distribution of courses to meet all requirements in the preparatory curriculum:

<table>
<thead>
<tr>
<th>First Year</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Semester</td>
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</tr>
<tr>
<td>GSE 101</td>
<td>3</td>
</tr>
<tr>
<td>GSO 100</td>
<td>1</td>
</tr>
<tr>
<td>GSP 180</td>
<td>1</td>
</tr>
<tr>
<td>MIL 101, option, or</td>
<td>2</td>
</tr>
<tr>
<td>elective (women)</td>
<td></td>
</tr>
<tr>
<td>Suggested general education options:</td>
<td></td>
</tr>
<tr>
<td>GEO 210</td>
<td>3</td>
</tr>
<tr>
<td>Biological laboratory science</td>
<td>3</td>
</tr>
<tr>
<td>General elective</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>16</td>
</tr>
<tr>
<td>Second Semester</td>
<td></td>
</tr>
<tr>
<td>GEO 210* or humanities elective</td>
<td>3</td>
</tr>
<tr>
<td>GEO 216</td>
<td>3</td>
</tr>
<tr>
<td>GLY 108 or 210</td>
<td>3-4</td>
</tr>
<tr>
<td>GSE 102</td>
<td>3</td>
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<tr>
<td>GSP 181</td>
<td>1</td>
</tr>
<tr>
<td>GSS 246 or HIS 202</td>
<td>3</td>
</tr>
<tr>
<td>MIL 102, option, or</td>
<td>2</td>
</tr>
<tr>
<td>elective (women)</td>
<td></td>
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<tr>
<td></td>
<td>18</td>
</tr>
</tbody>
</table>

EDF 202, PSY 211**, or elective  3
General education literature  3
General education laboratory science** or MAT 107  3
GSP 281  3
GSS 247 or HIS 203  3
MIL 201, option, or elective (women)  2
                        17

*GEO 210 or equivalent should be completed during the first two semesters.
**Students seeking teaching certificates must complete EDF 202 and PSY 211.
***Six hours of a general education laboratory science must be completed in Central University College.

REGIONAL PLANNING

Preparatory curriculum for Regional Planning (non-teaching), Department of Geography

Courses required for admission to the College of Arts and Sciences: PLA 220 and 221; ECO 230; INT 191; POL 101; SOC 131; GLY 108 or 210 and general education biological science (meets the 6 hour laboratory requirement in Central University College); general education humanities (3); and the initial semester general education options (6-8). See page 233 for the third and fourth years of this program.
Recommended distribution of courses to meet all requirements in the preparatory curriculum:

### First Year

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Hours</th>
<th>Second Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GSE 101</td>
<td>3</td>
<td>GSE 102</td>
<td>3</td>
</tr>
<tr>
<td>GSO 100</td>
<td>1</td>
<td>GSP 181</td>
<td>1</td>
</tr>
<tr>
<td>GSP 180</td>
<td>1</td>
<td>General education biological laboratory science, GLY 108, or GLY 210*</td>
<td>3-4</td>
</tr>
<tr>
<td>MIL 101, option or elective (women)</td>
<td>2</td>
<td>General education humanities, GSS 246 or HIS 202*</td>
<td>3</td>
</tr>
<tr>
<td>Suggested general education options: GLY 108 or 210</td>
<td>3-4</td>
<td>INT 191</td>
<td>3</td>
</tr>
<tr>
<td>GEO 210</td>
<td>3</td>
<td>MIL 102, option, or elective (women)</td>
<td>2</td>
</tr>
</tbody>
</table>

**Suggested general elective:** General education humanities 3

16-17

### Second Year

| General education humanities or biological laboratory science* | 3     | ECO 230       | 3     |
| GSP 281          | 3     | General education humanities | 3     |
| GSS 246 or 247; HIS 202 or 203* | 3     | GSS 247, HIS 203* or elective | 3     |
| MIL 201, option, or elective (women) | 2     | MIL 202, option, or elective (women) | 2     |
| PLA 220         | 3     | PLA 221       | 3     |
| POL 101         | 3     | SOC 131       | 3     |

17

*Six hours of general education laboratory science must be completed in Central University College; three hours of this must be biological laboratory science. GSS 246 and 247 or HIS 202 and 203 must also be completed in Central University College.

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**GEOLGY**

**EARTH SCIENCE**

Preparatory curriculum for majors in Geology (non-teaching) and Earth Science (teaching)

Courses required for admission to the College of Arts and Sciences: GLY 210 and 211; BIO 141; CHE 111 and 112 (meets the 6 hour general education laboratory requirement in Central University College); MAT 109; MAT 111, 207, and CHE 213 or GEO 210, EDF 202, and PSY 211 (for teacher certification); and the initial semester general education options (6-8). See page 238 for the third and fourth years of these programs.

Recommended distribution of courses to meet all requirements in the preparatory curriculum:

### First Year

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Hours</th>
<th>Second Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GSE 101</td>
<td>3</td>
<td>BIO 141, CHE 111 or elective</td>
<td>3-4</td>
</tr>
<tr>
<td>GSO 100</td>
<td>1</td>
<td>CHE 112 or MAT 109</td>
<td>5</td>
</tr>
<tr>
<td>GSP 180</td>
<td>1</td>
<td>GLY 210 or 211</td>
<td>3-4</td>
</tr>
<tr>
<td>MIL 101, option, or elective (women)</td>
<td>2</td>
<td>GSE 102</td>
<td>3</td>
</tr>
<tr>
<td>Suggested general education options: GSP 281*</td>
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<td>GSP 181</td>
<td>1</td>
</tr>
<tr>
<td>BIO 141 or CHE 111</td>
<td>4</td>
<td>MIL 102, option, or elective (women)</td>
<td>2</td>
</tr>
<tr>
<td>Suggested general elective: GLY 210</td>
<td>4</td>
<td></td>
<td></td>
</tr>
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</table>

18

17-19
Second Year

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHE 111, 112, or MAT 109</td>
<td>4-5</td>
</tr>
<tr>
<td>EDF 202, PSY 211**, or MAT 111</td>
<td>3-4</td>
</tr>
<tr>
<td>GLY 211 or 310</td>
<td>3-4</td>
</tr>
<tr>
<td>GSS 246 or HIS 202</td>
<td>3</td>
</tr>
<tr>
<td>MIL 201, option, or elective (women)</td>
<td>2</td>
</tr>
<tr>
<td>BIO 141, CHE 112 or 213, EDF 202, or PSY 211**</td>
<td>3-5</td>
</tr>
<tr>
<td>GEO 210, MAT 207, or elective</td>
<td>3</td>
</tr>
<tr>
<td>GSP 281* or elective</td>
<td>3</td>
</tr>
<tr>
<td>GSS 247 or HIS 203</td>
<td>3</td>
</tr>
<tr>
<td>MIL 202, option, or elective (women)</td>
<td>2</td>
</tr>
<tr>
<td>Elective</td>
<td>0-4</td>
</tr>
</tbody>
</table>

15-18

*GSP 281 must be completed in Central University College.
**EDF 202 and PSY 211 are required for students seeking teaching certificates.

HEALTH

(See Physical Education for preparatory curriculum in the area of Health and Physical Education)

PUBLIC HEALTH

Preparatory curriculum for a major in Public Health, School of Health, Physical Education, Recreation, and Athletics

Courses required for admission to the College of Education: HEA 290 and 315; BIO 141; CHE 111 and 112 (meets the 6 hour general education laboratory requirement in Central University College); general education humanities (9); general education social science (3); and the initial semester general education options (6-8). See page 353 for the third and fourth years of this program.

Recommended distribution of courses to meet all requirements in the preparatory curriculum:

First Year

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GSE 101</td>
<td>3</td>
</tr>
<tr>
<td>GSO 100</td>
<td>1</td>
</tr>
<tr>
<td>GSP 180</td>
<td>1</td>
</tr>
<tr>
<td>MIL 101, option, or elective (women)</td>
<td>2</td>
</tr>
<tr>
<td>Suggested general education options:</td>
<td></td>
</tr>
<tr>
<td>Social science</td>
<td>3</td>
</tr>
<tr>
<td>Humanities</td>
<td>3</td>
</tr>
<tr>
<td>Suggested general elective:</td>
<td></td>
</tr>
<tr>
<td>CHE 111</td>
<td></td>
</tr>
<tr>
<td></td>
<td>17</td>
</tr>
<tr>
<td>Second Semester</td>
<td>Hours</td>
</tr>
<tr>
<td>----------------</td>
<td>-------</td>
</tr>
<tr>
<td>BIO 141, CHE 111, or 112</td>
<td>4-5</td>
</tr>
<tr>
<td>General education humanities</td>
<td>3</td>
</tr>
<tr>
<td>GSE 102</td>
<td>3</td>
</tr>
<tr>
<td>GPS 181</td>
<td>1</td>
</tr>
<tr>
<td>GSS 246, HIS 202, or general education social science</td>
<td>3</td>
</tr>
<tr>
<td>MIL 102, option, or elective (women)</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>16-17</td>
</tr>
</tbody>
</table>

Second Year

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 141 or CHE 112</td>
<td>4-5</td>
</tr>
<tr>
<td>ENG 211 or GSH 228</td>
<td>3</td>
</tr>
<tr>
<td>GSP 281</td>
<td>3</td>
</tr>
<tr>
<td>GSS 246 or 247; HIS 202 or 203</td>
<td>3</td>
</tr>
<tr>
<td>MIL 201, option, or elective (women)</td>
<td>2</td>
</tr>
<tr>
<td>BIO 141 or 211</td>
<td>4</td>
</tr>
<tr>
<td>ENG 212 or GSH 230</td>
<td>3</td>
</tr>
<tr>
<td>GSS 247, HIS 203*, or general education social science</td>
<td>3</td>
</tr>
<tr>
<td>HEA 290</td>
<td>3</td>
</tr>
<tr>
<td>HEA 315</td>
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<td>MIL 202, option, or elective (women)</td>
<td>2</td>
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<tr>
<td></td>
<td>18</td>
</tr>
</tbody>
</table>

*GSS 246 and 247 or HIS 202 and 203 must be completed in Central University College.
SCHOOL HEALTH

Preparatory curriculum for a major in School Health, School of Health, Physical Education, Recreation, and Athletics

Courses required for admission to the College of Education: HEA 290; BIO 301 and 378 (meets 4 hours of the general education laboratory requirement in Central University College; EDF 202 and PSY 211; general education humanities (9); general education social science (3); and the initial semester general education options (6-8). See page 353 for the third and fourth years of this program.

Recommended distribution of courses to meet all requirements in the preparatory curriculum:

### First Year

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GSE 101</td>
<td>3</td>
</tr>
<tr>
<td>GSO 100</td>
<td>1</td>
</tr>
<tr>
<td>GSP 180</td>
<td>1</td>
</tr>
<tr>
<td>MIL 101, option, or elective (women)</td>
<td>2</td>
</tr>
<tr>
<td>Suggested general education options: Laboratory science</td>
<td>3</td>
</tr>
<tr>
<td>Social science</td>
<td>3</td>
</tr>
<tr>
<td>Suggested general elective: General education humanities</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>16</td>
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</table>

<table>
<thead>
<tr>
<th>Second Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>General education humanities</td>
<td>3</td>
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<tr>
<td>General education laboratory science</td>
<td>3</td>
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<tr>
<td>GSE 102</td>
<td>3</td>
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<tr>
<td>GSP 181</td>
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<tr>
<td>MIL 102, option, or elective (women)</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>17-18</td>
</tr>
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</table>

### Second Year

<table>
<thead>
<tr>
<th></th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDF 202 or PSY 211</td>
<td>3</td>
</tr>
<tr>
<td>ENG 211 or GSH 228</td>
<td>3</td>
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<td>General education science</td>
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<tr>
<td>GSP 281</td>
<td>3</td>
</tr>
<tr>
<td>GSS 246 or 247; HIS 202 or 203</td>
<td>3</td>
</tr>
<tr>
<td>MIL 201, option, or elective, (women)</td>
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</tr>
<tr>
<td><strong>Total</strong></td>
<td>17</td>
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<table>
<thead>
<tr>
<th></th>
<th>Hours</th>
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<tbody>
<tr>
<td>BIO 301 and 378</td>
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<td>EDF 202 or PSY 211</td>
<td>3</td>
</tr>
<tr>
<td>ENG 212 or GSH 230</td>
<td>3</td>
</tr>
<tr>
<td>GSS 247, HIS 203**, or general education social science</td>
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</tr>
<tr>
<td>HEA 290</td>
<td>3</td>
</tr>
<tr>
<td>MIL 202, option, or elective (women)</td>
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</tr>
<tr>
<td><strong>Total</strong></td>
<td>18</td>
</tr>
</tbody>
</table>

*To be selected with approval of advisor.

**GSS 245 and 247 or HIS 202 and 203 must be completed in Central University College.

### HISTORY

Preparatory curriculum for a major in History (teaching or non-teaching), or an area in History and Social Science

Courses required for admission to the College of Arts and Sciences: HIS 202 and 203; social science area requirement or general education foreign language or philosophy (3); EDF 202 and PSY 211 (for teacher certification); general education literature (3); GSS 142, and the initial semester general education options (6-8). See page 242 for the third and fourth years of these programs.
Recommended distribution of courses to meet all requirements in the preparatory curriculum:

### First Year

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Hours</th>
<th>Second Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GSE 101</td>
<td>3</td>
<td>General education humanities or general education science*</td>
<td>3</td>
</tr>
<tr>
<td>GSO 100</td>
<td>1</td>
<td>GSE 102</td>
<td>3</td>
</tr>
<tr>
<td>GSP 180</td>
<td>1</td>
<td>GSP 181</td>
<td>3</td>
</tr>
<tr>
<td>MIL 101, option, or elective (women)</td>
<td>2</td>
<td>GSS 142 or 246*</td>
<td>3</td>
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<tr>
<td>Suggested general education options:</td>
<td></td>
<td>HIS 202</td>
<td>3</td>
</tr>
<tr>
<td>Science*</td>
<td>3</td>
<td>MIL 102, option, or elective (women)</td>
<td>2</td>
</tr>
<tr>
<td>GSS 142</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Suggested general elective: General education humanities* or social science area requirement</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>16</td>
<td></td>
<td></td>
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</table>

### Second Year

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Hours</th>
<th>Second Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDF 202, PSY 211, or elective</td>
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<td>EDF 202, PSY 211, or elective</td>
<td>3</td>
</tr>
<tr>
<td>General education humanities*, social science area requirement, or GSP 281*</td>
<td>3</td>
<td>General education literature</td>
<td>3</td>
</tr>
<tr>
<td>General education science* or literature</td>
<td>3</td>
<td>General education science* or social science area requirement</td>
<td>3</td>
</tr>
<tr>
<td>GSS 246 or 247*</td>
<td>3</td>
<td>GSS 247* or 248</td>
<td>3</td>
</tr>
<tr>
<td>HIS 203</td>
<td>3</td>
<td>GSP 281* or elective</td>
<td>3</td>
</tr>
<tr>
<td>MIL 101, option, or elective (women)</td>
<td>2</td>
<td>MIL 102, option, or elective (women)</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>17</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*GSP 281, GSS 246 and 247, and six hours of general education laboratory science must be completed in Central University College. The general education humanities option is restricted to six hours of foreign language or six hours of philosophy.

### HOME ECONOMICS

Preparatory curriculum for General Home Economics

Courses required for admission to the College of Applied Arts and Technology: HEC 202; NFA 201; CHE 101 (meets 4 hours of the general education laboratory requirement in Central University College); general education literature (3); and the initial semester general education options (6-8). See pages 123-124 for the third and fourth years of this program.

Recommended distribution of courses to meet all requirements in the preparatory curriculum:

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Hours</th>
<th>Second Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GSE 101</td>
<td>3</td>
<td>CHE 101 or general education science*</td>
<td>3-4</td>
</tr>
<tr>
<td>GSO 100</td>
<td>1</td>
<td>GSE 102</td>
<td>3</td>
</tr>
<tr>
<td>GSP 180</td>
<td>1</td>
<td>GSP 181</td>
<td>1</td>
</tr>
<tr>
<td>MIL 101, option, or elective (women)</td>
<td>2</td>
<td>GSS 142 or 246*</td>
<td>3</td>
</tr>
<tr>
<td>Suggested general education options:</td>
<td></td>
<td>HIS 202, or GSP 281*</td>
<td>3</td>
</tr>
<tr>
<td>CHE 101</td>
<td>4</td>
<td>HEC 132, 102, or NFA 121</td>
<td>3</td>
</tr>
<tr>
<td>Suggested general electives:**</td>
<td></td>
<td>MIL 102, option, or elective (women)</td>
<td>2</td>
</tr>
<tr>
<td>GSP 281*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HEC 132, 102, or NFA 121</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>17</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**HEC 132, 102, or NFA 121 must be completed in Central University College. The general education humanities option is restricted to six hours of foreign language or six hours of philosophy.**
Second Year

<table>
<thead>
<tr>
<th>General education literature</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>General education science*</td>
<td>3</td>
</tr>
<tr>
<td>GSS 246 or 247, HIS 202 or 203*</td>
<td>3</td>
</tr>
<tr>
<td>HEC 202 or NFA 201</td>
<td>2-3</td>
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<tr>
<td>MIL 201, option, or elective</td>
<td>2</td>
</tr>
<tr>
<td>Elective (women)</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total: 16-17**

*GSP 281, GSS 246 and 247 or HIS 202 and 203, and six hours of general education laboratory science must be completed in Central University College.

HOME ECONOMICS EDUCATION

Preparatory curriculum for Home Economics Education

Courses required for admission to the College of Applied Arts and Technology: HEC 102, 132, 202, and 231; NFA 121 and 201; NFA 321 or BIO 301 and 378; CHE 101 and 102 (meets the 6 hour general education laboratory requirement in Central University College); EDF 202 and PSY 211; and the initial semester general education options (6-8). See page 121 for the third and fourth years of this program.

Recommended distribution of courses to meet all requirements in the preparatory curriculum:

**First Year**

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GSE 101</td>
<td>3</td>
</tr>
<tr>
<td>GSO 100</td>
<td>1</td>
</tr>
<tr>
<td>GSP 180</td>
<td>1</td>
</tr>
<tr>
<td>Suggested general education options:</td>
<td></td>
</tr>
<tr>
<td>CHE 101</td>
<td>4</td>
</tr>
<tr>
<td>GSP 281*</td>
<td>3</td>
</tr>
<tr>
<td>Suggested general electives:**</td>
<td></td>
</tr>
<tr>
<td>HEC 102</td>
<td>3</td>
</tr>
<tr>
<td>NFA 121</td>
<td>3</td>
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**Total: 18**

<table>
<thead>
<tr>
<th>Second Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHE 101 or 102*</td>
<td>4-5</td>
</tr>
<tr>
<td>GSE 102</td>
<td>3</td>
</tr>
<tr>
<td>GSP 181</td>
<td>1</td>
</tr>
<tr>
<td>GSP 281* or restricted elective**</td>
<td>0-3</td>
</tr>
<tr>
<td>HEC 102* or 132</td>
<td>3</td>
</tr>
<tr>
<td>NFA 121 or HEC 231</td>
<td>2-3</td>
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**Total: 13-18**

**Second Year**

<table>
<thead>
<tr>
<th>CHE 102* and/or restricted elective**</th>
<th>5-7</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDF 202 or PSY 211</td>
<td>3</td>
</tr>
<tr>
<td>GSS 246 or HIS 202</td>
<td>3</td>
</tr>
<tr>
<td>HEC 132 or 202</td>
<td>2</td>
</tr>
<tr>
<td>HEC 201 or NFA 201</td>
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**Total: 16-18**

<table>
<thead>
<tr>
<th>EDF 202 or PSY 211</th>
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</tr>
</thead>
<tbody>
<tr>
<td>General education literature or restricted elective**</td>
<td>3</td>
</tr>
<tr>
<td>GSS 247 or HIS 202</td>
<td>3</td>
</tr>
<tr>
<td>HEC 202* or restricted elective**</td>
<td>2-3</td>
</tr>
<tr>
<td>NFA 201* or restricted elective**</td>
<td>2-3</td>
</tr>
<tr>
<td>NFA 321 or BIO 301 and 378</td>
<td>4</td>
</tr>
</tbody>
</table>

**Total: 15-19**

*GSP 281, six hours of general education laboratory science, NFA 201, and HEC 202 must be completed in Central University College.

**To be selected with approval of advisor to meet general education, major, or minor requirements, or military science for male students.
CHILD DEVELOPMENT

Preparatory curriculum for Child Development (with or without meeting guidelines for teaching kindergarten)

Courses required for admission to the College of Applied Arts and Technology: HEC 132, 241, 341; NFA 201; ANT 201; BIO 301, 378, and CHE 101, (meets the 6 hour general education laboratory requirement in Central University College); EDF 202 (for kindergarten teaching); MAT 107; PSY 211; SOC 131; general education literature (3); and the initial semester general education options. See page 122 for the third and fourth years of this program.

Recommended distribution of courses to meet all requirements in the preparatory curriculum:

First Year

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GSE 101</td>
<td>3</td>
</tr>
<tr>
<td>GSO 100</td>
<td>1</td>
</tr>
<tr>
<td>GSP 180</td>
<td>1</td>
</tr>
<tr>
<td>MIL 101, option, or elective</td>
<td>2</td>
</tr>
<tr>
<td>Suggested general education options:</td>
<td>4</td>
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<tr>
<td>HEC 132</td>
<td>3</td>
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Second Year

<table>
<thead>
<tr>
<th>Second Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>AN 201</td>
<td>3</td>
</tr>
<tr>
<td>CHE 101* or MAT 107</td>
<td>3-4</td>
</tr>
<tr>
<td>GSE 102</td>
<td>3</td>
</tr>
<tr>
<td>GSP 181</td>
<td>1</td>
</tr>
<tr>
<td>GSP 281* or restricted elective**</td>
<td>3</td>
</tr>
<tr>
<td>HEC 132 or restricted elective**</td>
<td>3</td>
</tr>
<tr>
<td>NFA 201</td>
<td>2</td>
</tr>
<tr>
<td>EDF 202*** or restricted elective**</td>
<td>3-6</td>
</tr>
<tr>
<td>BIO 201 and 378*</td>
<td>4</td>
</tr>
<tr>
<td>EDF 202 or restricted elective**</td>
<td>6-3</td>
</tr>
<tr>
<td>General education literature</td>
<td>3</td>
</tr>
<tr>
<td>GSS 247, HIS 203*, or restricted elective**</td>
<td>3</td>
</tr>
<tr>
<td>HEC 341</td>
<td>3</td>
</tr>
<tr>
<td>SOC 131</td>
<td>3</td>
</tr>
</tbody>
</table>

17

15-18

16-19

*GSP 281, GSS 246 and 247 or HIS 202 and 203, and six hours of general education laboratory science must be completed in Central University College.

**Selected with approval of advisor to meet general education, major, or minor requirements; or military science requirements for male students.

***Must be completed in Central University College by students preparing for kindergarten teaching.

DIETETICS

Preparatory curriculum for Dietetics (Administrative or Therapeutic) and Food Service Administration

Courses required for admission to the College of Applied Arts and Technology: NFA 121, 201, and 341; ACC 108; BIO 301, 378, and CHE 101 (meets the 6 hour general education laboratory requirement in Central University College); CHE 102, other general education science, or general education literature (3-5); restricted electives from ANT 110, ECO 320 or 231, HEC 202, SPE 100, and general education literature (9); and initial semester general education options (6-8). See page 122 for the third and fourth years of this program.
Academic Division

Recommended distribution of courses to meet all requirements in the preparatory curriculum:

**First Year**

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GSE 101</td>
<td>3</td>
</tr>
<tr>
<td>GSO 100</td>
<td>1</td>
</tr>
<tr>
<td>GSP 180</td>
<td>1</td>
</tr>
<tr>
<td>MIL 101, option, or elective (women)</td>
<td>2</td>
</tr>
<tr>
<td>Suggested general education options: CHE 101</td>
<td>4</td>
</tr>
<tr>
<td>GSP 281*</td>
<td></td>
</tr>
<tr>
<td>Suggested general elective: NFA 121</td>
<td>3</td>
</tr>
</tbody>
</table>

| Total | 17 |

**Second Semester**

<table>
<thead>
<tr>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHE 101, 102, or other general education science*</td>
</tr>
<tr>
<td>GSE 102</td>
</tr>
<tr>
<td>GSP 181</td>
</tr>
<tr>
<td>GSP 281* or ACC 108</td>
</tr>
<tr>
<td>MIL 102, option, or elective (women)</td>
</tr>
<tr>
<td>NFA 121</td>
</tr>
<tr>
<td>NFA 201</td>
</tr>
</tbody>
</table>

| Total | 15-19 |

**Second Year**

<table>
<thead>
<tr>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHE 102, other general education science*, or general education literature</td>
</tr>
<tr>
<td>GSS 246 or HIS 202</td>
</tr>
<tr>
<td>MIL 201, option, or elective (women)</td>
</tr>
<tr>
<td>NFA 241</td>
</tr>
</tbody>
</table>

| Total | 15-17 |

<table>
<thead>
<tr>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 301 and 378</td>
</tr>
<tr>
<td>GSS 217 or HIS 203</td>
</tr>
<tr>
<td>MIL 202, option, or elective (women)</td>
</tr>
<tr>
<td>Restricted electives**</td>
</tr>
</tbody>
</table>

| Total | 18 |

*GSP 281 and six hours of general education laboratory science must be completed in Central University College.

**To be selected with approval of advisor from ANT 110, ECO 230 or 231, HEC 202, SPE 100, or general education literature.

TEXTILES AND DESIGN

Preparatory curriculum for Textiles and Design with minors in Art, Journalism, Business Administration, or Chemistry

Courses required for admission to the College of Applied Arts and Technology: HEC 102 and 202; NFA 201; CHE 101 and 102 or 111 and 112 (meets the 6 hour general education laboratory requirement in Central University College); general education literature (3); and the initial semester general education options (6-8). See page 123 for the third and fourth years of this program.

Recommended distribution of courses to meet all requirements in the preparatory curriculum:

**First Year**

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GSE 101</td>
<td>3</td>
</tr>
<tr>
<td>GSO 100</td>
<td>1</td>
</tr>
<tr>
<td>GSP 180</td>
<td>1</td>
</tr>
<tr>
<td>MIL 101, option, or elective (women)</td>
<td>2</td>
</tr>
<tr>
<td>Suggested general education options: CHE 101 or 111*</td>
<td>4</td>
</tr>
<tr>
<td>GSP 281*</td>
<td></td>
</tr>
<tr>
<td>Suggested general elective: HEC 102</td>
<td>3</td>
</tr>
</tbody>
</table>

| Total | 18 |

**Second Semester**

<table>
<thead>
<tr>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHE 101 or 111; 102 or 112*</td>
</tr>
<tr>
<td>GSE 102</td>
</tr>
<tr>
<td>GSP 181</td>
</tr>
<tr>
<td>GSP 281*, or restricted elective**</td>
</tr>
<tr>
<td>HEC 102 or 202</td>
</tr>
<tr>
<td>MIL 102, option, or elective (women)</td>
</tr>
</tbody>
</table>

| Total | 16-17 |
Second Year

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHE 102, 112*, or restricted elective**</td>
<td>3-5</td>
</tr>
<tr>
<td>GSS 246 or HIS 202</td>
<td>3</td>
</tr>
<tr>
<td>HEC 202 or 305</td>
<td>3</td>
</tr>
<tr>
<td>MIL 201, option, or elective (women)</td>
<td>2</td>
</tr>
<tr>
<td>NFA 201</td>
<td>2</td>
</tr>
<tr>
<td>Restricted elective**</td>
<td>3</td>
</tr>
</tbody>
</table>

16-18

CHE 102, 112*, and/or restricted elective**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>General education literature</td>
<td>3</td>
</tr>
<tr>
<td>GSS 247 or HIS 203</td>
<td>3</td>
</tr>
<tr>
<td>MIL 202, option, or elective (women)</td>
<td>2</td>
</tr>
</tbody>
</table>

13-19

*GSP 281, and six hours of general education laboratory science must be completed in Central University College.

**Selected with approval of advisor to meet general education, major, or minor requirements.

INDUSTRIAL EDUCATION

Preparatory curriculum for a Comprehensive Area in Industrial Education or Manual Arts Therapy

Courses required for admission to the College of Applied Arts and Technology: IED 130, 141, 180, 191, 242, 281, and 292; EDF 202 and PSY 211; and the initial semester general education options (6-8). See page 134 for the third and fourth years of this program.

Recommended distribution of courses to meet all requirements in the preparatory curriculum:

First Year

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Semester</td>
<td></td>
</tr>
<tr>
<td>GSE 101</td>
<td>3</td>
</tr>
<tr>
<td>GSO 100</td>
<td>1</td>
</tr>
<tr>
<td>GSP 180</td>
<td>1</td>
</tr>
<tr>
<td>MIL 101, option, or elective (women)</td>
<td>2</td>
</tr>
<tr>
<td>Suggested general education options:</td>
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<tr>
<td>Humanities</td>
<td>3</td>
</tr>
<tr>
<td>Science or mathematics</td>
<td>3</td>
</tr>
<tr>
<td>Suggested general electives:</td>
<td></td>
</tr>
<tr>
<td>IED 141</td>
<td>3</td>
</tr>
<tr>
<td>IED 191</td>
<td>3</td>
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19

Second Semester | Hours |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>General education laboratory science</td>
<td>3</td>
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<tr>
<td>GSE 102</td>
<td>3</td>
</tr>
<tr>
<td>GSP 181</td>
<td>1</td>
</tr>
<tr>
<td>IED 130</td>
<td>1</td>
</tr>
<tr>
<td>IED 141 or 180</td>
<td>3</td>
</tr>
<tr>
<td>IED 191 or 292</td>
<td>3</td>
</tr>
<tr>
<td>MIL 102, option, or elective (women)</td>
<td>2</td>
</tr>
</tbody>
</table>

16

Second Year

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDF 202 or PSY 211</td>
<td>3</td>
</tr>
<tr>
<td>General education laboratory science* or GSP 281</td>
<td>3</td>
</tr>
<tr>
<td>GSS 246 or HIS 202</td>
<td>3</td>
</tr>
<tr>
<td>IED 242 or 292</td>
<td>3</td>
</tr>
<tr>
<td>IED 180 or 281</td>
<td>3</td>
</tr>
<tr>
<td>MIL 201, option, or elective (women)</td>
<td>2</td>
</tr>
</tbody>
</table>

17

*Six hours of laboratory science must be completed in Central University College; GSP 281 must be completed in Central University College.
Preparatory curriculum for a Specialized Area in Industrial Education

Courses required for admission to the College of Applied Arts and Technology: IED 130, 141, 180, 191, and 292; MAT 109; PHY 131 (meets the general education laboratory requirement in Central University College); EDF 202 and PSY 211; general education literature (3); and the initial semester general education options (6-8). See page 135 for the third and fourth years of this program.

Recommended distribution of courses to meet all requirements in the preparatory curriculum:

**First Year**

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GSE 101</td>
<td>3</td>
</tr>
<tr>
<td>GSO 100</td>
<td>1</td>
</tr>
<tr>
<td>GSP 180</td>
<td>1</td>
</tr>
<tr>
<td>MIL 101, option, or elective (women)</td>
<td>2</td>
</tr>
<tr>
<td><strong>Suggested general education options:</strong></td>
<td></td>
</tr>
<tr>
<td>Humanities</td>
<td>3</td>
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<tr>
<td>MAT 109</td>
<td>5</td>
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<tr>
<td><strong>Suggested general elective:</strong></td>
<td></td>
</tr>
<tr>
<td>IED 191</td>
<td>3</td>
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18

**Second Year**

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDF 202 or PSY 211</td>
<td>3</td>
</tr>
<tr>
<td>GSS 246 or HIS 202</td>
<td>3</td>
</tr>
<tr>
<td>IED 242 or 292</td>
<td>3</td>
</tr>
<tr>
<td>MIL 201, option, or elective (women)</td>
<td>2</td>
</tr>
<tr>
<td>PHY 131</td>
<td>5</td>
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**Second Semester**

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
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<td>IED 130</td>
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<tr>
<td>IED 141</td>
<td>3</td>
</tr>
<tr>
<td>IED 190 or MAT 109</td>
<td>3-5</td>
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<tr>
<td>IED 191 or 292</td>
<td>3</td>
</tr>
<tr>
<td>MIL 102, option, or elective (women)</td>
<td>2</td>
</tr>
</tbody>
</table>

16-18

**VOCATIONAL-INDUSTRIAL AND TECHNICAL TEACHER EDUCATION**

Preparatory curriculum for a major in Vocational-Industrial and Technical Teacher Education

Courses required for admission to the College of Applied Arts and Technology: IED courses selected with approval of advisor (6-9); IED or general education humanities (3); MAT 109 or general education science (3-5); general education literature (3); general education social science (3); and the initial semester general education options (6-8). See page 135 for the third and fourth years of this program.
Recommended distribution of courses to meet all requirements in the preparatory curriculum:

### First Year

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Hours</th>
<th>Second Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GSE 101</td>
<td>3</td>
<td>General education social science,</td>
<td></td>
</tr>
<tr>
<td>GSO 100</td>
<td>1</td>
<td>GSS 246, or HIS 202</td>
<td>3</td>
</tr>
<tr>
<td>GSE 102</td>
<td>3</td>
<td>GSP 181</td>
<td>1</td>
</tr>
<tr>
<td>GSP 180</td>
<td>1</td>
<td>IED 160 or IED elective*</td>
<td>3</td>
</tr>
<tr>
<td>MIL 101, option, or elective (women)</td>
<td>2</td>
<td>MIL 102, option, or elective (women)</td>
<td>2</td>
</tr>
<tr>
<td>Suggested general education options: Biological laboratory science</td>
<td>3</td>
<td>MIL 201, option, or elective</td>
<td>3-5</td>
</tr>
<tr>
<td>Social science</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Suggested general electives: IED elective*</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IED 160</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>19</td>
<td></td>
<td>15-17</td>
</tr>
</tbody>
</table>

### Second Year

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Hours</th>
<th>Second Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GSP 281</td>
<td>3</td>
<td>ENG 209 or 211</td>
<td>3</td>
</tr>
<tr>
<td>GSS 246 or 247; HIS 202 or 203</td>
<td>3-6</td>
<td>GSS 247, HIS 203**, or general education social science</td>
<td>3</td>
</tr>
<tr>
<td>INT 105, 106, 311, 351, and INT selected with approval of advisor</td>
<td>9</td>
<td>IED 261, IED elective, or general education humanities</td>
<td>2-6</td>
</tr>
<tr>
<td>INT 201, 292</td>
<td>3-6</td>
<td>MIL 202, option, or elective (women)</td>
<td>2</td>
</tr>
<tr>
<td>PHY 131 or other general education laboratory science</td>
<td>3-5</td>
<td>PHY 132 or other general education science</td>
<td>3-5</td>
</tr>
<tr>
<td></td>
<td>16-17</td>
<td></td>
<td>15-17</td>
</tr>
</tbody>
</table>

*Technical courses in industrial education as approved by advisor (18 semester hours maximum may be allowed by proficiency examination; six semester hours may be allowed for supervised work experience). A graduate of this approved program shall have a minimum of 2,000 clock hours of planned and supervised work experience in the occupation in which he plans to teach, or a minimum of three years of approved work experience in the occupation in which he plans to teach. **GSS 246 and 247 or HIS 202 and 203 must be completed in Central University College.

### INDUSTRIAL TECHNOLOGY

Preparatory curriculum for a major in Industrial Technology

Courses required for admission to the College of Applied Arts and Technology: INT 105, 106, 311, 351 and INT selected with approval of advisor (9); MAT 109; PHY 131 (meets general education laboratory requirement in Central University College); and the initial semester general education options (6-8). See page 147 for the third and fourth years of this program.

Recommended distribution of courses to meet all requirements in the preparatory curriculum:

### First Year

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Hours</th>
<th>Second Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GSE 101</td>
<td>3</td>
<td>GSE 102</td>
<td>3</td>
</tr>
<tr>
<td>GSO 100</td>
<td>1</td>
<td>GSP 181</td>
<td>1</td>
</tr>
<tr>
<td>GSP 180</td>
<td>1</td>
<td>INT 105</td>
<td>1</td>
</tr>
<tr>
<td>MIL 101, option, or elective (women)</td>
<td>2</td>
<td>INT 201, 292 and INT elective or INT 191, 281, and MAT 109</td>
<td>8-11</td>
</tr>
<tr>
<td>Suggested general education options: Humanities</td>
<td>3</td>
<td>MIL 102, option, or elective (women)</td>
<td>2</td>
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<tr>
<td>Social science</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Suggested general elective: INT 191 and/or 281</td>
<td>3-6</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>16-19</td>
<td></td>
<td>15-18</td>
</tr>
</tbody>
</table>
Second Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GSS 246 or HIS 202</td>
<td>3</td>
</tr>
<tr>
<td>INT 106</td>
<td>1</td>
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<tr>
<td>INT 311</td>
<td>3</td>
</tr>
<tr>
<td>INT 351</td>
<td>3</td>
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<tr>
<td>INT 292 or MAT 109</td>
<td>3-5</td>
</tr>
<tr>
<td>MIL 201, option, or elective (women)</td>
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</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>15-17</strong></td>
</tr>
</tbody>
</table>

**INTERIOR DESIGN**

Preparatory curriculum for a major in Interior Design

Courses required for admission to the College of Applied Arts and Technology: HEC 202, 221A, and 350; INT 191, 205, and 240; ART 117; general education science (3-4); general education social science (3); and the initial semester general education options (6-8). See page 126 for the third and fourth years of this program.

Recommended distribution of courses to meet all requirements in the preparatory curriculum:

### First Year

<table>
<thead>
<tr>
<th>Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First Semester</strong></td>
<td></td>
</tr>
<tr>
<td>GSE 101</td>
<td>3</td>
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<tr>
<td>GSO 100</td>
<td>1</td>
</tr>
<tr>
<td>GSP 189</td>
<td>1</td>
</tr>
<tr>
<td>MIL 101, option, or elective (women)</td>
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</tr>
<tr>
<td>Suggested general education options:</td>
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</tr>
<tr>
<td>CHE 101 or PHY 101*</td>
<td>3-4</td>
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<tr>
<td>Social science</td>
<td>3</td>
</tr>
<tr>
<td>Suggested general elective:</td>
<td></td>
</tr>
<tr>
<td>ART 117</td>
<td>3</td>
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<td><strong>Total</strong></td>
<td><strong>16-17</strong></td>
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<table>
<thead>
<tr>
<th>Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Second Semester</strong></td>
<td></td>
</tr>
<tr>
<td>GSP 281*</td>
<td>0-3</td>
</tr>
<tr>
<td>GSS 246 or HIS 202; GSS 247 or HIS 203*</td>
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<tr>
<td>General education science*</td>
<td>3</td>
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<tr>
<td>HEC 202</td>
<td>3</td>
</tr>
<tr>
<td>HEC 221A</td>
<td>3</td>
</tr>
<tr>
<td>INT 205</td>
<td>3</td>
</tr>
<tr>
<td>MIL 201, option, or elective (women)</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>16-19</strong></td>
</tr>
</tbody>
</table>

*GSP 281, GSS 246 and 247 or HIS 202 and 203, and six hours of general education laboratory science must be completed in Central University College.

### Second Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GSP 281</td>
<td>3</td>
</tr>
<tr>
<td>GSS 247 or HIS 203</td>
<td>3</td>
</tr>
<tr>
<td>INT elective</td>
<td>3</td>
</tr>
<tr>
<td>MIL 202, option, or elective (women)</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>16-19</strong></td>
</tr>
</tbody>
</table>

### JOURNALISM

See ENGLISH

#### KINDERGARTEN TEACHING

See ELEMENTARY EDUCATION and/or HOME ECONOMICS (CHILD DEVELOPMENT)
LAW ENFORCEMENT

Preparatory curriculum for majors in General Law Enforcement and Corrections

Courses required for admission to the College of Applied Arts and Technology: LEN 101; LEN 102 and 203 or 120 and 220; HEA 202; OAD 151 (if not proficient in typing); general education science or mathematics (3); general education science or mathematics (3); general education social science (3); and the initial semester general education options (6-8). See page 160 for the third and fourth years of this program.

Recommended distribution of courses to meet all requirements in the preparatory curriculum:

<table>
<thead>
<tr>
<th>First Year</th>
<th>Second Year</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First Semester</strong></td>
<td><strong>Second Semester</strong></td>
</tr>
<tr>
<td>Hours</td>
<td>Hours</td>
</tr>
<tr>
<td>GSE 101</td>
<td>General education mathematics or science*</td>
</tr>
<tr>
<td>GSO 100</td>
<td>GSE 102</td>
</tr>
<tr>
<td>GSP 180</td>
<td>GSP 181</td>
</tr>
<tr>
<td>MIL 101, option, or elective (women)</td>
<td>GSS 246, HIS 202*, or general education social science</td>
</tr>
<tr>
<td>Suggested general education options: Mathematics or science*</td>
<td>HEA 202 or OAD 151**</td>
</tr>
<tr>
<td>Social science</td>
<td>LEN 101, 102, or 120</td>
</tr>
<tr>
<td>Suggested general electives: LEN 101</td>
<td>MIL 102, option, or elective (women)</td>
</tr>
<tr>
<td>OAD 151**</td>
<td>**-2</td>
</tr>
<tr>
<td>16-18</td>
<td>**-17</td>
</tr>
</tbody>
</table>

**Six hours of general education laboratory science and GSS 246 and 247 or HIS 202 and 203 must be completed in Central University College.**

**A student who is not proficient in typing will be required to enroll in OAD 151 to remove this deficiency.

LIBRARY SCIENCE

Preparatory curriculum for a major in Library Science (teaching)

Courses required for admission to the College of Education: LIB 300; EDF 202 and PSY 211; general education science or mathematics (3); general education literature or GSH (3); general education literature, GSH, foreign language, ART 200, and/or MUS 271 (6); GSS 142, 144, or 248; and the initial semester general education options (6-8). See page 330 for the third and fourth years of this semester.
Recommended distribution of courses to meet all requirements in the preparatory curriculum:

**First Year**

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GSE 101</td>
<td>3</td>
</tr>
<tr>
<td>GSO 100</td>
<td>1</td>
</tr>
<tr>
<td>GSP 180</td>
<td>1</td>
</tr>
<tr>
<td>MIL 101, option, or elective (women)</td>
<td>2</td>
</tr>
</tbody>
</table>

Suggested general education options:
- Foreign language*, ART 200, or GSH 124 | 3 |
- GSS 142 | 3 |

Suggested general elective:
- General education mathematics or science** | 3 |

16

<table>
<thead>
<tr>
<th>Second Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foreign language*, ART 200, MUS 271, or GSH 126</td>
<td>3</td>
</tr>
<tr>
<td>General education mathematics or science**</td>
<td>3</td>
</tr>
<tr>
<td>GSE 102</td>
<td>3</td>
</tr>
<tr>
<td>GSP 181</td>
<td>1</td>
</tr>
<tr>
<td>GSS 142, 144, 246, or HIS 202</td>
<td>3</td>
</tr>
<tr>
<td>MIL 102, option, or elective (women)</td>
<td>2</td>
</tr>
</tbody>
</table>

15

<table>
<thead>
<tr>
<th>Second Year</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDF 202 or PSY 211</td>
<td>3</td>
</tr>
<tr>
<td>ENG 211, GSH 228, foreign language*, ART 200, or MUS 271</td>
<td>3</td>
</tr>
<tr>
<td>General education mathematics or science**</td>
<td>3</td>
</tr>
<tr>
<td>GSP 281</td>
<td>3</td>
</tr>
<tr>
<td>GSS 246 or 247, HIS 202 or 203**</td>
<td>3</td>
</tr>
<tr>
<td>MIL 201, option, or elective (women)</td>
<td>2</td>
</tr>
</tbody>
</table>

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*Library Science majors are strongly urged to take a foreign language. Six hours of the same foreign language must be completed to meet the general education humanities requirement.

**Six hours of laboratory science must be completed in Central University College. Three hours of biological science and three hours of physical science are required for graduation. GSS 246 and 247 or HIS 202 and 203 must be completed in Central University College.

**MANAGEMENT**

See BUSINESS ADMINISTRATION

**MANUAL ARTS THERAPY**

See INDUSTRIAL EDUCATION

**MARKETING**

See BUSINESS ADMINISTRATION
MATHMATICS

Preparatory curriculum for a major in Mathematics
(teaching or non-teaching)

Courses required for admission to the College of Arts and Sciences: required mathematics (11-13); PHY 201 and 202 (meets the 6 hour general education laboratory requirement in Central University College); general education literature or EDF 202 and PSY 211 (for teacher certification) (6); general education social science (3); and the initial semester general education options (6-8). See page 251 for the third and fourth years of this program.

Recommended distribution of courses to meet all requirements in the preparatory curriculum:

**First Year**

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GSE 101</td>
<td>3</td>
</tr>
<tr>
<td>GSO 100</td>
<td>1</td>
</tr>
<tr>
<td>GSP 180</td>
<td>1</td>
</tr>
<tr>
<td>MIL 101, option, or elective</td>
<td>2</td>
</tr>
<tr>
<td><strong>Suggested general education options:</strong></td>
<td></td>
</tr>
<tr>
<td>Biological science</td>
<td>3</td>
</tr>
<tr>
<td>Social science</td>
<td>3</td>
</tr>
<tr>
<td><strong>Suggested general elective:</strong></td>
<td></td>
</tr>
<tr>
<td>Required mathematics*</td>
<td>4-5</td>
</tr>
<tr>
<td></td>
<td><strong>17-18</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Second Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GSE 102</td>
<td>3</td>
</tr>
<tr>
<td>GSP 181</td>
<td>1</td>
</tr>
<tr>
<td>GSP 281</td>
<td>3</td>
</tr>
<tr>
<td>GSS 246 or HIS 202</td>
<td>3</td>
</tr>
<tr>
<td>MIL 102, option, or elective</td>
<td>2</td>
</tr>
<tr>
<td><strong>Required mathematics</strong>*</td>
<td>4-5</td>
</tr>
<tr>
<td></td>
<td><strong>16-17</strong></td>
</tr>
</tbody>
</table>

**Second Year**

| General education literature,      |       |
| EDF 202 or PSY 211**               | 3     |
| GSS 247 or HIS 203                 | 3     |
| MIL 201, option, or elective       | 2     |
| intermediate                      | 5     |
| Required mathematics*              | 4     |
| **17**                             |        |

| General education literature,      |       |
| EDF 202, or PSY 211**              | 3     |
| General education social science   | 3     |
| MIL 202, option, or elective       | 2     |
| intermediate                      | 5     |
| Required mathematics*              | 3-4   |
| **16-17**                           |      |

*To be selected in consultation with advisor from MAT 109, 110, 111, 112, 213, and 308. MAT 109 and 110 may be waived. Placement in the beginning mathematics courses will be determined by the Mathematics Department.

**Students who wish to qualify for teaching certificates must complete EDF 202 and PSY 211; humanities requirements will be taken by those students during the junior year.

MEDICAL SCIENCE

See PRE-MEDICAL SCIENCE
MEDICAL TECHNOLOGY

Preparatory curriculum for a major in Medical Technology

Courses required for admission to the College of Arts and Sciences: BIO 141, and CHE 111 (meets the 6 hours general education laboratory requirement in Central University College); BIO 211 and 242; CHE 112 and 213; restricted electives (5-12); and the initial semester general education options (6-8). See page 181 for the third and fourth years of this program.

Recommended distribution of courses to meet all requirements in the preparatory curriculum:

**First Year**

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GSE 101</td>
<td>3</td>
</tr>
<tr>
<td>GSO 100</td>
<td>1</td>
</tr>
<tr>
<td>GSP 180</td>
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<tr>
<td>MIL 101, option, or elective</td>
<td>2</td>
</tr>
<tr>
<td>(women)</td>
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<tr>
<td>Suggested general education</td>
<td></td>
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<td>options:</td>
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<tr>
<td>CHE 111</td>
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<td>Elective</td>
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<td>BIO 141</td>
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<tr>
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<table>
<thead>
<tr>
<th>Second Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 141 or 211</td>
<td>4</td>
</tr>
<tr>
<td>CHE 111 or 112</td>
<td>4-5</td>
</tr>
<tr>
<td>GSE 102</td>
<td>3</td>
</tr>
<tr>
<td>GSP 181</td>
<td>1</td>
</tr>
<tr>
<td>MIL 102, option, or elective</td>
<td>2</td>
</tr>
<tr>
<td>(women)</td>
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</tr>
<tr>
<td>Restricted elective*</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
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</tbody>
</table>
|                                | **17**-
|                                | **18**|

**Second Year**

<table>
<thead>
<tr>
<th></th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 211 or restricted elective*</td>
<td>4</td>
</tr>
<tr>
<td>CHE 112 or 213</td>
<td>4-5</td>
</tr>
<tr>
<td>MIL 201, option, or elective</td>
<td>2</td>
</tr>
<tr>
<td>(women)</td>
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</tr>
<tr>
<td>Restricted electives*</td>
<td>6-9</td>
</tr>
<tr>
<td></td>
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</tbody>
</table>
|                                | **16**-
|                                | **19**|

To be selected with approval of advisor from general education social science, general education literature, other general education humanities, GSP 281, MAT 107, and MAT 207. GSP 281 and either GSS 246 and 247 or HIS 202 and 203 must be completed in Central University College.

**MUSIC**

Preparatory curriculum for Bachelor of Music Education (teaching), Bachelor of Music with majors in Applied Music or Church Music, and Bachelor of Arts with a major in Music (non-teaching)

Courses required for admission to the College of Arts and Sciences: required music (28); EDF 202 and PSY 211 (for teacher certification); and general education requirement (3). See page 256 for the third and 166 for the third and fourth years of this program.
Recommended distribution of courses to meet all requirements in the preparatory curriculum:

### First Year

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Hours</th>
<th>Second Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GSE 101</td>
<td>3</td>
<td>General education requirement*</td>
<td>3</td>
</tr>
<tr>
<td>GSO 100</td>
<td>1</td>
<td>GSE 102</td>
<td>3</td>
</tr>
<tr>
<td>GSP 180</td>
<td>1</td>
<td>GSP 181</td>
<td>1</td>
</tr>
<tr>
<td>MIL 101, option, or elective (women)</td>
<td>2</td>
<td>MIL 102, option, or elective (women)</td>
<td>2</td>
</tr>
<tr>
<td>Required music**</td>
<td>7½</td>
<td>Required music**</td>
<td>7½</td>
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<table>
<thead>
<tr>
<th>First Year</th>
<th>Hours</th>
<th>Second Year</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDF 202, PSY 211, or elective***</td>
<td>3</td>
<td>EDF 202, PSY 211, or elective***</td>
<td>3</td>
</tr>
<tr>
<td>General education requirements*</td>
<td>6</td>
<td>General education requirements*</td>
<td>6</td>
</tr>
<tr>
<td>MIL 201, option, or elective</td>
<td>2</td>
<td>MIL 202, option, or elective</td>
<td>2</td>
</tr>
<tr>
<td>Required music**</td>
<td>6½</td>
<td>Required music**</td>
<td>6½</td>
</tr>
</tbody>
</table>

### Second Year

<table>
<thead>
<tr>
<th>First Year</th>
<th>Hours</th>
<th>Second Year</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MIL 201, option, or elective (women)</td>
<td>2</td>
<td>MIL 202, option, or elective (women)</td>
<td>2</td>
</tr>
<tr>
<td>Required music**</td>
<td>17½</td>
<td>Required music**</td>
<td>17½</td>
</tr>
</tbody>
</table>

\*GSP 281, GSS 246 and 247 or HIS 202 and 203, and six hours of general education laboratory science must be completed in Central University College.

**To be scheduled with approval of advisor from MUS 171, 181, 182, 231, 282, 130, 131, 251, 252, 110, 111, 113, applied electives, and ensembles.

***EDF 202 and PSY 211 must be completed by students following the BME program.

### NURSING

Preparatory Curriculum for a major in Nursing

Courses required for admission to the College of Applied Arts and Technology: NUD 301; NFA 201 and 302; BIO 171 and 301; CHE 101 and 102 (meets the 6 hour general education laboratory requirement in Central University College); PSY 211; general education social science (3); and the initial semester general education options (6-8). See page 166 for the third and fourth years of this program.

Recommended distribution of courses to meet all requirements in the preparatory curriculum:

### First Year

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Hours</th>
<th>Second Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GSE 101</td>
<td>3</td>
<td>BIO 171</td>
<td>4</td>
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<tr>
<td>GSO 100</td>
<td>1</td>
<td>CHE 101 or 102</td>
<td>4-5</td>
</tr>
<tr>
<td>GSP 180</td>
<td>1</td>
<td>GSE 102</td>
<td>3</td>
</tr>
<tr>
<td>MIL 101, option, or elective (women)</td>
<td>2</td>
<td>GSP 181</td>
<td>1</td>
</tr>
<tr>
<td>Suggested general education options:</td>
<td>4</td>
<td>GSS 246 or HIS 202</td>
<td>3</td>
</tr>
<tr>
<td>CHE 101</td>
<td></td>
<td>MIL 102, option, or elective (women)</td>
<td>2</td>
</tr>
<tr>
<td>Humanities</td>
<td>3</td>
<td>NUR 301</td>
<td>5</td>
</tr>
<tr>
<td>Suggested general elective:</td>
<td>17</td>
<td></td>
<td>17-18</td>
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</table>

### Second Year

<table>
<thead>
<tr>
<th>First Year</th>
<th>Hours</th>
<th>Second Year</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 301 or CHE 102</td>
<td>3-5</td>
<td>BIO 273 or 301</td>
<td>3-4</td>
</tr>
<tr>
<td>GSP 281</td>
<td>3</td>
<td>EDF 213</td>
<td>4</td>
</tr>
<tr>
<td>GSS 247 or HIS 203</td>
<td>3</td>
<td>MIL 202, option or elective (women)</td>
<td>2</td>
</tr>
<tr>
<td>MIL 201, option, or elective (women)</td>
<td>2</td>
<td>NUR 301</td>
<td>5</td>
</tr>
<tr>
<td>NFA 201</td>
<td>2</td>
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<td></td>
</tr>
<tr>
<td>PSY 211</td>
<td>3</td>
<td></td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>First Year</th>
<th>Hours</th>
<th>Second Year</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>16-18</td>
<td></td>
<td>14-15</td>
<td></td>
</tr>
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</table>
OFFICE ADMINISTRATION
See BUSINESS ADMINISTRATION

PHILOSOPHY
Preparatory curriculum for a major in Philosophy (non-teaching)

Courses required for admission to the College of Arts and Sciences: PHI 110, 130, and 211; foreign language (6); general education social science (3); general education requirements (6); and the initial semester general education options (6-8). See page 268 for the third and fourth years of this program.

Recommended distribution of courses to meet all requirements in the preparatory curriculum:

First Year

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GSE 101</td>
<td>3</td>
</tr>
<tr>
<td>GSO 100</td>
<td>1</td>
</tr>
<tr>
<td>GSP 180</td>
<td></td>
</tr>
<tr>
<td>MIL 101, option, or elective (women)</td>
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</tr>
<tr>
<td>Suggested general education options*</td>
<td>3-4</td>
</tr>
<tr>
<td>Social science</td>
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<tr>
<td>PHI 110</td>
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16-17

<table>
<thead>
<tr>
<th>Second Semester</th>
<th>Hours</th>
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<tbody>
<tr>
<td>Foreign language or general education laboratory science*</td>
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<tr>
<td>GSE 192</td>
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<tr>
<td>GSP 181</td>
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<tr>
<td>GSS 246, HIS 202*, or general education social science</td>
<td>3</td>
</tr>
<tr>
<td>MIL 102, option, or elective (women)</td>
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</tr>
<tr>
<td>PHI 110, 130, or 211</td>
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15-16

Second Year

<table>
<thead>
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<th>Hours</th>
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</thead>
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<tr>
<td>Foreign language* or elective</td>
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<tr>
<td>General education literature or other general education requirement</td>
<td>3-4</td>
</tr>
<tr>
<td>General education science* or other general education requirement</td>
<td>3-4</td>
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<tr>
<td>GSS 246 or 247; HIS 202 or 203*</td>
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<tr>
<td>MIL 201, option, or elective (women)</td>
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</tr>
<tr>
<td>PHI 130 or 211</td>
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17-19

<table>
<thead>
<tr>
<th>Second Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foreign language* or elective</td>
<td>3</td>
</tr>
<tr>
<td>General education literature or other general education requirement</td>
<td>3-4</td>
</tr>
<tr>
<td>GSP 281* or elective</td>
<td>3</td>
</tr>
<tr>
<td>GSS 247, HIS 203, or general education social science</td>
<td>3</td>
</tr>
<tr>
<td>MIL 202, option, or elective (women)</td>
<td>2</td>
</tr>
<tr>
<td>PHI 130, 211, or 300</td>
<td>3</td>
</tr>
</tbody>
</table>

17-18

*The following requirements must be completed in Central University College: GSS 246 and 247 or HIS 202 and 203; GSP 281; six hours of general education laboratory science; and six hours of foreign language, preferably French or German.

PHYSICAL EDUCATION
Preparatory curriculum for men majoring in Physical Education, or an area in Health, Physical Education and Recreation (teaching or non-teaching), School of Health, Physical Education, Recreation, and Athletics

Courses required for admission to the College of Education: PHE 125, 215, and 216; EDF 202 and PSY 211 (for teacher certification); GSC 261 or BIO 162 and BIO 171 (meets the 6 hour general education laboratory requirement in Central University College): ART 200, MUS
271 or GSH (3); general education literature or GSH (6); general education social science (3); and the initial semester general education options (6-8). See page 342 for the third and fourth years of this program.

Recommended distribution of courses to meet all requirements in the preparatory curriculum:

### First Year

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Hours</th>
<th>Second Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GSE 101</td>
<td>3</td>
<td>ART 200, MUS 271, or GSH 126</td>
<td>3</td>
</tr>
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<td>GSO 100</td>
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<td>General education social science</td>
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<td>GSP 180</td>
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<td>GSE 102</td>
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<tr>
<td>MIL 161 or option</td>
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<td>GSP 181</td>
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<tr>
<td><strong>Suggested general education options:</strong></td>
<td></td>
<td>GSP 281</td>
<td>3</td>
</tr>
<tr>
<td>ART 200, MUS 271, or GSH 124</td>
<td>3</td>
<td>HBA 202 or PHE 125</td>
<td>2</td>
</tr>
<tr>
<td>BIO 162, 171, GSC 261</td>
<td>3</td>
<td>MIL 102 or option</td>
<td>2</td>
</tr>
<tr>
<td><strong>Suggested general electives:</strong></td>
<td></td>
<td>**</td>
<td>2</td>
</tr>
<tr>
<td>General education social science</td>
<td>3</td>
<td>**</td>
<td></td>
</tr>
<tr>
<td>PHE 125</td>
<td>2</td>
<td>**</td>
<td></td>
</tr>
<tr>
<td>**</td>
<td>18</td>
<td>**</td>
<td>17</td>
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</tbody>
</table>

### Second Year

<table>
<thead>
<tr>
<th>BIO 162 or 171***, GSC 261, or physical laboratory science</th>
<th>3</th>
<th><strong>BIO 162, 171, 301, GSC 261</strong>*, or physical laboratory science</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDF 202, PSY 211**, or elective</td>
<td>3</td>
<td><strong>EDF 202, PSY 211</strong>, or elective</td>
<td>3</td>
</tr>
<tr>
<td>ENG 211 or GSH 229</td>
<td>3</td>
<td><strong>ENG 212 or GSH 230</strong></td>
<td>3</td>
</tr>
<tr>
<td>GSS 246 or 247; HIS 202 or 203</td>
<td>3</td>
<td><strong>GSS 247, HIS 203</strong>*, or other general education social science</td>
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<tr>
<td>HEA 202 (if needed)*</td>
<td>0-2</td>
<td><strong>MIL 202 or option</strong></td>
<td>2</td>
</tr>
<tr>
<td>MIL 201 or option</td>
<td>2</td>
<td><strong>PHE 215 or 216</strong></td>
<td>2</td>
</tr>
<tr>
<td>PHE 215 or 216</td>
<td>2</td>
<td>**</td>
<td>2</td>
</tr>
<tr>
<td>**</td>
<td>16-18</td>
<td>**</td>
<td>16</td>
</tr>
</tbody>
</table>

*Students preparing for the area major must complete HEA 202.
**EDF 202 and PSY 211 are required for a teaching certificate.
***GSC 261 or BIO 162 must be completed before BIO 301.
****GSS 246 and 247 or HIS 202 and 203 must be completed in Central University College.

Preparatory curriculum for women majoring in Physical Education, or an area in Health, Physical Education, and Recreation (teaching or non-teaching), School of Health, Physical Education, and Recreation

Courses required for admission to the College of Education: PHE 125, 207, 208, 241, and 300; HEA 202; EDF 202 and PSY 211 (for teacher certification); GSC 261 or BIO 162 and BIO 171 (meets the 6 hours general education laboratory requirement in Central University College); BIO 301; general education humanities (9); general education social science (3); and the initial semester general education options (6-8). See page 344 for the third and fourth years of this program.
Recommended distribution of courses to meet all requirements in the preparatory curriculum:

### First Year

<table>
<thead>
<tr>
<th>Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First Year</strong></td>
<td></td>
</tr>
<tr>
<td>GSE 101</td>
<td>3</td>
</tr>
<tr>
<td>GSO 100</td>
<td>1</td>
</tr>
<tr>
<td>GSP 180</td>
<td>1</td>
</tr>
<tr>
<td><strong>Suggested general education options:</strong></td>
<td></td>
</tr>
<tr>
<td>GSC 261, BIO 162 or physical science</td>
<td>3</td>
</tr>
<tr>
<td>Social science</td>
<td>3</td>
</tr>
<tr>
<td><strong>Suggested general electives:</strong></td>
<td></td>
</tr>
<tr>
<td>Humanities</td>
<td>3</td>
</tr>
<tr>
<td>PHE 125</td>
<td>2</td>
</tr>
<tr>
<td><strong>First Semester</strong></td>
<td><strong>Second Semester</strong></td>
</tr>
<tr>
<td><strong>First Year</strong></td>
<td><strong>Hours</strong></td>
</tr>
<tr>
<td>BIO 162, GSC 261, or general education physical science**</td>
<td>3</td>
</tr>
<tr>
<td>General education humanities</td>
<td>3</td>
</tr>
<tr>
<td>General education social science</td>
<td>3</td>
</tr>
<tr>
<td>GSE 102</td>
<td>3</td>
</tr>
<tr>
<td>GSP 181</td>
<td>1</td>
</tr>
<tr>
<td>HEA 202 or approved elective*</td>
<td>2</td>
</tr>
<tr>
<td>PHE 125 or optional approved elective*</td>
<td>0-2</td>
</tr>
<tr>
<td><strong>Second Semester</strong></td>
<td><strong>Hours</strong></td>
</tr>
<tr>
<td>BIO 201</td>
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</tr>
<tr>
<td>EDF 202, PSY 211***, or approved elective</td>
<td>3</td>
</tr>
<tr>
<td>ENG 210, 212, or GSH 219</td>
<td>3</td>
</tr>
<tr>
<td>GSS 246 or HIS 202</td>
<td>3</td>
</tr>
<tr>
<td>HFA 202 or optional approved elective*</td>
<td>0-2</td>
</tr>
<tr>
<td>PHE 207</td>
<td>2</td>
</tr>
<tr>
<td>PHE 300</td>
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<tr>
<td><strong>Second Year</strong></td>
<td><strong>Hours</strong></td>
</tr>
<tr>
<td>BIO 171</td>
<td>3</td>
</tr>
<tr>
<td>EDF 202, PSY 211***, or approved elective</td>
<td>3</td>
</tr>
<tr>
<td>ENG 209, 211, or GSH 228</td>
<td>3</td>
</tr>
<tr>
<td>GSS 246 or HIS 202</td>
<td>3</td>
</tr>
<tr>
<td>HFA 202 or optional approved elective*</td>
<td>0-2</td>
</tr>
<tr>
<td>PHE 207</td>
<td>2</td>
</tr>
<tr>
<td>PHE 300</td>
<td>2</td>
</tr>
<tr>
<td><strong>Second Year</strong></td>
<td><strong>Hours</strong></td>
</tr>
<tr>
<td>BIO 301</td>
<td>3</td>
</tr>
<tr>
<td>EDF 202, PSY 211***, or approved elective</td>
<td>3</td>
</tr>
<tr>
<td>ENG 210, 212, or GSH 228</td>
<td>3</td>
</tr>
<tr>
<td>GSS 246 or HIS 202</td>
<td>3</td>
</tr>
<tr>
<td>GSP 281 or approved elective*</td>
<td>3</td>
</tr>
<tr>
<td>GSS 247 or HIS 203</td>
<td>3</td>
</tr>
<tr>
<td>PHE 208</td>
<td>2</td>
</tr>
<tr>
<td>PHE 241</td>
<td>1</td>
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<tr>
<td><strong>Second Year</strong></td>
<td><strong>Hours</strong></td>
</tr>
<tr>
<td>BIO 171</td>
<td>3</td>
</tr>
<tr>
<td>EDF 202, PSY 211***, or approved elective</td>
<td>3</td>
</tr>
<tr>
<td>ENG 210, 212, or GSH 228</td>
<td>3</td>
</tr>
<tr>
<td>GSS 246 or HIS 202</td>
<td>3</td>
</tr>
<tr>
<td>GSP 281 or approved elective*</td>
<td>3</td>
</tr>
<tr>
<td>GSS 247 or HIS 203</td>
<td>3</td>
</tr>
<tr>
<td>PHE 208</td>
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<tr>
<td>PHE 241</td>
<td>1</td>
</tr>
</tbody>
</table>

*Students preparing to major in physical education should choose electives from their other major or minor field with approval of advisor. GSP 281 must be completed in Central University College.

**BIO 162 or GSC 261 and three hours of general education physical science must be completed before the first semester of the sophomore year. Six hours of laboratory science must be completed in Central University College.

***EDF 202 and PSY 211 are required for students seeking teacher certification.

### PHYSICS

Preparatory curriculum for a major in Physics (teaching or non-teaching)

Courses required for admission to the College of Arts and Sciences: required Physics (meets the 6 hour general education laboratory requirement in Central University College) (9-17); required mathematics (11-13); CHE 111; CHE 112 and general education requirement (3) or EDF 202 and PSY 211 (for teacher certification); and the initial semester general education options (6-8). See page 271 for the third and fourth years of this program.

Recommended distribution of courses to meet all requirements in the preparatory curriculum:

### First Year

<table>
<thead>
<tr>
<th>Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First Year</strong></td>
<td></td>
</tr>
<tr>
<td>GSE 101</td>
<td>3</td>
</tr>
<tr>
<td>GSO 100</td>
<td>1</td>
</tr>
<tr>
<td>GSP 180</td>
<td>1</td>
</tr>
<tr>
<td>MIL 101, option, or elective (women)</td>
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</tr>
<tr>
<td><strong>Suggested general education options:</strong></td>
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</tr>
<tr>
<td>MAT 169 or 111</td>
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</tr>
<tr>
<td>Elective</td>
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<td><strong>Suggested general elective:</strong></td>
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</tr>
<tr>
<td>Required physics**</td>
<td>2-5</td>
</tr>
<tr>
<td><strong>First Year</strong></td>
<td><strong>Second Semester</strong></td>
</tr>
<tr>
<td><strong>First Year</strong></td>
<td><strong>Hours</strong></td>
</tr>
<tr>
<td>GSE 102</td>
<td>3</td>
</tr>
<tr>
<td>GSP 181</td>
<td>1</td>
</tr>
<tr>
<td>General education requirements*</td>
<td>3-6</td>
</tr>
<tr>
<td>MAT 109, 111, or 112</td>
<td>4-5</td>
</tr>
<tr>
<td>MIL 102, option, or elective (women)</td>
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</tr>
<tr>
<td><strong>Required physics</strong></td>
<td><strong>Hours</strong></td>
</tr>
<tr>
<td><strong>Second Semester</strong></td>
<td><strong>Hours</strong></td>
</tr>
</tbody>
</table>

*Required physics** | 2-7
Second Year

EDF 202, PSY 211, or CHE 111  3-4
General education requirement*  3
MAT 111, 112, or 213  4
MIL 201, option, or elective (women)  2
Required physics**  3-5

-----

CHE 111 or 112  4-5
EDF 202, PSY 211, or general education requirement*  3
MAT 112, 213, or general education requirement  3-4
MIL 202, option, or elective (women)  2
Required physics**  2-5

-----

17-18

*To be selected with approval of advisor; GSP 281 and either GSS 246 and 247 or HIS 202 and 203 must be completed in Central University College.

**To be selected with approval of advisor from PHY 100, 107, 201, 202, 300, and/or 307.

PLANNING

See “REGIONAL PLANNING” under GEOGRAPHY

POLITICAL SCIENCE

Preparatory curriculum for a major in Political Science (teaching or non-teaching)

Courses required for admission to the College of Arts and Sciences: POL 100, 101, and major requirement (3); EDF 202 and PSY 211 (for teacher certification); general education literature (6); and the initial semester general education options (6-8). See page 277 for the third and fourth years of this program.

Recommended distribution of courses to meet all requirements in the preparatory curriculum:

First Year

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GSE 101</td>
<td>3</td>
</tr>
<tr>
<td>GSO 100</td>
<td>1</td>
</tr>
<tr>
<td>MIL 101, option or elective (women)</td>
<td>2</td>
</tr>
<tr>
<td>Suggested general education options:</td>
<td>3</td>
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<tr>
<td>Laboratory science</td>
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<td>Social science</td>
<td>3</td>
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<tr>
<td>Suggested general elective:</td>
<td>3</td>
</tr>
<tr>
<td>Foreign language</td>
<td></td>
</tr>
<tr>
<td></td>
<td>16</td>
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</table>

Second Year

<table>
<thead>
<tr>
<th>Second Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foreign language or elective</td>
<td>3</td>
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<tr>
<td>General education science*</td>
<td>3</td>
</tr>
<tr>
<td>GSE 102</td>
<td>3</td>
</tr>
<tr>
<td>GSP 181</td>
<td>1</td>
</tr>
<tr>
<td>MIL 102, option or elective (women)</td>
<td>2</td>
</tr>
<tr>
<td>POL 100 or 101</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>

| EDF 202, PSY 211, or general education mathematics or science* | 3 |
| General education literature | 3 |
| GSP 281 | 3 |
| GSS 246 or HIS 202 | 3 |
| MIL 201, option, or elective (women) | 2 |
| POL 101, foreign language, or approved elective | 3 |
|                   | 17    |

*Six hours of general education laboratory science must be completed in Central University College; EDF 202 and PSY 211 must be completed in Central University College by students seeking teaching certificates.
PRE-FORESTRY
See BIOLOGY

PRE-MEDICAL SCIENCES
Preparatory curriculum for a major in Pre-Medical Sciences

Courses required for admission to the College of Arts and Sciences: BIO 141, 211, and 242; CHE 111, 112, (meets the 6 hour general education laboratory requirement in Central University College); CHE 213; MAT 109 and 111; and the initial semester general education options (6-8). See page 182 for the upper division semesters of this program.

Recommended distribution of courses to meet all requirements in the preparatory curriculum:

<table>
<thead>
<tr>
<th>First Year</th>
<th>Second Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Semester</td>
<td>Hours</td>
</tr>
<tr>
<td>GSE 101</td>
<td>3</td>
</tr>
<tr>
<td>GSO 100</td>
<td>1</td>
</tr>
<tr>
<td>GSP 130</td>
<td>3</td>
</tr>
<tr>
<td>MIL 101, option, or elective (women)</td>
<td>2</td>
</tr>
<tr>
<td>Suggested general education options:</td>
<td>4</td>
</tr>
<tr>
<td>CHE 111</td>
<td>4</td>
</tr>
<tr>
<td>GSP 231*</td>
<td>3</td>
</tr>
<tr>
<td>Suggested general elective: BIO 141</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>18</td>
</tr>
</tbody>
</table>

Second Year

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>BIO 211 or 242</td>
<td>4</td>
</tr>
<tr>
<td>CHE 112 or 213</td>
<td>4-5</td>
</tr>
<tr>
<td>GSP 231 or general education social science*</td>
<td>3</td>
</tr>
<tr>
<td>MAT 109</td>
<td>5</td>
</tr>
<tr>
<td>MIL 201, option, or elective (women)</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>18-19</td>
</tr>
</tbody>
</table>

| BIO 242 or 221 | 4 |
| CHE 213 or elective | 4 |
| GSP 231 or general education social science* | 3 |
| MAT 111 | 4 |
| MIL 202, option, or elective (women) | 2 |
| | 17 |

*GSP 231 and GSS 246 and 247 or HIS 202 and 203 must be completed in Central University College.

PRE-VETERINARY
See BIOLOGY

PSYCHOLOGY
Preparatory curriculum for a major in Psychology (non-teaching)

Courses required for admission to the College of Arts and Sciences: PSY 211 and 213; MAT 107; ENG 211 and 212; general education social science (3); and the initial semester general education options (6-8). See page 283 for the third and fourth years of this program.
Recommended distribution of courses to meet all requirements in the preparatory curriculum:

### First Year

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GSE 101</td>
<td>3</td>
</tr>
<tr>
<td>GSO 100</td>
<td>1</td>
</tr>
<tr>
<td>GSP 180</td>
<td>1</td>
</tr>
<tr>
<td>MIL 101, option or elective (women)</td>
<td>2</td>
</tr>
<tr>
<td>Suggested general education options:</td>
<td></td>
</tr>
<tr>
<td>Social science</td>
<td>3</td>
</tr>
<tr>
<td>BIO 141 or 162</td>
<td>3</td>
</tr>
<tr>
<td>Suggested general elective: GSP 281* or foreign language</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>16-17</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Second Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>General education laboratory science or MAT 107*</td>
<td>3</td>
</tr>
<tr>
<td>GSE 102</td>
<td>3</td>
</tr>
<tr>
<td>GSP 181, foreign language, or elective*</td>
<td>3</td>
</tr>
<tr>
<td>GSS 246 or HIS 203, or general education social science</td>
<td>3</td>
</tr>
<tr>
<td>MIL 101, option, or elective (women)</td>
<td>2</td>
</tr>
<tr>
<td>PSY 211</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>17-18</td>
</tr>
</tbody>
</table>

*GSP 281, GSS 246 and 247 or HIS 202 and 203, MAT 107, and 6 hours of general education laboratory science must be completed in Central University College. BIO 141 or 162, 301, and PHY 101 are recommended.

### PUBLIC HEALTH

See HEALTH

### RECREATION

Preparatory curriculum for a major in Recreation Administration (non-teaching), School of Health, Physical Education, Recreation, and Athletics

Courses required for admission to the College of Education: REC 100, 102 or 201, 163, and 263; PHE 207 or 215; POL 101; GSS 142 or 144; science (9) selected from GSC 261, 262, GLY 108 and 210 (meets the 6 hour general education laboratory requirement in Central University College); general education literature or GSH (6); and the initial semester general education options (6-8). See pages 349-350 for the third and fourth years of this program.

Recommended distribution of courses to meet all requirements in the preparatory curriculum:

### First Year

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GSE 101</td>
<td>3</td>
</tr>
<tr>
<td>GSO 100</td>
<td>1</td>
</tr>
<tr>
<td>GSP 180</td>
<td>1</td>
</tr>
<tr>
<td>MIL 101, option, or elective (women)</td>
<td>2</td>
</tr>
<tr>
<td>Suggested general education options:</td>
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</tr>
<tr>
<td>ART 200, MUS 271, or GSH 154</td>
<td>3</td>
</tr>
<tr>
<td>GSP 281</td>
<td>3</td>
</tr>
<tr>
<td>Suggested general electives: REC 100 or HEA 202</td>
<td>2-3</td>
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<tr>
<td></td>
<td>15-16</td>
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<table>
<thead>
<tr>
<th>Second Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 200, MUS 271, GSH 126, or GSP 281*</td>
<td>3</td>
</tr>
<tr>
<td>GSC 261 or 262, GLY 108 or 210</td>
<td>3</td>
</tr>
<tr>
<td>GSE 102</td>
<td>3</td>
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<tr>
<td>GSP 181</td>
<td>1</td>
</tr>
<tr>
<td>GSS 142 or 144</td>
<td>3</td>
</tr>
<tr>
<td>MIL 101, option, or elective (women)</td>
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<tr>
<td>REC 163</td>
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</table>
Second Year

ENG 211 or GSH 228 .......................... 3
GSC 261 or 262; GLY 108 or 210 .......... 3
GSS 246 or HIS 202 .......................... 3
MIL 201, option, or elective (women) ........ 2
POL 101 ....................................... 3
REC 100, or PHE 215 (men) or
PHE 207 (women) ................................ 2-3

16-17

*GSP 281 must be completed in Central University College.

REGIONAL PLANNING
See GEOGRAPHY

REHABILITATION EDUCATION
See SPECIAL EDUCATION

SCHOOL HEALTH
See HEALTH

SOCIAL SCIENCE
See HISTORY

SOCIOCY AND SOCIAL WORK
Preparatory curriculum for majors in Sociology (teaching or non-teaching) or Social Work

Courses required for admission to the College of Arts and Sciences: SOC 131 and 232; EDF 202 and PSY 211 (for teacher certification); general education humanities (3); general education literature (6); and the initial semester general education options (6-8). See page 184 for the third and fourth years of these programs.

Recommended distribution of courses to meet all requirements in the preparatory curriculum:

First Year

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GSE 101</td>
<td>3</td>
</tr>
<tr>
<td>GSO 100</td>
<td></td>
</tr>
<tr>
<td>GSP 180</td>
<td>1</td>
</tr>
<tr>
<td>MIL 101, option, or elective (women)</td>
<td>2</td>
</tr>
<tr>
<td>Suggested general education options:</td>
<td></td>
</tr>
<tr>
<td>Elective</td>
<td>3</td>
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<tr>
<td>Mathematics or science*</td>
<td>3</td>
</tr>
<tr>
<td>Suggested general elective:</td>
<td></td>
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<tr>
<td>General education humanities</td>
<td>3</td>
</tr>
<tr>
<td>16</td>
<td></td>
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</tbody>
</table>

Second Semester                Hours

<table>
<thead>
<tr>
<th>Second Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANT 110, SOC 131* or elective</td>
<td>3</td>
</tr>
<tr>
<td>General education humanities</td>
<td>3</td>
</tr>
<tr>
<td>General education mathematics</td>
<td>3</td>
</tr>
<tr>
<td>MIL 102, option, or elective (women)</td>
<td>2</td>
</tr>
<tr>
<td>GSE 102</td>
<td></td>
</tr>
<tr>
<td>GSP 181</td>
<td>1</td>
</tr>
<tr>
<td>MIL 102, option, or elective</td>
<td>1</td>
</tr>
</tbody>
</table>

15
Central University College

Second Year

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Hours</th>
<th>Course Code</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDF 202, PSY 211, SWK 210 or elective*</td>
<td>3</td>
<td>EDF 202, PSY 211, SWK 210</td>
<td>3</td>
</tr>
<tr>
<td>ENG 209 or 211</td>
<td>3</td>
<td>ENG 210 or 212</td>
<td>3</td>
</tr>
<tr>
<td>General education mathematics or science*</td>
<td>3</td>
<td>GSP 281</td>
<td>3</td>
</tr>
<tr>
<td>GSS 246 or HIS 202</td>
<td>3</td>
<td>GSS 247 or HIS 203</td>
<td>3</td>
</tr>
<tr>
<td>MIL 201, option, or elective (women)</td>
<td>2</td>
<td>MIL 202, option, or elective (women)</td>
<td>2</td>
</tr>
<tr>
<td>SOC 131* or 232</td>
<td>3</td>
<td>SOC 232 or elective</td>
<td>3</td>
</tr>
<tr>
<td>*SOC 131, 232 and six hours of general laboratory science must be completed in Central University College.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>**EDF 202 and PSY 211 are required for teaching certificates; SWK 210 and PSY 211 are required for the major in Social Work.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

SPECIAL EDUCATION

(See also ELEMENTARY EDUCATION)

REHABILITATION EDUCATION

Preparatory curriculum for a major in Rehabilitation Education

Courses required for admission to the College of Education: RHB 300; BIO 301; PSY 211; SOC 131 and 335; general education humanities (9); and the initial semester general education options (6-8). See page 337 for the third and fourth years of this program.

Recommended distribution of courses to meet all requirements in the preparatory curriculum:

First Year

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Hours</th>
<th>Course Code</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GSE 101</td>
<td>3</td>
<td>General education humanities</td>
<td>3</td>
</tr>
<tr>
<td>GSO 100</td>
<td>1</td>
<td>General education laboratory</td>
<td>1</td>
</tr>
<tr>
<td>GSP 180</td>
<td>1</td>
<td>General education science*</td>
<td>3</td>
</tr>
<tr>
<td>MIL 101, option, or elective (women)</td>
<td>2</td>
<td>GSE 102</td>
<td>3</td>
</tr>
<tr>
<td>Suggested general education options: BIO 162 or GSC 261</td>
<td>3</td>
<td>GSP 181</td>
<td>1</td>
</tr>
<tr>
<td>Humanities</td>
<td>3</td>
<td>GSS 246 or HIS 202</td>
<td>3</td>
</tr>
<tr>
<td>Suggested general elective: GSP 281</td>
<td>3</td>
<td>MIL 102, option, or elective (women)</td>
<td>2</td>
</tr>
</tbody>
</table>

Second Year

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Hours</th>
<th>Course Code</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 301</td>
<td>3</td>
<td>General education literature or GSH sequence</td>
<td>3</td>
</tr>
<tr>
<td>General education literature or GSH sequence</td>
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<td>General education laboratory</td>
<td>3</td>
</tr>
<tr>
<td>GSS 247 or HIS 203</td>
<td>3</td>
<td>GSP 281* or elective</td>
<td>3</td>
</tr>
<tr>
<td>MIL 201, option, or elective (women)</td>
<td>2</td>
<td>MIL 202, option, or elective (women)</td>
<td>2</td>
</tr>
<tr>
<td>PSY 211</td>
<td>3</td>
<td>RHB 300</td>
<td>3</td>
</tr>
<tr>
<td>SOC 131</td>
<td>3</td>
<td>SOC 335</td>
<td>3</td>
</tr>
</tbody>
</table>

*Three hours of biological science must be completed during the first two semesters. GSP 281 must be completed in Central University College.
SPEECH PATHOLOGY AND AUDIOLOGY

Preparatory curriculum for a major in Speech Pathology and Audiology (teaching or non-teaching), Department of Special Education and Rehabilitation

Courses required for admission to the College of Education: SED 270 and 275; PSY 211 and 312; PSY 213 or EDF 202 (latter required for teacher certification); SPE 100; general education physical laboratory science (3), BIO 301, and 378 (meets the 6 hour general education laboratory requirement in Central University College); general education mathematics; general education literature or GSH (3); general education social science (3); and the initial semester general education options (6-8). See page 336 for the third and fourth years of this program.

Recommended distribution of courses to meet all requirements in the preparatory curriculum:

<table>
<thead>
<tr>
<th>First Year</th>
<th></th>
<th>Second Year</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First Semester</strong></td>
<td><strong>Hours</strong></td>
<td><strong>Second Semester</strong></td>
<td><strong>Hours</strong></td>
</tr>
<tr>
<td>GSE 101</td>
<td>3</td>
<td>General education humanities or physical science*</td>
<td>3</td>
</tr>
<tr>
<td>GSO 100</td>
<td>1</td>
<td>General education mathematics</td>
<td>3</td>
</tr>
<tr>
<td>GSP 180</td>
<td>1</td>
<td>GSE 102</td>
<td>3</td>
</tr>
<tr>
<td>MIL 101, option, or elective</td>
<td>(women)</td>
<td>GSP 151</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>GSP 281, physical science, or elective*</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>GSS 246, HIS 202, or other general education social science*</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>MIL 102, option, or elective (women)</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td><strong>16</strong></td>
<td></td>
<td><strong>18</strong></td>
</tr>
</tbody>
</table>

**First Year**

- GSE 101 .......... 3
- GSO 100 .......... 1
- GSP 180 .......... 1
- MIL 101, option, or elective (women) .......... 2
- Suggested general education options:
  - Social science .......... 3
  - Physical science* .......... 3
  - Suggested general elective: SPE 100 .......... 3

**Second Year**

- BIO 301 and 378 .......... 4
- General education literature, GSH sequence, or SPE 100 .......... 3
- GSS 246 or 247; HIS 202 or 203 .......... 3
- MIL 201, option, or elective (women) .......... 2
- PSY 211 .......... 3
- SED 275 .......... 3
- General education literature or GSH sequence .......... 3
- GSS 247, HIS 203, or other general education or social science* .......... 3
- MIL 202, option, or elective (women) .......... 2
- PSY 213 or EDF 202** .......... 3
- PSY 312 .......... 3
- SED 270 .......... 3

**18** .......... **17**

*GSP 281, six semester hours of general education laboratory science, and GSS 246 and 247 o r HIS 202 and 203 must be completed in Central University College.

**EDF 202 is required for the teaching program.

SPEECH

See DRAMA and SPEECH
TEXTILES AND DESIGN
See HOME ECONOMICS

TECHNICAL TEACHER EDUCATION
See VOCATIONAL-INDUSTRIAL TECHNICAL TEACHER EDUCATION

UNDECIDED
Preparatory curriculum for students who have not yet decided upon a major

Recommended distribution of courses:

<table>
<thead>
<tr>
<th>First Year</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First Semester</strong></td>
<td>Hours</td>
</tr>
<tr>
<td>GSE 101</td>
<td>3</td>
</tr>
<tr>
<td>GSO 100</td>
<td>1</td>
</tr>
<tr>
<td>GSP 180</td>
<td>1</td>
</tr>
<tr>
<td>MIL 101, option, or elective (women)</td>
<td>2</td>
</tr>
<tr>
<td>General education option</td>
<td>6</td>
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<tr>
<td>General elective</td>
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<tr>
<td><strong>Second Semester</strong></td>
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</tr>
<tr>
<td>General education humanities</td>
<td>3</td>
</tr>
<tr>
<td>General education mathematics or science*</td>
<td>3-4</td>
</tr>
<tr>
<td>General education social science</td>
<td>3</td>
</tr>
<tr>
<td>GSE 102</td>
<td>3</td>
</tr>
<tr>
<td>GSP 181</td>
<td>1</td>
</tr>
<tr>
<td>MIL 102, option, or elective (women)</td>
<td>2</td>
</tr>
<tr>
<td>Elective</td>
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</tr>
<tr>
<td><strong>Total</strong></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Second Year</th>
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</thead>
<tbody>
<tr>
<td><strong>First Semester</strong></td>
<td></td>
</tr>
<tr>
<td>ENG 209, 211 or GSH 228</td>
<td>3</td>
</tr>
<tr>
<td>General education mathematics or science*</td>
<td>3-4</td>
</tr>
<tr>
<td>GSP 281</td>
<td>3</td>
</tr>
<tr>
<td>GSS 246, 247; or HIS 202 or 203</td>
<td>3</td>
</tr>
<tr>
<td>MIL 201, option, or elective (women)</td>
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</tr>
<tr>
<td>Elective</td>
<td>0-3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>14-18</td>
</tr>
</tbody>
</table>

*Six hours of general education laboratory science must be completed in Central University College.

VETERINARY MEDICINE
See PRE-VETERINARY MEDICINE listed with BIOLOGY

VOCATIONAL-INDUSTRIAL AND TECHNICAL TEACHER EDUCATION
See INDUSTRIAL EDUCATION

WILDLIFE
See BIOLOGY
GENERAL STUDIES COURSE OFFERINGS

ORIENTATION (GSO 100)

Roy Barlow, Chairman

GSO 100. Academic Orientation. One hour. I.
This course deals with the principal aspects of career choice. Students are also introduced to the study and use of the University Catalog, and emphasis is placed upon important academic regulations.
Classes meet on alternate Wednesdays; attendance at two additional assembly meetings is required.

ENGLISH COMPOSITION (GSE)

John M. Long, Chairman

GSE 101. (Formerly English 101) English Composition I. Three hours. I, II.
Review of the mechanics of expression; word study and use of dictionary; primary emphasis on composition; some practice in more effective oral communication, reading, listening, and thinking.

GSE 102. (Formerly English 102) English Composition II. Three hours. I, II.
Prerequisite: General Studies 101 (or equivalent).
Continued practice in composition; library paper; emphasis on reading and analysis, including the explication of literature.

NATURAL SCIENCE (GSC)

Wallace C. Dixon, Chairman
Martin, McLaren, Murphy, Schaffer, Wernegreen

GSC 171. Physical Science A. Three hours. I, II.
(Not open to students who have completed college laboratory courses in physics.)
This course attempts to identify, analyze, and trace the historical development of basic principles in the world of inanimate natural phenomena. It gives attention to the principles of motion in the material world (from planets to electrons) and culminates with a consideration of electricity, light and the origin of material systems. GSC 171 should be followed by GSC 172, but it may be taken alone. Two lectures and one two-hour laboratory-discussion period.

GSC 172. Physical Science B. Three hours. I, II.
(Not open to students who have completed college laboratory courses in chemistry or geology.)
This course is designed to follow GSC 171. It will apply the basic principles introduced in the first semester to an understanding of atomic structure, chemical and
nuclear energy, and the changing organization of materials in the earth, the atmosphere, and the universe at large. Implications affecting the welfare of man will be emphasized. Two lectures and one two-hour laboratory-discussion period.

GSC 173. Physical Science B. Three hours. I, II.
This is a non-laboratory version of GSC 172. It substitutes a 50 minute discussion period for the laboratory period.

GSC 173. Physical Science B. Three hours. I, II.
(Not open to students who have completed college laboratory courses in biology.) This course attempts to integrate the life sciences, showing their dependency on each other as well as on the physical sciences. Emphasis is placed on the methods of biological science—their fruitfulness and limitations; problems unique to biology; the physical basis of life; the nature of an organism; selected examples of biological function in both plants and animals, stressing interrelationship; and population biology. This course is designed to be followed by GSC 262. Biological Science B; however, it may be taken alone. Two lecture hours and two laboratory hours.

GSC 262. Biological Science B. Three hours. I, II.
(Open only to students who have completed a one semester college biology course.) This course is designed to follow GSC 261. Biological Science A, and will emphasize the following: variations in the levels of organization of both plant and animals; mechanisms for evolutionary change in organisms—their genetic base; the organism (especially man) and its environment; the role of man as an agent of change. Two lecture hours and two laboratory hours.

GSC 263. Biological Science B. Three hours. I, II.
This is a non-laboratory version of GSC 262. It substitutes a 50 minute discussion period for the laboratory period.

GSC 250. Science and Society. Three hours. I, II.
(Open only to students who have completed one semester college courses in both biological and physical science.) Selected case studies in contemporary science (both physical and biological) will be explored with regard to their impact on society, as well as the impact of society on science. Emphasis will be upon aspects of society which rest on scientific understanding as well as make demands on science. Lectures by a team of faculty and guests, panel discussions, films, and small discussion meetings will be utilized in teaching this course. Each student will be expected to become involved in an independent study project. Two lectures and a one hour discussion meeting each week.

HUMANITIES (GSH)
Bryan Lindsay, Chairman

GSH 124. Introduction to the Arts and Humanities. Three hours. I.
The nature and significance of subjective human experience; the process of "humanization"; the role of the arts and other humanities in expressing, clarifying, intensifying, and giving meaning to subjective experiences, with examples drawn from poetry, the visual arts, music, dance, film, drama, and philosophy. Individualized creative activities.

GSH 126. Humanistic Expression in Traditional Cultures. Three hours. II.
Prerequisite: GSH 124.
An exploration of "humanizing" experiences and typical subjective expressions before modern times: examples drawn from aboriginal and emerging cultures, including those of Pacific, Australian, Oriental, black African, Eskimo, and Pre-Columbian peoples; other examples taken from the great historic civilizations, including the ancient Near East, India, China, Europe, Africa, and the New World. Individualized creative activities.
GSH 228. Humanistic Expression in the Modern World. Three hours. I.
Prerequisite: GSH 124.

An exploration of significant humanistic experiences expressed in cultures throughout the world, with emphasis on those expressions accompanying the European Renaissance and Reformation, the expansion of Europe, world industrialization, and the emergence of mass social consciousness preceding the 20th century. Individualized creative activities.

GSH 230. The Contemporary Crisis in Humanistic Experience. Three hours. II.
Prerequisite: GSH 124.

The problems of "feeling" and "believing" for contemporary man; the impact of change upon subjective experience, particularly the influence of Freudian psychology, scientific technology, the population explosion, the "third world," and the bomb; summation in student planned and directed study activities. Individualized creative activities.

**BASIC PHYSICAL EDUCATION (GSP)**

John Deck, Chairman

GSP 180. (Formerly Physical Education 115) Basic Physical Education. One hour. I, II.

A combination of lecture, assigned readings, and selected activities. Includes an interpretation of scientific data regarding the need for and biophysical values of muscular activity.

<table>
<thead>
<tr>
<th>Activities for Men</th>
<th>Activities for Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bowling</td>
<td>Tumbling</td>
</tr>
<tr>
<td>Dance</td>
<td>Apparatus</td>
</tr>
<tr>
<td>Physical Maintenance</td>
<td>Wrestling</td>
</tr>
<tr>
<td>Tennis</td>
<td>Badminton</td>
</tr>
<tr>
<td>Volleyball</td>
<td>Track and Field</td>
</tr>
<tr>
<td>Golf</td>
<td>Handball</td>
</tr>
<tr>
<td>Soccer</td>
<td>Developmental Physical Education</td>
</tr>
<tr>
<td>Swimming</td>
<td>Adapted Physical Education</td>
</tr>
</tbody>
</table>

| Body Form and Function        | Tumbling                                    |
| Bowling                       | Apparatus                                   |
| Dance                         | Archery                                     |
| Physical Maintenance          | Badminton                                   |
| Tennis                        | Track and Field                             |
| Volleyball                    | Field Hockey                                |
| Golf                          | Basketball                                  |
| Soccer                        | Paddle Tennis                               |
| Swimming                      | Adapted Physical Education                  |

GSP 181. (Formerly Physical Education 116) Basic Physical Education. One hour. I, II.

A continuation of GSP 180.
HEALTH (GSP)
Herman S. Bush, Chairman

GSP 281. (Formerly Health 201) Personal and Community Health. Three hours. I, II.
An interpretation of scientific findings in health concepts, nutrition, emotional health, family health, communicable diseases, addictions, physical fitness, environmental health and community health agencies. Emphasis placed on stressing intelligent self-direction of health behavior and acceptance for responsibilities in personal and community health.

SOCIAL SCIENCE (GSS)
Kenneth Tunnell, Chairman


GSS 142. Man, Culture, and Society. Three hours. I, II.
The scientific approach to man: attitudes, methods, concepts; basic terms of social science; biological and psychological foundations of human life; the dynamics of human change; patterns of cultural evolution; examples from non-literate cultures and emerging civilizations.

GSS 144. Contemporary Society. Three hours. I, II.
An introduction to basic economic and political concepts of modern society; 20th century economic and political ideologies and institutions; problems of economic systems and governments in meeting the challenges of the industrial world and modern technology; alternative economic and political systems; international relations.

GSS 246. Civilization I. Three hours. I, II.
Theories and concepts for the analysis of civilization; global patterns and examples of pre-industrial civilization; the preconditions of industrial civilization.

GSS 247. Civilization II. Three hours. I, II.
The developing pattern of Industrial civilization in the 19th and 20th centuries: science, industrial capitalism, nationalism, war; the global spread of modernization; the United States and other appropriate examples of the growth of industrial civilization.

GSS 248. The Human Problem in the 20th Century. Three hours. I, II.
The contemporary crisis and decisions for the future: the revolution of technology; economic maladjustments; population growth and the depletion of resources; roots of contemporary collectivism; threats to personal liberty; conformity and mass psychology; personal and social disorganization; international anarchy and war; the question of human survival.

INTERDISCIPLINARY

GCC 399. College Colloquium. Three hours. A.
Crucial topics considered from an interdisciplinary viewpoint. The course is intended to demonstrate the complexity of the great human problems, while at the same time helping the student integrate knowledge from the scattered disciplines. The course is strictly elective and does not meet general education requirements as listed on pages 44 and 45.
MILITARY SCIENCE (MIL)
COL Pilant, Chairman

MAJ Adams, MAJ Davis, MAJ George, MAJ Livengood, MAJ Parris, MAJ Randall, MAJ Wheelan, CPT Berry, CPT Brooke, CPT Catron, CPT Estes, CPT Hennessey, CPT Mincke, CPT Parham, CPT Prehar.

Eastern Kentucky University maintains a unit of the senior division of the Army Reserve Officers' Training Corps (ROTC) under provisions of the National Defense Act of 1916, as amended.

The complete Military Science Program is four years in length. Its successful completion qualifies students to be commissioned second lieutenant in one of fifteen branches of the United States Army.

The four year program is divided into a two year Basic Course (lower division) and two year Advanced Course (upper division). The objectives of the Basic Course are to develop leadership potential, impart citizenship training, explore the functional relationships between the Department of Defense and other U.S. Departments and Agencies, and to stimulate and motivate students for future useful service in behalf of the Nation in whatever careers they choose. The Advanced Course objective is to produce junior officers for the United States Army who, by education, training, attitude and inherent qualities are suitable for continued development as officers in the Army.

Flight training is available to fourth year cadets. Successful completion of this program qualifies participants for a private pilot's license.

Basic Course

MIL 101. The United States Defense Establishment Part I. Two hours. I, II. History and organization of the United States Army; evolution of warfare; principles of war; marksmanship; mission and organization of combat units; leadership, drill and ceremonies.

MIL 102. United States Defense Establishment Part II. Two hours. I, II. Role of Department of Defense agencies in national defense; national power and its relationship to our national objectives; small unit tactics; leadership, drill and ceremonies.

MIL 201. Introduction to Tactics and Operations. Two hours. I, II. Map and aerial photograph reading; basic operations and tactics; leadership, drill and ceremonies.

MIL 202. American Military History. Two hours. I, II. Survey of American Military history with emphasis on factors contributing to the development of military art as practiced by the U. S. Army; leadership, drill and ceremonies.

Advanced Course

Prerequisites: Basic Course or prior military service; acceptance by the Professor of Military Science; pass standardized qualification test.

MIL 302. Fundamentals and Dynamics of the Military Team I. One hour. I. Organization, functions and missions of the arms and services; internal defense and development; leadership, drill and exercise of command; field training exercises.
MIL 301. Leadership and Management I. Four hours. II.
Principles and techniques of leadership and management; military teaching principles; small unit tactics; communications; drill and exercise of command; field training exercises.

MIL 401. Fundamentals and Dynamics II. Four hours. I.
Command and staff operations and functions; decision making; administrative management; military law; military intelligence; logistics; internal defense and development; leadership, drill and exercise of command; field training exercises.

MIL 402. Leadership and Management II. One hour. II.
The impact of world affairs on the Armed Forces of the United States; obligations and responsibilities of officers; leadership, drill and command; field training exercises.
College of Applied Arts and Technology

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Home Economics 120
Industrial Education 133
Industrial Technology 146
The Kentucky School of Crafts 159
Law Enforcement 159
Nursing 166
Traffic Safety Institute 172
Kentucky Law Enforcement Council 173
COLLEGE OF APPLIED ARTS
AND TECHNOLOGY

William E. Sexton, Dean
Jack A. Luy, Associate Dean

The College of Applied Arts and Technology is organized to provide programs of instruction, public service, and research as these relate to the broad field of technical education. The College offers undergraduate programs to prepare teachers of technical subjects, and, in cooperation with the Graduate School and the College of Education, a program of specialization in industrial education and home economics education leading to the Master of Arts in Education degree. In addition, the College, in cooperation with the Graduate School, offers programs leading to the Master of Science degree in industrial education, the Master of Science degree in industrial technology, the Specialist in Technology degree, and the Master of Science degree in criminal justice.

The College administers a variety of two- and four-year programs designed to prepare individuals for technical occupations and professions. Students enrolled in or completing Associate of Arts (two-year) degree programs may transfer to a baccalaureate program within the same department (exceptions are nursing and crafts) with little, if any, loss of credits.

The College of Applied Arts and Technology is composed of eight departments: Agriculture, Home Economics, Industrial Education, Industrial Technology, Nursing, Law Enforcement, The Kentucky School of Crafts, and The Traffic Safety Institute. A ninth unit, The Kentucky Law Enforcement Council, now an independent agency of state government, was established through a grant to the College of Applied Arts and Technology, Eastern Kentucky University, in 1966. The Executive Director of the Council works closely with the Dean of the College in the utilization of services and facilities at the University.

The Department of Agriculture administers two-year programs designed to prepare technicians for agriculture-related occupations. The Associate of Arts Degree is awarded to students who successfully complete the prescribed programs in Agricultural Mechanization, Dairy Science and Technology, or Horticulture. In addition, a baccalaureate program with a first major in Agriculture and a minor in Business is offered. The department also administers certain pre-professional and transfer curricula for students who plan to complete baccalaureate programs at other institutions.

The Department of Home Economics administers baccalaureate programs to prepare home economics and kindergarten teachers, as well as specialists in child development, administrative and therapeutic dietetics, food service, interior design, and textiles and design. Associate degree programs are offered in child care, food service technology, homemaking supervision, and interior decoration.

The Department of Industrial Education offers programs to prepare teachers in industrial arts and vocational technical education. In addition, the department offers a program of study for the preparation of manual arts therapists. These are baccalaureate level programs.
The Department of Industrial Technology administers two and four-year programs for the preparation of technicians for industrial employment. The Associate of Arts degree is awarded to those who successfully complete the two-year programs, (applied electronics technology, broadcast engineering technology, drafting technology, drafting and design technology, electronics technology, instructional media technology, and printing technology) and the Bachelor of Science Degree is awarded those completing the four-year programs.

The Department of Nursing offers four-year Bachelor of Science degree and two-year Associate of Arts degree programs in nursing. Students who successfully complete either of these programs are eligible to write the State Board Examination for licensure as a Registered Nurse. The department also administers two-year Associate of Arts degree programs to prepare administrative medical assistants, clinical medical assistants, and medical record technologists.

The School of Law Enforcement offers four-year Bachelor of Science degree programs that provide for a major in law enforcement or corrections with a minor in a supporting discipline. In addition, four Associate of Arts degree curricula (general law enforcement, corrections, juvenile, and industrial security) are offered.

The Kentucky School of Crafts serves as a coordinating agency for in-service and extension type classes offered for teachers, novice craftsmen, and practicing artisans.

The Traffic Safety Institute was established in 1966 to provide instruction, public service, and research related to the broad area of traffic safety.

The Kentucky Law Enforcement Council, an independent agency of state government, utilizes the facilities and services of Eastern Kentucky University and coordinates activities with the Dean of the College of Applied Arts and Technology.

**Admission to the College of Applied Arts and Technology**

Students enrolled in baccalaureate programs should apply for admission to the College during the semester in which Central University College requirements are expected to be met which is normally the last semester of the sophomore year. Students should apply for a planned curriculum, at the Office of the Dean, not later than the first semester of the junior year.

A number of associate degree programs are administered by the College of Applied Arts and Technology. Specific program requirements are outlined in this section of the catalog. Students pursuing two-year programs in the College of Applied Arts and Technology are enrolled in Central University College for advising and record keeping only. Their other academic affairs are administered by the Dean of the College of Applied Arts and Technology. Students should apply for a planned curriculum at the Office of the Dean, College of Applied Arts and Technology, at the beginning of the second semester of the freshman year.
Degree Requirements

General university requirements, described elsewhere in the catalog, as well as specific course requirements set forth in the descriptions of curricula, must be met by students completing baccalaureate programs administered in the College of Applied Arts and Technology. All baccalaureate programs in the College of Applied Arts and Technology must have an area of concentration, or two majors, or one major and two minors, or one major and one minor.

AGRICULTURE (AGR)

Householder, W., Chairman; Barkley, Devore, Hayes, Stocker, Whitaker

Eastern Kentucky University offers students of Agriculture three types of programs: (1) two-year technical training curriculums leading to an Associate of Arts Degree; (2) a four-year major in Agriculture with a minor in Business leading to a Bachelor of Science Degree; and (3) a minor in Agriculture. Graduates of these programs are in an unprecedented demand because the rapidly changing labor structure in agriculture throughout Kentucky and the United States is placing increasing value on technically trained personnel.

The technical student of Agriculture, regardless if he is a two or four-year student, must qualify himself for employment by preparing in three major areas:

1. The technical content of a selected area in agriculture.
2. The basic principles of agriculture in general.
3. Personal improvement through the intellectual pursuit of general education and business courses.

MAJOR IN AGRICULTURE WITH A MINOR IN BUSINESS

Curriculum for a Bachelor of Science Degree with a minor in Business. The first two years of this curriculum may be found in the Central University College section of the catalog.

Students pursuing a Bachelor of Science Degree with a major in Agriculture will also earn a minor in Business. Students may choose from two major areas of technical agriculture; AGRICULTURE (AGR) including livestock and crop production and ORNAMENTAL HORTICULTURE (OHO) including greenhouse, nursery and turf production.

GENERAL CURRICULUM

Third Year

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Hours</th>
<th>Second Semester</th>
<th>Hours</th>
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<tr>
<td>ECO 230</td>
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<td>ECO 231</td>
<td>3</td>
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<td>ENG 209 or 211</td>
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<td>3</td>
<td>AGR or OHO Electives</td>
<td>3</td>
</tr>
<tr>
<td>Gen. Electives</td>
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<td></td>
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</tr>
<tr>
<td>Gen. Electives</td>
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Fourth Year

<table>
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<th>Hours</th>
<th>Second Semester</th>
<th>Hours</th>
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<tbody>
<tr>
<td>ENG 210 or 212</td>
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<td>BUS Admin. Elec.</td>
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<td>BUS Admin. Elec.</td>
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<td>AGR 411</td>
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<td>AGR 410</td>
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<td>AGR or OHO Elec.</td>
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<td>Gen. Electives</td>
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<td><strong>Total</strong></td>
<td><strong>16-17</strong></td>
<td></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

AGR or OHO electives must include those courses listed in the technical specialization option which the student has chosen. These options are listed below. All electives require adviser's approval.

**TECHNICAL SPECIALIZATION OPTIONS**

**AGRICULTURE**

With emphasis in **General Agriculture:**
18 hours of agriculture or sufficient number of hours to equal a total of 43 hours of AGR and/or OHO. Courses will be chosen to best meet the needs of the student's anticipated career.

AGR or OHO electives ........................................... 18 hrs.
General electives ............................................... 14-17 hrs.

With emphasis in **Agricultural Mechanization:**
AGR 382, 383, 392 plus 9 hours of AGR electives .......... 21 hrs.
General electives ............................................... 13-15 hrs.

With emphasis in **Dairy Herd Management:**
AGR 380, 390 plus 9 hours of AGR electives .......... 19 hrs.
General electives ............................................... 15-17 hrs.

With emphasis in **Farm Manager Training:**
AGR 310, 312, 313, 314, 327, plus 10 hrs. of AGR 380 and 390 series courses .......... 28 hrs.
General electives ............................................... 5-8 hrs.

**ORNAMENTAL HORTICULTURE**

With emphasis in **Nursery and Greenhouse Management:**
OHO 381, 391, plus 9 hours of OHO elec. ............... 19 hrs.
General electives ............................................... 15-17 hrs.

With emphasis in **Turf Management:**
General electives ............................................... 15-17 hrs.

**MINOR IN AGRICULTURE**

A minor consists of 18 hours of Agriculture arranged between the department chairman and the student seeking the minor. The objective is to meet the student's need for taking a minor in Agriculture. However, six or more hours shall be upper division courses.
ASSOCIATE OF ARTS DEGREE CURRICULA

AGRICULTURAL MECHANIZATION

A student receiving an Associate of Arts Degree in agricultural mechanization will have had a background of training in the areas of communications, business, and agriculture, in addition to technical training in agricultural mechanization. He will be qualified to seek employment in agricultural businesses in the areas of sales, parts, assembly, and repairs of agricultural equipment.

Curriculum for an Associate of Arts Degree

First Year

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Hours</th>
<th>Second Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GSE 101</td>
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<td>GSE 102</td>
<td>3</td>
</tr>
<tr>
<td>GSO 100</td>
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<td>GSP 181</td>
<td>1</td>
</tr>
<tr>
<td>GSP 180</td>
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<td>MIL 102 or option</td>
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<tr>
<td>MIL 101 or option</td>
<td>4</td>
<td>AGR 272</td>
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<tr>
<td>AGR 130</td>
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<td>AGR 263</td>
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16

17-18

Second Year

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<th>First Semester</th>
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<td>ACC 108</td>
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<td>BUS Elec.</td>
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<td>AGR 383</td>
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<td>MIL 202 or option</td>
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</tbody>
</table>

16

17

*Substitution possible with consent of advisor.

DAIRY SCIENCE AND TECHNOLOGY

The primary function of this curriculum is to give the student a deep insight into the technical management of dairy cattle herds. His training will qualify him to work with dairy herds or with related agricultural industries in the areas of sales and service.

Curriculum for an Associate of Arts Degree

First Year

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Hours</th>
<th>Second Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GSE 101</td>
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<td>GSP 181</td>
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<td>AGR 270</td>
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<tr>
<td>Gen. Ed. Elec.</td>
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</table>

15

17-18
ORNAMENTAL HORTICULTURE

This curriculum trains the student in plant propagation, nursery and greenhouse operation and production, principles of landscape design, and maintenance of landscapes. He will qualify as a technical worker in nursery and greenhouse businesses, recreational organizations, state highway and parks departments, and other institutions and businesses involved with ornamental plantings. He might also organize a private service.

Curriculum for an Associate of Arts Degree

First Year

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Hours</th>
<th>Second Semester</th>
<th>Hours</th>
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<tr>
<td>GSE 101</td>
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Summer Session OHO 371 2-4 hours

Second Year

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<td>OHO 381</td>
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<tr>
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<td>OHO 362</td>
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</table>

*Substitution possible.

TURF MANAGEMENT OPTION IN ORNAMENTAL HORTICULTURE

This option is designed to prepare students for specialized technical work in positions such as a golf superintendent, park manager, sod producer, institutional and grounds supervisor, highway landscaper, and memorial grounds superintendent. He would also be trained for positions in turf-related industries where a knowledge of turf production is required.
## Curriculum for the Turf-Grass Management Option

### First Year

<table>
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<th>First Semester</th>
<th>Hours</th>
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<tr>
<td>OHO 271</td>
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<tr>
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**Summer Session** OHO 371 2-4 hours

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### Second Year

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGR 213</td>
<td>4</td>
</tr>
<tr>
<td>AGR Elec.</td>
<td>3-4</td>
</tr>
<tr>
<td>OHO 361</td>
<td>5</td>
</tr>
<tr>
<td>MIL 201 or option</td>
<td>2</td>
</tr>
<tr>
<td>GSP 180</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>15-16</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Second Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC 108</td>
<td>3</td>
</tr>
<tr>
<td>BUS Elec.</td>
<td>3</td>
</tr>
<tr>
<td>MIL 202 or option</td>
<td>2</td>
</tr>
<tr>
<td>Gen. Ed. Elec.*</td>
<td>3</td>
</tr>
<tr>
<td>OHO 362</td>
<td>2</td>
</tr>
<tr>
<td>AGR 410 or 301</td>
<td>1</td>
</tr>
<tr>
<td>GSP 181</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

*May include Speech 100

## PRE-VETERINARY MEDICINE

A limited number of college students who are residents of Kentucky and who have completed the required pre-veterinary medicine program are selected each year to enter the professional training program in veterinary medicine offered at Auburn University, Ohio State University, or at Tuskegee Institute.

The students selected are exempt from the out-of-state tuition charge that would normally apply to a Kentucky resident. The students enter the four-year program of the transfer institution at the beginning of the fall term each year and are approved for succeeding years so long as normal progress is made toward the degree in Veterinary Medicine.

This training program is made available to Kentucky residents by an appropriation of the General Assembly to the Kentucky Council on Public High Education which administers the program in cooperation with Southern Regional Education Board and the three above named institutions.

A student who completes the program prescribed below and wishes to complete a baccalaureate degree at Eastern Kentucky University should consult with the Dean of the College of Arts and Sciences concerning transfer to the program described in the College of Arts and Sciences section of this catalogue.
Core requirements to be completed by all Pre-Vet students:

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGR 221</td>
<td>4</td>
</tr>
<tr>
<td>BIO 141, 211, 315</td>
<td>12</td>
</tr>
<tr>
<td>CHE 111, 112, 213, 361</td>
<td>18</td>
</tr>
<tr>
<td>GSE 101, 102</td>
<td>6</td>
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<tr>
<td>GSO 100</td>
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<tr>
<td>GSP 180, 181</td>
<td>2</td>
</tr>
<tr>
<td>GSS 246, 247</td>
<td>6</td>
</tr>
<tr>
<td>MAT 109</td>
<td>5</td>
</tr>
<tr>
<td>MIL 101, or option 102, or option 201 or option 202 or option</td>
<td>8</td>
</tr>
<tr>
<td>PHY 151, 152</td>
<td>10</td>
</tr>
<tr>
<td>3 hrs. Humanities electives</td>
<td>3</td>
</tr>
</tbody>
</table>

Students planning to transfer to Auburn University must complete the following in addition to the core requirements:

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHE 362</td>
<td>4</td>
</tr>
<tr>
<td>GSP 281</td>
<td>3</td>
</tr>
<tr>
<td>MAT 111</td>
<td>4</td>
</tr>
<tr>
<td>BIO 221</td>
<td>4</td>
</tr>
<tr>
<td>POL 101 or 300</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>8</td>
</tr>
</tbody>
</table>

Students planning to transfer to the Ohio State University must complete the following in addition to the core requirements:

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGR 125</td>
<td>4</td>
</tr>
</tbody>
</table>

Students planning to transfer to Tuskegee Institute must complete the following in addition to the core requirements:

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 555</td>
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<tr>
<td>CHE 362</td>
<td>4</td>
</tr>
<tr>
<td>GSP 281</td>
<td>3</td>
</tr>
<tr>
<td>MAT 111</td>
<td>4</td>
</tr>
<tr>
<td>BIO 221</td>
<td>4</td>
</tr>
<tr>
<td>POL 101</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>21</td>
</tr>
</tbody>
</table>

**PRE-FORESTRY CURRICULUM**

A student who wishes to prepare for a career as a professional forester may complete the equivalent of two years of coursework at Eastern Kentucky University and complete the baccalaureate degree program in approximately two years and one summer term at the University of Kentucky.

Students beginning a forestry curriculum are advised that the following courses should be completed before transferring to the University of Kentucky or to other schools offering degree programs in forestry. Core requirements to be completed by all Pre-Forestry students:

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGR 125, 130, 215</td>
<td>12</td>
</tr>
<tr>
<td>ECO 230, 231 or GEO 420</td>
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</tr>
<tr>
<td>GSE 101 and 102</td>
<td>6</td>
</tr>
<tr>
<td>GSO 100</td>
<td>1</td>
</tr>
<tr>
<td>JOU 201</td>
<td>3</td>
</tr>
<tr>
<td>MIL 101, or option 102, or option 201 or option 202 or option</td>
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</tr>
<tr>
<td>SPE 100</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>39</td>
</tr>
</tbody>
</table>

Students planning to transfer to the Forest Technology curriculum must complete the following in addition to the core requirements:

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 131, 141 or GSC 261, 262</td>
<td>6-8</td>
</tr>
<tr>
<td>CHE 101, or 111, 102, or 112</td>
<td>9</td>
</tr>
<tr>
<td>GSC 176</td>
<td>3</td>
</tr>
<tr>
<td>HIS 202, 203</td>
<td>6</td>
</tr>
<tr>
<td>MAT 109</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>29-31</td>
</tr>
</tbody>
</table>
Academic Division

Students planning to transfer to the Forest Science curriculum must complete the following in addition to the core requirements:

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 131, 141</td>
<td>8</td>
</tr>
<tr>
<td>CHE 111, 112</td>
<td>9</td>
</tr>
<tr>
<td>MAT 109, 111</td>
<td>9</td>
</tr>
<tr>
<td>Humanities or History electives</td>
<td>6</td>
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</tbody>
</table>

**32**

**AGRICULTURE (AGR)**

**AGR 125.** (Formerly AGR 25.) Principles of Animal Science. (Formerly Farm Livestock Production.) Four hours. II.

Management and production practices of livestock enterprises; types, market classes and grades of beef cattle, sheep, and swine, and the breeds and products of dairy cattle.

**AGR 128.** (Formerly Introduction Agronomy.) Principles of Agronomy. Four hours. I.

Principles of plant growth, reproduction, crop-soil relationships. Provides foundation of information for further study in field crop production and soil management.

**AGR 213.** Principles of Agricultural Mechanics. Four hours. I. II.

Principles of operation, maintenance and repair of gasoline engines and electrical motors; basic electrical circuits and electrical controls for agricultural mechanization systems and power requirements for agricultural structures; students receive theoretical and practical experience.

**AGR 215.** (Formerly AGR 30 and 315.) Principles of Soils. (Formerly called Soils.) Four hours. II.

Soil origin, classification, and properties; soil conservation; soil micro-organisms; organic matter; soil water; soil minerals; lime, commercial fertilizers; soil erosion; soil management. Students receive field experience.

**AGR 221.** (Formerly AGR 31 and 321.) Principles of Animal Nutrition. Four hours. I.

Digestion, absorption, assimilation, and utilization of nutrients by domestic animals; principle feeds and nutritive ratios; formulating livestock rations.

**AGR 225.** (Formerly Livestock Judging.) Evaluation and Selection of Livestock. Three hours. I.

An evaluation of purebred and commercial dairy cattle, beef cattle, swine and sheep; use of records, body type ratings and carcass information as they relate to functional anatomy and efficiency of production; sire selection and pedigree interpretation; written and oral reasons.

**AGR 243.** (Formerly SOC 114.) Agricultural Sociology. Three hours. A.

Social organization of individuals and groups of individuals involved in the pursuit of rural or non-urban life. Historical and present trends in agriculture; processes of technological development and how rural people adopt change.

**AGR 260.** Job Placement. One hour. II.

Required of all two year students in their fourth semester. Job placement orientation; techniques of being interviewed; preparing bio-data sheet; writing letters of inquiry and investigating job potentials.

**AGR 263.** Seminar in Technical Agriculture. One hour. I.

For two and four year students who want to study problems in technical agriculture in depth.

**AGR 270.** (Formerly AGR 223.) Farm Dairy Production. Five hours. II.

The dairy cow and her requirements in meeting her potential milk production; principles of milk production; basic practices of feeding, sanitation, housing, dairy cow selection, and production records.
AGR 272. Principles of Agricultural Machinery. Five hours. II.
Selection, operation, and maintenance of agricultural machinery used in the production and processing of agricultural products. Student experiences assembling different types of new farm machinery and reconditioning old machinery.

*AGR 301. (OHO 301.) Directed Work Experience. One to four hours. I, II.
A minimum of three hours per week of work on the college farm or an approved farm. Two months of full-time employment in an approved agri-business may be substituted for the work requirement. Students will meet one hour each week for discussion and review of current publications.

AGR 310. (Formerly AGR 32 and 345.) Principles of Farm Management. Three hours. II.
Organization and management of farms; cost of production; profits; types of farming; soil management; cropping systems and livestock enterprises.

AGR 311. Advanced Crops: Forage Crops. Three hours. II.
Prerequisite: AGR 130.
Cultural practices and principles of forage crops, especially grasses and legumes suited to Kentucky farms.

AGR 312. Methods of Using Agricultural Chemicals. Four hours. I.
Prerequisite: GSC 170 or equivalent.
The chemicals and physical properties of agricultural chemicals, their uses and effects on plants and their toxicity to man and animals. The student experiences work in formulations, calibration of equipment, and methods of application.

AGR 314. Nature of Insects, Parasites, and Diseases. Four hours. II.
Insects, parasites, and diseases as they relate to agricultural production, processing, and distribution; life cycles; damages to agricultural products; methods of control and extermination.

AGR 327. (Formerly AGR 44 and 227.) Beef Production. Three hours. I.
Prerequisite: AGR 125.
History, importance, and trends associated with the beef cattle industry; systems of selection, breeding, feeding, and management of beef cattle.

AGR 328. (Formerly AGR 26 and 228.) Pork Production. Three hours. A.
Prerequisite: AGR 125.
Types and breeds of swine; selection; breeding; feeding; disease control.

AGR 340. (Formerly AGR 240.) Conservation of Agricultural Resources. Three hours. A.
Conservation of soils and their fertility; erosion and control; soil conservation methods for individual farms; water supply and distribution; problems of water and air pollution; problems resulting from the population explosion.

AGR 344. Production of Economic Crops in Kentucky. Three hours. A.
Production of field and forage crops, identification, economic importance, production and harvesting techniques. Trial plots will be grown of all crops important to Kentucky.

*AGR 371. (OHO 371.) Supervised Work Experience. Two or four hours. A.
Supervised work experience in the students major interest area; arranged on University facilities or in approved commercial establishments during the summer months; credit varies with hours of employment; half-time, two hours; full time, four hours.

AGR 371A. Agricultural Mechanization option.

AGR 371B. Livestock and Crop Production option.

*Credit is to be granted for only one of these cross-listed courses.
AGR 371C. Sales and Service option.

AGR 380. (Formerly AGR 280.) Technical Management of Dairy Cattle. Five hours. I.
A continuation of AGR 270 with greater emphasis on herd management, feeding systems, sanitation and disease control; planning housing facilities; producing quality forages and pastures and herd improvement.

AGR 382. (Formerly AGR 282.) Agricultural Power Systems. Four hours. I.
Operation, maintenance, and repair of agricultural power machinery and tractor systems including electrical circuitry, carburetion, lubrication, cooling systems and transmissions, includes methods of environmental control.

AGR 383. Diesel Power Systems. Three hours. I.
Study of the operation, maintenance and repair of agricultural diesel powered systems; includes electrical systems, fuels. Injection pumps and nozzles and hydraulic systems; laboratory practice.

AGR 390. Advanced Dairy Herd Management. Five hours. II.
Marketing milk, milk sanitation, and applied bacteriology, butterfat testing laboratory tests, dairy plant operations, artificial insemination, DHIA testing, operation of milk cooperatives and other related business will be studied. Emphasis will be on both practices and managerial techniques.

AGR 392. Agricultural Mechanization Systems. Five hours. II.
Principles and planning materials handling systems, drying systems, water pumps and systems, lighting and ventilation systems and feed mixing systems used in agricultural production. Student experiences many different kinds of agricultural mechanical systems.

*AGR 410. (OHO 410.) Special Problems Seminar. One-three hours. I. II.
The students choose a problem and work under the supervision of the instructor in the field of the problem.

AGR 411. Seminar on Emerging Agricultural Technology. One hour. II.
This course provides students an opportunity to study managerial, technological, and consumer trends in agriculture.

AGR 440. Agricultural Financing. Three hours. II.
Uses and types of agricultural credit, credit institutions, and relating credit needs to farm enterprises.

*AGR 570. (OHO 570). Advanced Study In Technical Agriculture. Three to fifteen hours. In 3-hour segments.
Advanced Technical study in five agricultural areas with emphasis upon updating the technology and the development of understanding and the technical competency in:

AGR 570 b. Agricultural Mechanization. Three hours. A.

AGR 570 c. Dairy Herd Management. Three hours. A.

AGR 570 d. Farm Livestock Management. Three hours. A.

AGR 570 e. Farm Service and Supplies. Three hours. A.

*AGR 571. (OHO 571.) Production Management in Agriculture. Three hours. A.
Application of advanced technology in the production of agricultural products providing a means of updating in agricultural areas such as production methods, new equipment, economic trends and labor management.

AGR 577. Workshop in the Conservation of Natural Resources. Three hours. S.
Currently, this workshop is held four weeks in the summer for teachers returning for graduate work. Instruction is given in the areas of soil, water, fish and wildlife, and forest conservation and methods of teaching related units at the elementary and junior high level.

*Credit is to be granted for only one of these cross-listed courses.
ORNAMENTAL HORTICULTURE (OHO)

OHO 131. (Formerly AGR 12.) Principles of Plant Propagation. (Formerly General Horticulture. Four hours. I.
Principles and techniques of plant reproduction, including soil-water-temperature-plant relationship, methods of propagation and growth habit, adaptations and uses.

Cultural practices of propagating and growing evergreen, deciduous trees, shrubs, and hardy perennials to transplanting size, using structures and facilities not including the greenhouse. Students spend considerable time in the nursery.

*OHO 301. (AGR 301.) Directed Work Experience. One to four hours. I. II.
A minimum of three hours per week of work on the college farm or an approved farm. Two months of full-time employment in an approved agri-business may be substituted for the work requirement. Students will meet one hour each week for discussion and review of current publications.

OHO 351. Turfgrass Ecology and Morphology. Four hours. II.
Interrelationships of environmental factors and management practices as they affect growth and survival of turf type grasses.

OHO 361. Turf Production and Management. Five hours. I.
Physiological and edaphic factors affecting growth of adapted turfgrasses. Golf course and athletic field construction, turf establishment, irrigation, soil drainage, fertilization, disease, insect and weed problems, relating to turf.

OHO 362. (Formerly AGR 262.) Topics in Landscape Gardening. One-six hours. A.
Students may enroll up to six times for a total of six credits. 362A Home Landscape; 362B Selection and Use of Ornamental Plants; 362C Landscape Maintenance; 362D Disease and Insect Control; 362E Floral Design; 362F Lawn Establishment and Maintenance; 362A or equivalent prior to enrolling specialized sections.

OHO 362G. Problems of Golf Course Operation. One hour. A.
Problems of the golf superintendent such as budget preparations and presentations, labor, supplies, work schedules, and tournament preparations will be emphasized.

OHO 362H. Turfgrass Diseases. One hour. A.
In depth study of the major turfgrass diseases, includes recognition, habits and control.

*OHO 371. (AGR 371.) Supervised Work Experience. Two or four hours. A.
Supervised work experience in the students major interest area; arranged on University facilities or in approved Commercial establishments during the summer months; credit varies with hours of employment; half-time, two hours; full time, four hours.

OHO 371 K. Greenhouse Production option.
OHO 371 L. Nursery Production and Landscape option.
OHO 371 M. Turfgrass Production and Management option.

OHO 381. (Formerly AGR 281.) Greenhouse Operation and Management. Five hours. II.
Plant propagation and growing techniques in a greenhouse. The student also learns operation procedures and the economics of operating a greenhouse and using cold and hot frames.

OHO 391. Landscape Methods and Related Businesses. Five hours. II.
Elements of design and the execution of the landscape architect plan. Additional emphasis will be placed on occupations related to ornamental horticulture including turf maintenance, specialized flower production, park and roadside management and industrial grounds management.
*OHO 410. (AGR 410.) Special Problem Seminar. One-three hours. I, II.
   The students choose a problem and work under the supervision of the instructor
   in the field of the problem.

*OHO 570. (AGR 570.) Advanced Study in Technical Agriculture. Three to fifteen
   hours. In 3-hour segments.
   Advanced Technical study in five agricultural areas with emphasis upon updating
   the technology and the development of understanding and the technical competency in:

   AGR 570 a. Ornamental Horticulture. Three hours. A.

*OHO 571. (AGR 571.) Production Management in Agriculture. Three hours. A.
   Application of advanced technology in the production of agricultural products
   providing a means of updating in agricultural areas such as production methods, new
   equipment, economic trends and labor management.

HOME ECONOMICS (HEC & NFA)

R. Hill, Chairman; V. Buchholz, C. Calvert, E. Creamer, F. Francis, D.
Gates, W. Moss, S. Snarr, S. Sutton.

The Department of Home Economics offers general and specialty
   programs leading to Bachelor of Science and Associate of Arts Degrees.
   Graduates of this department qualify for a variety of professional posi-
   tions in education, government, business, and industry. In addition, stu-
   dents may minor (non-teaching )in Home Economics by completing one
   of several series of specified courses.

   In order to clarify the specialty programs in Home Economics, the
   Department separates its courses among five divisions. Courses in Home
   Economics are thus prefixed and numbered in the following manner:

   HEC 00-29 Textiles and Design
   HEC 30-49 Family Life and Child Development
   HEC 50-59 Family Economics and Management
   HEC 60-69 Home Economics Education
   NFA 00-99 Nutrition, Foods, and Food Administration

   Curricula in Home Economics with an area of concentration of 48
   hours are: (1) Secondary Education, (2) Therapeutic Dietetics, and
   (3) General (18 and 18 hours, respectively, in two divisions and at least
   one course in each of the two other divisions exclusive of Home Eco-
   nomics Education).

   Approved curricula for first majors in Home Economics with minors
   in other colleges are: Administrative Dietetics and Food Service Ad-
   ministration, both with minors in Business Administration; Child
   Development with a minor in Psychology and with or without certifi-
   cation for kindergarten teaching; and Textiles and Design with any of
   four minors (Art, Business Administration, Chemistry, or Journalism).
   Second majors will be required to complete the same HEC and NFA
   courses in the specialty as first majors.

*Credit is to be granted for only one of these cross-listed courses.
A student may meet minor requirements in Home Economics in:

(1) Nutrition, Foods, and Food Administration: NFA 201, 301, 403, 501, 503, 515 (1 credit); (select one) HEC 132, 202, 331, or 352

(2) Child Development: HEC 132, 241, 341, 342, 345, NFA 201; HEC or NFA elective

(3) Textiles and Design: HEC 202; series A or B; (select one) HEC 132, 331, or 352, or NFA 201
A. HEC 320, 508, 519 (2 hours), elective in division (3 hours).
B. HEC 102, 305, 312, 411 or 412, elective in division.

All students in an area of concentration or first or second major are required to complete a core consisting of HEC 202, 331 and 352, and NFA 201. Minors or Associate of Arts curricula are required to complete core courses as stated.

Students following an area of concentration, first or second major, minor, or Associate of Arts degree program must maintain a “C” average in HEC and NFA courses.

**HOME ECONOMICS**

**Home Economics Education (Teaching)**

The first two years of this curriculum may be found in the Central University College section.

**Third Year**

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>General education literature or restricted elective</td>
<td>0-3</td>
</tr>
<tr>
<td>GSS 248</td>
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</tr>
<tr>
<td>HEC 305</td>
<td>3</td>
</tr>
<tr>
<td>HEC 350 or HEC 351</td>
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</tr>
<tr>
<td>HEC 353 or HEC-NFA elective</td>
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</tr>
<tr>
<td>NFA 321 or BIO 301, 378</td>
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</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>15-18</strong></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Second Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECO 230</td>
<td>3</td>
</tr>
<tr>
<td>EDF 317</td>
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</tr>
<tr>
<td>HEC 341 or restricted elective</td>
<td>3</td>
</tr>
<tr>
<td>HEC 350 or 351</td>
<td>3</td>
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<tr>
<td>HEC 352</td>
<td>3</td>
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<tr>
<td>HEC 353 or HEC-NFA elective</td>
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</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>18-19</strong></td>
</tr>
</tbody>
</table>

**Fourth Year**

| Art 390 or 391 | 3 |
| ESH 366 | 4 |
| HEC 453 | 3 |
| HEC 322 | 3 |
| HEC 331 | 3 |
| HEC 341 or restricted elective | 0-3 |
| **Total** | **16-19** |

| ESH 453 | 3 |
| ESH 498 | 3 |
| ESH 499 | 10 |
| **Total** | **16** |
HOME ECONOMICS
Child Development
(with or without meeting guidelines for teaching kindergarten)

The first two years of this curriculum may be found in the Central University College section.

### Third Year

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Hours</th>
<th>Second Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>General education literature</td>
<td></td>
<td>General education literature</td>
<td></td>
</tr>
<tr>
<td>HEC 202, or restricted elective</td>
<td>3-6</td>
<td>or restricted electives</td>
<td>3-6</td>
</tr>
<tr>
<td>HEC 342</td>
<td>3</td>
<td>HEC 331</td>
<td>3</td>
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<tr>
<td>PSY 213</td>
<td>3</td>
<td>HEC 347</td>
<td>3</td>
</tr>
<tr>
<td>Restricted PSY electives</td>
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<td></td>
<td></td>
<td>SOC 335 or 337</td>
<td>3</td>
</tr>
</tbody>
</table>

15-18

### Fourth Year

|                                                             |       |                                                             |       |
|                                                             |       |                                                             |       |
| HEC 352                                                  | 3     | ELE 520** or electives                                     | 7-8   |
| PSY 496                                                  | 3     | HEC 345                                                  | 3     |
| Restricted electives*                                     | 6-9   | HEC 547                                                  | 3-5   |
| SED 345                                                  | 3     | HEC 548                                                  | 1     |

15-18

**HEC 538 (1 hour) plus electives except for students preparing for kindergarten teaching.

**For students in kindergarten teaching; hours required in ELE 520 may be reduced if student has had previous formal teaching experiences.

HOME ECONOMICS
Dietetics—Administrative* and Therapeutic†

The first two years of this curriculum may be found in the Central University College section.

### Third Year

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Hours</th>
<th>Second Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 221 or 273</td>
<td>4</td>
<td>General education humanities</td>
<td>3</td>
</tr>
<tr>
<td>General education literature</td>
<td></td>
<td>General education humanities</td>
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<tr>
<td>or general education humanities</td>
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<td>elective</td>
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<tr>
<td>MGT 200* or restricted elective†</td>
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<td>NFA 301</td>
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<tr>
<td>NFA 342</td>
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<td>NFA 323† or restricted elective*</td>
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<td>PSY 211</td>
<td>3</td>
<td>NFA 343</td>
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</table>

16

15

### Fourth Year

|                                                             |       |                                                             |       |
|                                                             |       |                                                             |       |
| EDP 312* or NFA 403†                                     | 3     | EPY 320* or elective†                                     | 3     |
| HEC 331                                                | 3     | NFA 502                                                | 3     |
| HEC 352 or elective                                     | 3     | NFA 503† or MGT 500†                                     | 3     |
| NFA 501                                                | 3     | NFA 515† or 555*                                       | 5     |
| NFA 541                                                | 3     | Electives                                              |       |
| NFA 542                                                | 2     |                                                       |       |

17

15

*American Dietetics Association Concentration A. Nine hours consisting of MGT 410, PSY 402, and an elective in Business Administration may be substituted for the six hours of MGT 200 and MGT 500.

†American Dietetics Association Concentration C.
HOME ECONOMICS

Food Service Administration

The first two years of this curriculum may be found in the Central University College section.

### Third Year

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Hours</th>
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<tbody>
<tr>
<td>BIO 221 or 273, or restricted</td>
<td>2-4</td>
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<tr>
<td>HEC elect.</td>
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<tr>
<td>General education literature or</td>
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<tr>
<td>general education humanities</td>
<td></td>
</tr>
<tr>
<td>elective</td>
<td></td>
</tr>
<tr>
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<td>3</td>
</tr>
<tr>
<td>NFA 342</td>
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<td>PSY 211</td>
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Total: 14-16

<table>
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<th>Hours</th>
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<tbody>
<tr>
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<td>elective</td>
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<tr>
<td>General education humanities</td>
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</tr>
<tr>
<td>elective or HEC 202</td>
<td>3</td>
</tr>
<tr>
<td>MGT 200* or HEC 352</td>
<td>3</td>
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<tr>
<td>NFA 343</td>
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<td>NFA 344</td>
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Total: 15

### Fourth Year

<table>
<thead>
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<th>First Semester</th>
<th>Hours</th>
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<tbody>
<tr>
<td>EDP 312 or MGT 500*</td>
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<tr>
<td>HEC 202 elective</td>
<td>3</td>
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<tr>
<td>HEC 331</td>
<td>3</td>
</tr>
<tr>
<td>HEC 352 or elective or</td>
<td>3</td>
</tr>
<tr>
<td>NFA 541</td>
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<td>NFA 542</td>
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Total: 17

<table>
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<tr>
<td>NFA 323 or NFA 556</td>
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<tr>
<td>NFA 555</td>
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<tr>
<td>Electives</td>
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</tr>
</tbody>
</table>

Total: 16-18

*Or MGT 410 and an elective in Business Administration.

### HOME ECONOMICS

**General**

The first two years of this curriculum may be found in the Central University College section.

To complete this program, the student is required to fulfill remaining general education requirements, HEC-NFA courses depending upon the emphases chosen, and electives.

### HOME ECONOMICS

**Textiles and Design**

The first two years of this curriculum may be found in the Central University College section.

### Third Year

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
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<td>HEC 320</td>
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<td>Restricted electives*</td>
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Total: 15-17

<table>
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<tr>
<th>Second Semester</th>
<th>Hours</th>
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<tbody>
<tr>
<td>General education literature or</td>
<td></td>
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<td>elective</td>
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</tr>
<tr>
<td>HEC 352</td>
<td>3</td>
</tr>
<tr>
<td>HEC (textiles) elective</td>
<td>3</td>
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<tr>
<td>Restricted electives*</td>
<td>7-9</td>
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</table>

Total: 14-19

*Restricted electives are chosen according to the minor selected.
FOOD SERVICE TECHNOLOGY

This curriculum has been designed to prepare men and women for supervisory positions in food service establishments. The program combines technical food service management and general education courses that lead to an Associate of Arts degree.

First Year

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>ACC 108</td>
<td>3</td>
</tr>
<tr>
<td>CHE 101</td>
<td>4</td>
</tr>
<tr>
<td>GSE 101</td>
<td>3</td>
</tr>
<tr>
<td>GSO 100</td>
<td>1</td>
</tr>
<tr>
<td>NFA 121</td>
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<td>MIL 101 or option (men) or Elective (women)</td>
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<table>
<thead>
<tr>
<th>Second Semester</th>
<th>Hours</th>
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<tbody>
<tr>
<td>Gen. Ed. BIO elective</td>
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<tr>
<td>GSE 102</td>
<td>3</td>
</tr>
<tr>
<td>MGT 200</td>
<td>3</td>
</tr>
<tr>
<td>NFA 201</td>
<td>2</td>
</tr>
<tr>
<td>SPE 100*</td>
<td>3</td>
</tr>
<tr>
<td>MIL 102 or option (men) or Elective (women)</td>
<td>2</td>
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</table>

<table>
<thead>
<tr>
<th>Hours</th>
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<tbody>
<tr>
<td>16</td>
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Second Year

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 221 or 273 or restricted</td>
<td>2-4</td>
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<tr>
<td>HFA elec</td>
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</tr>
<tr>
<td>HEC 202, 331, or 352</td>
<td>3</td>
</tr>
<tr>
<td>NFA 341</td>
<td>4</td>
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<td>NFA 342</td>
<td>3</td>
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<tr>
<td>MIL 201 or option (men) or elective (women)</td>
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<table>
<thead>
<tr>
<th>Second Semester</th>
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<tbody>
<tr>
<td>Bus. Adm. Elective</td>
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<tr>
<td>NFA 241</td>
<td>3</td>
</tr>
<tr>
<td>NFA 343</td>
<td>3</td>
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<tr>
<td>NFA 344</td>
<td>3</td>
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<tr>
<td>PSY 211</td>
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<tr>
<td>MIL 202 or option (men) or elective (women)</td>
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</table>

<table>
<thead>
<tr>
<th>Hours</th>
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<tbody>
<tr>
<td>14-16</td>
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Summer Session

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>NFA 242</td>
<td>2</td>
</tr>
</tbody>
</table>

*Eng. Lit. may be substituted.

CHILD CARE

This Associate of Arts degree program is designed for persons desiring academic preparation to teach or assist in a day care center or in a center for culturally deprived children in a position not requiring professional education certification, and to work with those agencies responsible for licensing and certifying personnel in centers for young children.

First Year

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>GSE 101</td>
<td>3</td>
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<tr>
<td>GSO 100</td>
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<td>HEC 132</td>
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<td>HEC 141</td>
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<tr>
<td>SPE 100</td>
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</table>

<table>
<thead>
<tr>
<th>Second Semester</th>
<th>Hours</th>
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<tbody>
<tr>
<td>ANT 201</td>
<td>3</td>
</tr>
<tr>
<td>ART 117</td>
<td>3</td>
</tr>
<tr>
<td>GSE 102</td>
<td>3</td>
</tr>
<tr>
<td>NFA 201</td>
<td>3</td>
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<tr>
<td>MIL 102 or option (men) or Elective (Women)</td>
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<table>
<thead>
<tr>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>16</td>
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<tr>
<td>16</td>
</tr>
</tbody>
</table>
HOMEMAKING SUPERVISION*

The homemaking supervision curriculum, a 2-year Associate of Arts degree program, is designed for individuals wishing to work on the state level to train “Homemakers”, a classification of Case-Aide who consults with families offering practical help in all general problems involving the home life. Individuals with this degree could also be employed as specialized aides in certain phases of the operation of child day centers, and as aides to Home Economists working in industry and in other community services.

INTERIOR DESIGN AND INTERIOR DECORATION

The College of Applied Arts and Technology offers a Bachelor of Science degree in Interior Design, requiring an area of concentration selected from courses listed under four departments within the College: Home Economics (HEC), Industrial Education (IED), Industrial Technology (INT), and Agriculture (OHO). The program is administered by the Department of Home Economics, as is the 2-year curriculum in Interior Decoration.
### INTERIOR DESIGN

The first two years of this curriculum may be found in the Central University College section.

<table>
<thead>
<tr>
<th>Third Year</th>
<th>First Semester</th>
<th>Hours</th>
<th>Second Semester</th>
<th>Hours</th>
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<tbody>
<tr>
<td>ART 390 or 391</td>
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<td>ART 390 or 391</td>
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<tr>
<td>ENG 209 or 211</td>
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<td>ART elective</td>
<td>3</td>
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<tr>
<td>HEC 321, A, B, C, &amp; D</td>
<td>4</td>
<td>ENG 210 or 212</td>
<td>3</td>
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<tr>
<td>HEC 322</td>
<td>3</td>
<td>HEC 221B</td>
<td>2</td>
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<tr>
<td>PED 233</td>
<td>2</td>
<td>HEC 223</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>INT 394</td>
<td>3</td>
<td>HEC 326</td>
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<td><strong>Total</strong></td>
<td><strong>18</strong></td>
<td><strong>Total</strong></td>
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<table>
<thead>
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<th>Hours</th>
<th>Second Semester</th>
<th>Hours</th>
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<tbody>
<tr>
<td>OHO 362 A, B, &amp; E</td>
<td>3</td>
<td>HEC 427</td>
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<tr>
<td>*HEC 426</td>
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<td>HEC 428</td>
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<tr>
<td>INT 496</td>
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<td>MGT 410</td>
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<td><strong>Total</strong></td>
<td><strong>12</strong></td>
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### INTERIOR DECORATION

A graduate in Interior Decoration, Associate of Arts Degree program, may (1) be employed as an assistant to an Interior Designer, (2) be hired by retail stores as consultants to consumers, in the furniture, draping, and houseware areas, or (3) be self-employed. Other students will select this program for personal benefit.

<table>
<thead>
<tr>
<th>First Year</th>
<th>First Semester</th>
<th>Hours</th>
<th>Second Semester</th>
<th>Hours</th>
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<tbody>
<tr>
<td>ART 117</td>
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<td>GSE 102</td>
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<tr>
<td>GSE 101</td>
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<td>GSP 181</td>
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<td>GSO 100</td>
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<td>HEC 202</td>
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<tr>
<td>GSP 180</td>
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<td>INT 191</td>
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<td>*HEC 221A</td>
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<td>INT 240</td>
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<table>
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<th>Hours</th>
<th>Second Semester</th>
<th>Hours</th>
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<tbody>
<tr>
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<td>ART 390 or 391</td>
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<td>HEC 322</td>
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<td>HEC 221B</td>
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<tr>
<td>HEC 350</td>
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<td>HEC 228</td>
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<tr>
<td>INT 395</td>
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<tr>
<td>INT 394</td>
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<td>HEC 326</td>
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<td></td>
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<td>MIL 202 or option (men) or elective (women)</td>
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<td><strong>Total</strong></td>
<td><strong>16</strong></td>
<td><strong>Total</strong></td>
<td><strong>16</strong></td>
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</table>
HOME ECONOMICS (HEC)

TEXTILES AND DESIGN

HEC 102. (Formerly HEC 203). Clothing Selection and Construction. Three hours. I, II.
Principles of clothing selection and construction; application of design principles; selection of commercial patterns. Students passing the required By-Pass test will substitute another Textiles and Design course.

HEC 202. (Formerly 308). Fundamentals of Textiles. Three hours. I, II.
Introduction to fibers and their qualities relative to the resulting fabrics; emphasis is placed on uses of materials.

HEC 221. Topics in Interior Design. Two hours. I, II.
Students may enroll for maximum total of four hours credit. 221A Theory of Color and Light; 221B Furniture Design.

221A — Terminology, psychology, and use of color and light for an economical, functional, and original interior environment.

221B — Elements of furniture design using media as wood, metal, masonry, glass, and plastic. Making of detailed drawings and models. Field trips.

HEC 228. Practicum for Interior Decoration. Three hours. II.
Prerequisite: Concurrent enrollment in HEC 326. Supervised student participation in an approved establishment to gain experience in interior decorating.

HEC 305. (Formerly Tailoring and Design.) Techniques in Apparel. Three hours. I, II.
Prerequisites: HEC 102 and 202.
Introduction to problems in clothing the family; advance techniques in construction and fitting of family members; evaluation of commercial and remade apparel.

HEC 312. (Formerly HEC 512) Flat Pattern Design. Three hours. II.
Prerequisite: HEC 305.
Original design with emphasis upon appropriate line, color, and texture for the individual.

HEC 320. Economics of Apparel. Three hours. I.
Prerequisite: HEC 202.
Apparel as studied from the standpoints of quality, cost, and care required; the organization of the clothing industry and its effect upon consumer costs.

Students may enroll for a total of five hours credit. 321A Building Mechanics; 321B Building Materials; 321C Decorative Treatments; 321D Accessories; 321E Technical Problems in Furniture Selection.

321A — Illumination, wiring, plumbing, hearing, air conditioning, and acoustical facilities in architectural interiors.

321B — Characteristics, properties, uses, applications, finished, and specifications of building materials.

321C — Mechanical assembly and installation of decorative treatments: floors, walls, partitions, ceilings, windows, doors, screens, fireplaces, stairways, and hardware.

321D — Terminology, characteristics, properties, uses, and specifications of accessories used in architectural interiors.

321E — Problems in the selection of furniture; recent developments, and creation of appropriate product.
HEC 322. (Formerly Interior Decoration). Introduction to Interior Design. Three hours. I, II.
Prerequisite: HEC 350.
An introduction to applications of the design elements, principles, and objectives in relation to planning contemporary residential interior space via plat and elevation illustration.

HEC 323. Historical Interiors and Furnishings. Three hours. II.
Styles in interiors, furniture, and accessories, from antiquity to the contemporary period.

HEC 326. Interior Design Studio I. Three hours. II.
Prerequisite: HEC 322.
Advanced application of the design elements, principles, and objectives in relation to planning residential and/or commercial interior space via one and two-point perspective illustration.

HEC 411. Tailoring. Three hours. II.
Prerequisite: HEC 305.
Application of tailoring techniques to garments made from commercial patterns.

HEC 412. (Formerly HEC 555.) Costume Design. Three hours. I.
Prerequisite: HEC 312.
Application of art principles in color and line in design and construction of garments, with emphasis on draping.

HEC 414. Textile Merchandising. Five hours. A.
Prerequisites: Senior standing; Home Economics major or minor, in Textiles and Design.
Aspects of the retail sale of textile products. Lecture; practicum in a retail outlet.

HEC 426. Interior Design Studio II. Three hours. I.
Prerequisite: HEC 326.
Advanced application of the design elements, principles and objectives in relation to planning commercial interior space via isometric, perspective and additional illustrations.

HEC 427. The Professional in Interior Design. Two hours. II.
Prerequisites: HEC 426; concurrent enrollment in HEC 428.
Objectives, procedures, and ethics for the professional interior designer. Preparation of a portfolio of professional expression and illustration.

HEC 428. Supervised Field Experience in Interior Design. Ten hours. II.
Prerequisite: concurrent enrollment in HEC 427.
Observation of an interior design firm's operation and program, with performance in assigned tasks under supervision.

Prerequisites: CHE 102; HEC 202.
Chemical and physical tests of fibers and fabrics including dye properties and finishes. Study of textile legislation and standardization. Individual problems and projects.

HEC 510. Socio-Psychological Factors of Apparel. Three hours. II.
Prerequisite: HEC 330.
Social, cultural, and psychological factors which influence personal satisfaction in the selection and use of apparel.

HEC 519. Special Problems in Textiles. One to three hours. I, II, S.
Prerequisite: Consent of instructor.
The student selects a problem and works under the supervision of the instructor. May be repeated by graduate students to a maximum of 6 hours.
FAMILY LIFE AND CHILD DEVELOPMENT

HEC 132. (Formerly HEC 208). Family Living. Three hours. I, II.
Stages of development of the individual family members and of the family as a unit; biological, cultural, and personal accomplishments (developmental tasks) of the family throughout the life cycle will be emphasized.

HEC 141. The Child: His Nature and His Needs. Two hours. I.
Prerequisite: Consent of instructor.
Introduction to understanding the nature of the young child; developmental stages of growth, needs that must be met at each stage, and effects of deprivation on subsequent development.

HEC 231. Health and Home Care of the Sick. Two hours. I, II.
Health and the family; simple procedures for the care of patients in the home are stressed.

HEC 241. Prenatal and Infant Development. Three hours. I.
Growth and development in the prenatal and infant stages up to three years of age. Lecture, discussion, field trips and observation of infants and toddlers.

HEC 243. Preschool Experience. Three hours. II.
Prerequisite: Consent of instructor.
Practicum in preschools; introduction to the overall operation of selected preschools.

HEC 331. (Formerly HEC 307). Marriage and Family. Three hours. I, II.
Prerequisite: Junior standing.
Factors influencing marital adjustment; their relationships and implications for a successful life.

HEC 341. (Formerly HEC 303.) Development of the Preschool Child. Three hours. I, II.
Growth and development of the preschool child; case studies, observations, and participation experience with culturally advantaged and disadvantaged children in preschools.

HEC 342. (Formerly HEC 304.) Child and Adolescent Development. Three hours. I.
Prerequisites: HEC 241 or 341.
Physical, mental, emotional, and social development of the child from school age through adolescence; case studies, observations, and participation experiences with children culturally advantaged and disadvantaged.

HEC 345. Program Planning for Young Children. Three hours. II.
Prerequisite: HEC 241 or 341.
Planning experiences, including techniques and materials, to provide optimum educational environment appropriate to the age and background of the young child.

HEC 347. Parent Education. Three hours. II.
Prerequisites: PSY 211, HEC 241 or 341.
Methods and materials useful in working with parent conferences and parent groups. Experiences include home visits, parent conferences and planning parent discussion groups; involvement in preschool programs as Child Care and Head Start.

HEC 538. (Formerly HEC 505.) Seminar in Family Life. One to three hours. A.
Prerequisite: Consent of instructor.
Students will be able to concentrate their interests in an intensive study of specific areas of family life. The main focus will be on the family and its interpersonal relationships. Group projects and study, panel discussions, and conferences may be used. May be repeated by graduate students to a maximum of 6 hours.
HEC 547. (Formerly HEC 507.) Organization and Administration of Preschools. Three or five hours. A.
Prerequisite: HEC 345.
Study of the history of preschool education and its present organization and administration. Participation in programs for preschool children.

HEC 548. (Formerly HEC 504.) Seminar in Child Development. One to three hours. A.
Prerequisites: HEC 241, 341 and six hours in Family Life and Child Development. Current concepts and trends in child development; recent research and literature. May be repeated by graduate students to a maximum of 6 hours.

HEC 549. Special Problems in Child Development. One to three hours. A.
Prerequisites: HEC 548, and consent of instructor.
The student chooses a problem and works under the supervision of the instructor. May be repeated by graduate students to a maximum of 6 hours.

FAMILY ECONOMICS AND MANAGEMENT

HEC 350. The House. Three hours. I, II.
Concepts influencing housing: family values, needs, and wants with emphasis on environment. Original house plans including space analysis, room arrangement, equipment and storage are created with consideration of design elements, principles, and objectives.

HEC 351. (Formerly HEC 301.) Household Equipment. Three hours. I, II.
Standards for selecting and buying household equipment and small appliances; electricity and gas in the home; use, maintenance and care of equipment.

HEC 352. The Family as Consumers. Three hours. I, II.
Contemporary consumer behavior by families in our society; wise use of income, investments, savings, and credit. Advertising, organizations, and laws affecting the interests of the family as consumers.

HEC 353. (Formerly HEC 330.) Factors Affecting Home Management. Two hours. I, II.
Principles of management applied to individual and home situations; management of material resources in the family; decision-making; wise use of time, energy, abilities, and skills on the basis of optimum development of individuals.

HEC 453. (Formerly HEC 403.) Home Management Residence. Three hours. I, II.
Prerequisites: NFA 321, HEC 353.
Management of time, money, and energy in the practical situation of the home; projects may be assigned. Reservations for Turley House should be made several weeks in advance.

HEC 556. (Formerly Special Problems in Home Economics.) Special Problems in Family Economics and Management. One to three hours. A.
Prerequisite: Consent of instructor.
The student chooses a problem and works under the supervision of the instructor. May be repeated by graduate students to a maximum of six hours.

HOME ECONOMICS EDUCATION

HEC 566. Special Problems in Home Economics Education. One to three hours. I, II, S.
Prerequisite: Consent of instructor.
The student chooses a problem and works under the supervision of the instructor. May be repeated by graduate students to a maximum of six hours.
GRADUATE COURSES

HEC 660. Curriculum Development in Home Economics. Three hours. A.
Prerequisite: Consent of instructor.
Educational trends and their implications for home economics in the secondary school; principles of curriculum construction as applied to junior and senior high school home economics.

HEC 661. Supervision of Home Economics. Three hours. A.
Prerequisite: Consent of instructor.
Principles and techniques of effective supervision of home economics at different educational levels, with emphasis on supervision of student teaching.

HEC 662. Philosophy of Home Economics Education. Three hours. A.
Prerequisite: Consent of instructor.
Major ideas, trends, and past developments in home economics education and their influence and implications in the future directions of the field.

HEC 663. The Adult Homemaking Program. Three hours. A.
Prerequisite: Consent of instructor.
Materials, organization, and conducting homemaking programs for adults; use of appropriate instructional media.

HEC 664. Seminar in Home Economics Education. One to three hours. A.
Prerequisite: Consent of instructor.
Discussion of current topics and research relevant to home economics. May be repeated to a maximum of six hours.

HEC 665. Evaluation in Home Economics Education. Three hours. A.
Prerequisite: Consent of instructor.
Theories and techniques of evaluation; construction and interpretation of devices used to measure progress and attainment in home economics.

HEC 666. Research in Home Economics Education. One to six hours. A.
Prerequisite: Consent of instructor.
Independent research. May be repeated to total six hours.

NUTRITION, FOODS, AND FOOD ADMINISTRATION (NFA)

NFA 120. Basic Food Preparation. Two hours. I, II.
An introductory food course for non-majors and non-minors which will provide instruction in preparation of individual and family meals.

NFA 121. (Formerly HEC 204.) Introduction to Food Composition and Preparation. Three hours. I, II.
Composition of foods and their properties as they affect preparation. Scientific principles of food preparation.

NFA 201. (Formerly HEC 219.) Essentials of Nutrition. Two hours. I, II.
Basic nutrition and its application in meeting nutritional needs of all ages; consideration is given to food selection, food faddism, and problems of "over" and "under" nutrition.

NFA 241. (Formerly HEC 316.) Food Service Administration. Three hours. II.
Prerequisite: Consent of instructor.
Principles of food systems operation emphasizing financial and production controls, menu planning and technical operations. Field experiences.
NFA 242. (Formerly HEC 314.) Practicum. Two hours. A.
Prerequisites: NFA 241 and consent of instructor.
Supervised student participation in an approved food service institution.

NFA 301. (Formerly HEC 317.) Bio-Nutrition. Three hours. II.
Prerequisites: CHE 102 or 112; NFA 201.
Structures and properties of nutrients; introduction to their functions and inter-
relationships in metabolism.

NFA 302. Diet Therapy. Two hours. II.
Prerequisite: NFA 201.
The applied approach to dietary treatment for patients. Nutrition guidance and
counseling techniques. Does not meet the therapeutic nutrition requirement for dietetic
majors.

NFA 321. (Formerly HEC 215.) Meal Management. Four hours. I, II.
Prerequisites: NFA 121, 201.
Food management, planning, preparation and service of meals through management
of time, energy, money, and efficient use of equipment. Consideration is given to
nutritional needs, food habits, and social customs of family groups.

NFA 322. (Formerly HEC 302.) Experimental Foods. Three hours. II.
Prerequisites: NFA 321 or 341; CHE 101 or equivalent.
Experimental procedures involving methods and techniques and their effects on
the quality of products; individual problems dealing with the various aspects of food
preparation.

NFA 341. Quantity Meal Management. Four hours. I.
Prerequisite: NFA 121, 201 and consent of instructor.
Planning and service of meals to large groups; nutritional needs are emphasized.
Open to Nutrition, Foods, and Food Administration majors only.

NFA 342. (Formerly HEC 315.) Quantity Food Production. Three hours. I.
Prerequisite: NFA 341.
Principles and methods of preparation of food in quantity; use of standardized
formulas and of institutional equipment. Field trips included.

NFA 343. (Formerly HEC 313.) Institutional Equipment and Furnishings. Three
hours. II.
Prerequisite: NFA 342.
Fundamentals of planning food service layouts and furnishings for restaurants,
hotels, hospitals and other institutions.

NFA 344. Institutional Food Purchasing. Three hours. II.
Prerequisites: NFA 342; ACC 108.
Principles and methods of purchasing foods for various types of quantity food
services; emphasis on specifications and factors affecting quality; food cost control.
Field trips included.

NFA 403. (Formerly HEC 410.) Maternal and Child Nutrition. Three hours. I.
Prerequisites: NFA 201 and three hours in Chemistry,
Nutrition of the mother and fetus, during pregnancy and the infant years through
adolescence; observation of children at mealtime.

NFA 501. Human Nutrition. Three hours. I.
Prerequisite: NFA 301.
Interrelationships and functions of nutrients in normal nutrition; relation of
nutrient requirements at the cellular level to dietary standards.

NFA 502. (Formerly HEC 506). Therapeutic Nutrition. Three hours. II.
Prerequisite: NFA 501.
Theory and application of deviations in normal dietary patterns in disease.
NFA 503. Community Nutrition. Three hours. II.
Prerequisite: NFA 403.
Nutrition services and education facilities in the community. Application of the principles of nutrition to the varied needs of representative groups; food and drug laws and their implications in combatting food faddism. Field experience.

NFA 515. (Formerly HEC 413.) Seminar in Nutrition. One to three hours. II.
Prerequisite: NFA 501 and consent of instructor.
Reports and discussions of current problems and of research in nutrition. May be repeated by graduate students to a maximum of six hours.

NFA 516. Special Problems in Nutrition. One to three hours. I, II, S.
Prerequisite: NFA 501 and consent of instructor.
The student chooses a problem and works under the supervision of an instructor. May be repeated by graduate students to a maximum of six hours.

NFA 541. (Formerly HEC 319.) Food Service Organization and Management. Three hours. I.
Prerequisites: ACC 108; NFA 342.
Principles of organization and their application to various types of institution; personnel management, financial and administrative problems.

NFA 542. (Formerly HEC 318.) Laboratory for Food Service Organization and Management. Two hours. I.
Prerequisite: Concurrent enrollment in NFA 541.
Supervised experience in planning, preparing and serving food in approved institutions.

NFA 555. (Formerly HEC 418.) Seminar in Food Administration. One to three hours. II.
Prerequisite: NFA 541.
Reports and discussions of topics relative to the area of food administration. May be repeated by graduate students to a maximum of six hours.

NFA 556. Special Problems in Food Administration. One to three hours. I, II, S.
Prerequisite: NFA 541.
The student chooses a problem and works under the supervision of an instructor. May be repeated by graduate students to a maximum of six hours.

INDUSTRIAL EDUCATION (IED)

C. Craft, Chairman; G. Brown, T. Brown, Chastain, Davis, Jenkins, Lash, Luy, Martin, Myers, Ogle, Patrick, Rowlett, Spencer, Swinford, Weaver, Whalin.

The primary function of the Industrial Education Department is to prepare teachers of industrially oriented subjects for secondary and vocational-technical schools. Another function is to prepare personnel to staff the Manual Arts Therapy positions in the hospitals of the Veterans Administration.

The Industrial Arts Comprehensive Area Curriculum has as its purpose the preparation of general industrial arts teachers for schools offering broad diversified programs.

The Industrial Arts Specialized Area Curriculum has as its purpose the preparation of industrial arts teachers for schools where technician-teachers are desired and who possess greater depth in their respective areas.
The Associate of Arts Degree is awarded those who have completed the prescribed Vocational-Industrial and Technical Teacher Education Curriculum and 1,400 hours of approved and supervised related work experience or three years of approved related work experience. The purpose of this curriculum is to prepare teachers for the area vocational and technical schools of the state.

The Bachelor of Science Degree is awarded those who have completed the prescribed Vocational-Industrial and Technical Teacher Education Curriculum and 2,000 hours of approved and supervised work experience, or three years of approved related work experience. The purpose of this curriculum is to prepare teachers for the area vocational and technical schools of the state.

The purpose of the first major in Industrial Education is to give the future industrial arts teacher an opportunity to prepare to teach in another subject matter field.

The Manual Arts Therapy Curriculum has as its purpose the preparation of therapists with a broad background in industrial education with emphasis on the crafts.

### INDUSTRIAL EDUCATION

#### Industrial Arts Comprehensive Area Major

The first two years of this curriculum may be found in the Central University College section.

#### Third Year

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Hours</th>
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<tr>
<td>EDF 317</td>
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<tr>
<td>ENG Literature Elective</td>
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<td>IED 382 or 311</td>
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<td>IED 372 or 351</td>
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<th>Second Semester</th>
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<tr>
<td>IED 233</td>
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<td>IED 326 or 382</td>
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<td>IED 343 or ENG 210 or 212</td>
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<td>IED 467 or 372</td>
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**Total:** 16 hours

#### Fourth Year

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<td>IED 394 or 326</td>
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<td>ESH 498</td>
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<td>ESH 499</td>
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</table>

**Total:** 16 hours

Industrial Education courses are to be elected to complete a total of 48 semester hours.

Curriculum for a First Major in Industrial Education.

A student with a second major or minor in another department may complete the following courses for a first major in Industrial Education: Industrial Education 130, 141, 180, 191, 233, 242, 281, 292, 311, 351, 372, 394, and 467 for a total of 36 hours.
Curriculum for Dual Certification in Manual Arts Therapy and Industrial Arts Education

Persons desiring preparation in Manual Arts Therapy, a medically prescribed program of vocationally significant activity for sick and disabled patients on medical prescription, can obtain such by following the industrial arts comprehensive area curriculum above, substituting IED 328 for IED 382, and completing these additional courses:

BIO 301 and 378 ................................................................. 4
PHE 320 ........................................................................ 2
PSY 308 ........................................................................ 3

9

*ESH 499 will include 240 hours clinical experience in a Veterans Administration Hospital for those following the manual arts therapy curriculum.

INDUSTRIAL EDUCATION

Industrial Arts Specialized Area Major

The first two years of this curriculum may be found in the Central University College Section.

Third Year

First Semester  Hours  Second Semester  Hours
EDF 317 ................................................................. 4  General Education Biology
ENG 210 or 212 ....................................................... 3  Science Elective
IED 311 .................................................................. 3  IED 353 or 351 ....................................................... 3
IED 351 or 242 ......................................................... 3  IED 372 .................................................................. 3
Social Science Elective ................................................ 3  IED Elective* or 281 .................................................. 3

16  15

Fourth Year

Humanities Elective ....................................................... 3  ESH 452 ................................................................. 3
IED Elective* or IED Elective* and 353 ................................ 10  ESH 498 ................................................................. 3
IED 467 .................................................................. 3  ESH 499 ................................................................. 10

16  16

*To be elected from one major area.
A minimum of fifteen semester hours is required in one subject matter area in Industrial Education.
Industrial Education courses are to be elected to complete a total of 48 semester hours.

INDUSTRIAL EDUCATION

Vocational-Industrial and Technical Teacher Education Major

The first two years of this curriculum may be found in the Central University College section.
Third Year

<table>
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<tr>
<th>First Semester</th>
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<td>PSY 211</td>
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<td>FSY elective (upper div.)</td>
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*Technical courses in Industrial Education as approved by advisor (18 semester hours maximum may be allowed by proficiency examination, 6 semester hours maximum may be allowed for supervised work experience.)

Work Experience: A graduate of this approved program must have a minimum of 2,000 clock hours of planned and supervised work experience in the occupation in which he plans to teach or a minimum of three years of approved work experience in the occupation in which he plans to teach.

INDUSTRIAL EDUCATION

Vocational-Industrial and Technical Teacher Education Major Curriculum for an Associate of Arts Degree

First Year

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<tr>
<th>First Semester</th>
<th>Hours</th>
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<td>GSE 102</td>
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<tr>
<td>GSO 100</td>
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<td>General Education Laboratory</td>
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<td>GSS 142</td>
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<td>Science</td>
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<td>GSS 144</td>
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<td>MAT 107 or IED 201</td>
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<td>MIL 102 (men) or option</td>
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<td>Elective (Women)</td>
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Second Year

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<th>Hours</th>
<th>Second Semester</th>
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<tbody>
<tr>
<td>General Education Laboratory</td>
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<td>1st Nine Weeks</td>
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<tr>
<td>Science</td>
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<td>IED 263</td>
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<td>IED 281</td>
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<td>*IED Elective</td>
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<td>**IED Elective</td>
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<tr>
<td>MIL 201 or option</td>
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<td>MIL 202 or option</td>
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<td>PSY 211</td>
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<td>2nd Nine Weeks</td>
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<td>Humanities Elective</td>
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<td>IED 364</td>
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*Technical courses in Industrial Education as approved by advisor (nine semester hours maximum permitted through proficiency examination, three semester hours may be supervised work experience.)

**From approved list.

Work Experience: A graduate of this associate degree program must have a minimum of three years of approved occupational experience in the occupation in which he plans to teach or a minimum of 1,400 clock hours of planned and supervised occupational experience in the occupation in which he plans to teach.
INDUSTRIAL EDUCATION (IED)

IED 130. Design Orientation. One hour. I, II.
Introduction to design theory and practice. Emphasis on using contemporary tools, materials, and technical processes in solving design problems.

IED 141. (INT 141) Elementary Woodwork. Three hours. I, II.
Basic instruction in the use of common hand tools; basic machine operations; problems in wood construction; woodturning; related technical information; finishing and characteristics of common hard and soft woods.

IED 160. Technical Occupations-Orientation and Survey. Three hours. A.
General survey of technical occupations; development, function, skill require-
ments, training, and trends.

IED 180. (INT 180) General Metalwork I. Three hours. I, II.
Basic hand and machine operations and related information in sheet metal, bench metal, art metal, arc and oxyacetylene welding; projects and problems in each area of activity.

IED 191. (INT 191) Technical Drawing I. Three hours. I, II.
Basic technical drawing involving sketching, lettering, orthographic projection, pictorial representation, drafting techniques, tracing, and reproduction of drawings.

IED 201. (INT 201) Applied Mathematics in Technology. Three hours. I, II.
Mathematics involving an intensive study of applied algebra, geometry, and trigonometry with emphasis on the application of mathematics in the solution of technical problems.

IED 204. Related Science, Mathematics, and Technology in Occupations. I. Three hours. A.
Offered only through written examination; applicant must be eligible for vocational teaching certificate.

IED 205. Manipulative Skills in Occupations. I. Three hours. A.
Offered only through technical competence examination; applicant must be eligible for vocational teaching certificate.

IED 206. Knowledge of Related Subjects in Occupations. I. Three hours. A.
Offered only through oral examination; applicant must be eligible for vocational teaching certificate.

IED 233. Industrial Arts Design. Two hours. I, II.
Prerequisite: IED 191.
Study and application of the principles of three-dimensional design related to various media; emphasis placed on experimentation and problem-solving in developing design solutions; design and construction of projects involving both hand and mass production processes.

IED 241. General Woodworking. Two hours. I.
Basic operations and information units in hand and machine woodworking; common woods; care and maintenance of tools; finishing of woods; joinery and construction problems. Emphasis on woodworking as an avocation.

IED 241. General Woodworking. Two hours. I.
Basic operations and information units in hand and machine woodworking; common woods; care and maintenance of tools; finishing of woods; joinery and construction problems. Emphasis on woodworking as an avocation.

*IED 242. (INT 242.) Intermediate Woodwork. Three hours. I, II.
Prerequisite: IED 141.
Advanced woodworking operations; instruction in the operation of woodworking machines; care and sharpening of tools; related technical information; construction and finishing of projects.

*Credit is to be granted for only one of these cross-listed courses.
IED 243. General Woodworking II. Two hours. I.
Additional operations in machine and hand woodwork; joinery; related information; construction problems; finishing techniques and maintenance of equipment. Emphasis on woodworking as an avocation.

*IED 244 (INT 244) Wood Technology and Utilization. Three hours. A.
Wood as a raw material; manufacture, properties, and applications of wood and wood-base products; materials and processes involved in the production of fabricated wood products.

IED 261. Principles of Vocational-Industrial and Technical Teaching. Two hours. A.
Designed to acquaint the student with the historical developments, principles and practices related to teaching vocational-industrial and technical subjects.

IED 262. Trade and Technical Occupational Analysis. Two hours. A.
Involves the fundamental steps for analyzing trade and technical occupations in order to establish appropriate units of instruction.

IED 264. Instructional Materials. Two hours. A.
Selection and arrangement of teaching content; preparation of assignment, operation and information sheets; preparation of evaluative instruments.

*IED 281. (INT 281) General Metalwork II. Three hours. I, II.
Basic hand tool and machine operations; foundry; forging; heat treating; machine shop projects and problems; related information in each area of activity.

*IED 283. (INT 283) Arc and Oxyacetylene Welding. Three hours. A.
Manipulative processes and related information basic to successful arc, oxyacetylene, and tungsten inert gas welding; metallurgy of welding; physical testing of weldments.

*IED 292. (INT 292) Technical Drawing II. Three hours. I, II.
Prerequisite: IED 191.
Preparation of detail and assembly drawings; production illustrations; screw threads and fasteners; shop processes; dimetric projections; secondary auxiliaries; reproduction processes and materials.

*IED 293. (INT 293) Technical Drawing III. Three hours. A.
Prerequisite: IED 191.
Advanced drafting techniques with special emphasis on map drafting and elementary surveying.

IED 304. Related Science Mathematics, and Technology in Occupations. II. Three hours. A.
Offered only through written examination; applicant must be eligible for vocational teaching certificate.

IED 305. Manipulative Skills in Occupations. II. Three hours. A.
Offered only through technical competence examination; applicant must be eligible for vocational teaching certificate.

IED 306. Knowledge of Related Subjects in Occupations. II. Three hours. A.
Offered only through oral examination; applicant must be eligible for vocational teaching certificate.

*IED 311. (INT 311) Graphic Arts I. Three hours. I, II.
General graphic arts with emphasis on hand composition, elementary presswork, silkscreen principles, linoleum block printing, and bookbinding.

*IED 312. (INT 312) Graphic Arts II. Three hours. I, II.
Prerequisite: IED 311.
Advanced graphic arts with emphasis on automatic machine printing; production techniques; photography; and offset lithography.

*Credit is to be granted for only one of these cross-listed courses.
*IED 315. (INT 315) Photography I. Three hours. A.
Picture composition, film developing, printing, enlarging, dodging, contract printing, photo finishing, study of and care for equipment and materials; visual instruction; planning of facilities. (Each student required to provide camera.)

IED 322. Industrial Arts for Elementary Teachers. Three hours. I. II.
Appropriate projects and media to provide enrichment for the elementary school subjects; instruction in the use of basic hand tools employed in the completion of correlated units of work.

IED 326. Crafts I. Three hours. I. II.
Introduction to various craft media; leather, art metal enameling; castolite; wood carving; the making of archery equipment; utilization of material applicable for playground use, community centers, and summer camps.

IED 328. Crafts II. Three hours. I. II.
Introduction to lapidary and jewelry work; cabochon cutting; grinding and polishing; faceting; design and construction of costume jewelry using silver, copper, and gold; centrifugal casting using the lost wax process.

IED 343. Advanced Woodwork I. Three hours. I. II.
Prerequisite: IED 242.
Additional practice in furniture construction involving skill in the use of machines and hand tools; joinery, bending and laminating wood; finishing; wood technology; maintenance of equipment.

*IED 351. (INT 351) Fundamentals of Applied Electricity. Three hours. I. II.
Principles of static and current electricity; measures of electricity; heat, light, and power applied to the planning and construction of electrical installations.

*IED 352. (INT 352) Electrical Power and Motor Repair. Three hours. A.
Prerequisite: IED 351.
Generation and distribution of electricity; power distribution systems; maintenance and repair of electrical motors.

*IED 353. (INT 353) Introduction to Electronics. Three hours. I. II.
Prerequisite: IED 351.
Fundamentals of vacuum tubes; semiconductor devices, AM radio receivers, and servicing techniques.

IED 360. Principles of Vocational Guidance. Three hours. A.
Methods and techniques involved in exploring, selecting, preparing for, entering upon, and succeeding in a vocation; designed for vocational teachers and administrators.

IED 363. Evaluation in Vocational and Technical Education. Three hours. A.
Methods of evaluation; preparation of measuring devices; methods of assessing technical competency; interpretation of standardized test results; statistical analyses of test data and the improvement of instruction.

IED 364. Methods in Industrial Education. Three hours. A.
Presentation and application of instructional materials, methods, techniques and devices relevant to teaching vocational-industrial and technical subjects.

IED 365. Philosophy of Vocational-Industrial and Technical Education. Three hours.
Nature and purpose of the practical arts and vocational-industrial and technical education; their relationships and differences; the place of each in preparing people for the world of work.

IED 366. Instructional Aids in Vocational-Industrial and Technical Education. Three hours. A.
Selection, development, analysis, cataloging, and use of commercial and self-made instructional materials suitable for vocational-industrial and technical education.

*Credit is to be granted for only one of these cross-listed courses.
IED 367. Supervised Work Experience in Industry. One to six hours. A. Supervised employment in industry. Assignments individually arranged by University coordinator and the cooperating Industrp. Written reports required.

IED 368. Workshop in Vocational-Industrial and Technical Education. Two to six hours. A. Laboratory approach which provides opportunities for experienced educational personnel to concentrate their study on practical problems in vocational-industrial and technical education.

*IED 372. (INT 372) Power Mechanics I. Three hours. I, II. Prerequisite: IED 351. Principles of power sources and basic mechanisms; disassembly, inspection, measurement, adjustment, and tune-up of the two and four cycle small gasoline engine.

*IED 373. (INT 373) Power Mechanics II. Three hours. A. Prerequisite: IED 372. Study of the multi-cylinder engine; fuels and fuel systems, lubrication, cooling, ignition, tests, tune-up, adjustment, and minor repair.

*IED 382. (INT 382) Machine Tool Processes I. Three hours. I, II. Prerequisite: IED 281. Projects and problems involving machine operation on the lathe; bench work; blueprint reading; precision measurement; related technical information.

*IED 394. (INT 394) Architectural Drawing I. Three hours. I, II. Prerequisite: IED 191. Basic principles of house planning; styles of home architecture; comparative study of building materials; preparation of a complete set of plans and specifications for a small home.

*IED 395. (INT 395) Descriptive Geometry. Three hours. A. Prerequisite: INT 191 or consent of instructor. Application of the theory of orthographic projection to the graphical representation and solution of three-dimensional problems.

*IED 411. (INT 411) Graphic Arts III. Three hours. A. Prerequisite: IED 312. Advanced photography; off-set lithography; graphic arts materials and processes; printing management; current trends in the graphic arts industry.

*IED 451. (INT 451) Industrial Electronics I. Three hours. I. Prerequisite: IED 333. Principles of timing, control circuitry, transducers, polyphase system, and gaseous tubes as applied to industrial and commercial installations.

*IED 452. (INT 452) Industrial Electronics II. Three hours. II. Prerequisite: IED 451. Applications of industrial control circuitry: generation of electricity; power distribution systems; maintenance and repair of electrical devices.

*IED 454. (INT 454) Communications Electronics I. Three hours. I. Prerequisite: IED 333. Advanced radio communication receiving principles; quality audio re-producing devices; transmitter procedures; transmitting antennas; communications systems; and electronics servicing techniques.

*IED 455. (INT 455) Communications Electronics II. Three hours. II. Prerequisite: IED 454. Principles of television; antenna theory and installation; closed circuit television operation; and television servicing techniques.

*Credit is to be granted for only one of these cross-listed courses.
IED 460. Seminar in Vocational-Industrial and Technical Education. Three hours. A.
Individual and group investigations of current problems and issues in the field of vocational-industrial and technical education. Each student will be expected to plan and complete a minor research project and present his findings to the seminar.

IED 463. Supervised Student Teaching in Vocational-Industrial and Technical Education. Four to ten hours. A.
Observation, participation, and supervised teaching in vocational-industrial and technical education. Includes experiences in lesson planning, classroom management, record keeping, development and use of instructional materials, and directed teaching in approved centers.

Planning and organization of physical laboratory facilities with emphasis on the comprehensive general shop and the general unit shop. Preparation of instructional materials; instructional techniques; development and use of visual aids.

*IED 471. (INT 471) Power Transmission. Three hours. A.
Prerequisite: IED 373.
Principles of mechanical, electrical and fluid power transmission. Disassembly, inspection, and adjusting of mechanical transmission units; construction of fluid power circuits emphasizing their application to modern machines.

*IED 472. (INT 472) Chassis and Electrical Systems. Three hours. A.
Prerequisite: IED 373.
Detailed study and application of starting, charging, lighting, and accessory circuits; suspension, brakes, power brakes, steering, power steering, air conditioning.

*IED 487. (INT 487) Machine Tool Processes II. Three hours. A.
Prerequisite: IED 382.
Continuation of IED 382 with increased emphasis on machine tool operations; gear cutting; tool and cutter grinding; problems in tool making; related technical information.

*IED 488. (INT 488) Machine Tool Processes III. Three hours. A.
Prerequisite: IED 487.
Advanced machine tool operations and tool making; heat treating of metals; related technical studies and metrology.

*IED 489. (INT 489) Characteristics and Maintenance of Machine Tools. Two hours. A.
Prerequisite: IED 487.
Machine design and construction; installing; servicing; powering and rebuilding machine tools.

*IED 492. (INT 492) Technical Drawing IV. Three hours. I.
Prerequisite: IED 292.
Advanced machine drafting dealing with detail and assembly drawings, patent drawing, production illustrations, and tool design.

*IED 496. (INT 496) Architectural Drawing II. Three hours. II.
Prerequisite: IED 394.
Preparation of complete plans and specifications for small commercial and large residential buildings; emphasis on modern methods and materials utilized in the building industry; illustrative rendering; structural modeling.

*IED 501. (INT 501) Special Problems in Industrial Education. Three hours. I, II.
A course for graduate and exceptional undergraduates involving independent study and research related to problems of a theoretical and/or practical nature.

*Credit is to be granted for only one of these cross-listed courses.
*IED 502. (INT 502) Industrial Materials and Processes. Three hours. A.
Characteristics, utilization and processing of industrial materials such as wood, metals, plastics, clay, glass, concrete, etc.; composition and working qualities; types, grades, availability, and suitability of materials for varying purposes; shaping, forming, cutting, and finishing processes; quality, prices and control of materials and products.

*IED 511. (INT 511) Advanced Technical Problems in Graphic Arts. Two-six hours. I, II.
Technical instruction in the graphic arts field. Recent developments, advanced technical and experimental problems and preparation of technical reports in graphic arts.

*IED 533. (INT 533) Workshop in Industrial Education. One-four hours. A.
533a Design; 533b Graphic Arts; 533c Plastics; 533d Power Mechanics; 533e Electronics; 533f Wood Technology; 533g Metals; 533h Crafts; 533i Professional. (Maximum credit in any category is limited to 4 hours.)

IED 540. Wood Technology. Three hours. A.
The technology of wood; includes structure, composition, and properties of wood; wood seasoning and preservation; machining characteristics of wood.

*IED 541. (INT 451) Advanced Technical Problems in Woodworking. Two-six hours. I, II.
Technical instruction in the woodworking field. Recent developments, advanced technical and experimental problems, and preparation of technical reports in woodworking.

IED 544. Machine Woodworking. Two hours. A.
Prerequisite: IED 242.
Special machine operations; repairing and servicing power woodworking machinery.

*IED 551. (INT 551) Advanced Technical Problems in Electricity-Electronics. Two-six hours. I, II.
Technical instruction in the electricity-electronics field; recent developments, advanced technical and experimental problems, and preparation of technical reports in electricity-electronics.

*IED 561. (INT 561) Evaluation in Technical Education. Three hours. A.
Methods of evaluation in technical education; elementary statistical procedures; preparation and use of measuring devices; assessing technical competency, creativeness, quality, and quantity; analysis and interpretation of test results.

IED 563. Planning of Technical Education Facilities. Two hours. A.
Principles and practices underlying the planning and designing of shops and laboratories for vocational, industrial, and technical education.

IED 564. History and Philosophy of Industrial Education. Three hours. A.
History of industrial education from its early beginning to the present; the contributions of leaders; movements in the development of industrial and vocational education; modern concepts of industrial education.

*IED 571. (INT 571) Advanced Technical Problems in Power Mechanics. Two-six hours. I, II.
Technical instruction in the power mechanics field; recent developments; advanced technical and experimental problems, and preparation of technical reports in power mechanics.

*IED 581. (INT 581) Advanced Technical Problems in Metalworking. Two-six hours. I, II.
Technical instruction in the metalworking field; recent developments, advanced technical and experimental problems, and preparation of technical reports in metalworking.

*Credit is to be granted for only one of these cross-listed courses.
*IED 591. (INT 591) Advanced Technical Problems in Drafting. Two-six hours. I, II.
Technical instruction in the drafting field; recent developments, advanced technical and experimental problems, and preparation of technical reports in drafting.

GRADUATE COURSES

Advanced technical study, research and experimentation in photography; cameras and lenses, filters, films, enlarging, dodging, and finishing; color photography; darkroom techniques.

*IED 611B. (INT 611B.) Advanced Technical Study in Printing Technology: Layout and Design. Three hours. A.
Advanced technical study, research and experimentation in layout and design; concepts of graphic design related to newspapers, books, brochures, flyers, and posters; practical experience in design and layout of graphic presentations.

Advanced technical study, research and experimentation in color separation; copy preparation, camera techniques, developing, stripping, platemaking, and press operations.

Advanced technical study, research and experimentation in photo-offset-lithography; inks, fountain solutions, films, chemicals, type methods, layout, stripping, camera techniques, and platemaking.

Advanced technical study, research and experimentation in printing quality control; plant layout, temperature, humidity, chemicals, papers, and photographic materials.

*IED 633. (INT 633.) Creative Problem-Solving in Technical Fields. Three hours. A.
A review and analysis of basic and applied research in the development of creative behavior with emphasis on its application to industrial teaching and industrial problem-solving.

Advanced technical study, research and experimentation in structure and characteristics of wood; species, chemical composition, botanical structure, physical characteristics, and identification techniques.

Advanced technical study, research and experimentation in dimensional stability of wood; moisture content effects and control, strength and density, seasoning, and drying defects.

Advanced technical study, research and experimentation in veneer and plywood production; veneer production and specifications; strength characteristics, specifications, grades, and uses of hardwood and softwood plywood; grading and production processes.

*Credit is to be granted for only one of these cross-listed courses.
*IED 641D. (INT 641D.) Advanced Technical Study in Wood Technology; Wood Substitutes. Three hours. A.
Advanced technical study, research and experimentation in wood substitutes; composition and characteristics of hardboard, particle board and plastic laminates; material specifications; principles of application to industrial use.

Advanced technical study, research and experimentation in wood adhesives, types, characteristics and application techniques of natural and synthetic adhesives; joinery and control factors; curing and comparative testing.

Advanced technical study, research and experimentation in solid state electronics; amplifying devices; solid state and integrated circuit analysis and design.

*IED 651B. (INT 651B.) Advanced Technical Study in Electricity/Electronics: Computer Electronics. Three hours. A.
Advanced technical study, research and experimentation in computer electronics; digital systems, logic, component functions, memory systems, and control circuitry.

*IED 651C. (INT 651C.) Advanced Technical Study in Electricity/Electronics: Communicative Systems. Three hours. A.
Advanced technical study, research and experimentation in electronic communicative systems; signal analysis, transmission and modulation; intelligence and navigational transmission and reception; trouble shooting analysis and procedures.

*IED 651D. (INT 651D.) Advanced Technical Study in Electricity/Electronics: Microwave Electronics. Three hours. A.
Advanced technical study, research and experimentation in microwave electronics; field phenomena; equipment components and characteristics; measurement techniques; communication systems.

*IED 651E. (INT 651E.) Advanced Technical Study in Electricity/Electronics: Instrumentation. Three hours. A.
Advanced technical study, research and experimentation in instrumentation; measurement concepts; industrial considerations; electrical and electronic instruments and applications; control and regulation systems.

IED 661. Supervision in Technical Education. Three hours. A.
Principles, objectives, methods, techniques, and practices of supervision; specific problems in the supervision of technical education; selecting and organizing materials; planning and equipping education facilities; professional relations and in-service education.

IED 662. Philosophy of the Practical Arts and Vocational Education. Three hours. II.
Background, purpose and philosophies of the practical arts and vocational education; relationship to general education; effects of legislation for the practical arts and vocational education; the state plan.

IED 663. Organization and Administration of Technical Education. Three hours. A.
Organization of industrial education on the local, state, and national level; federal legislation in technical education; federal-state relationship; types of technical, vocational, and general industrial education programs and schools.

IED 664. Special Problems in Industrial Education. One-six hours. I, II.
Problems of particular value to the teacher in the field, both of a practical and of a research nature, will be pursued by the student and developed through conferences and activities directed by the staff.

*Credit is to be granted for only one of these cross-listed courses.


IED 665. Curriculum Practices and Trends in Industrial Education. Three hours. I.
Current concepts and trends in industrial education; principles underlying curriculum construction and development; long range planning for improvement of programs.

IED 666. Seminar in Industrial Education. Three hours. I.
A course for the graduate student in industrial education. Current problems and issues in the total field of industrial education will be studied with an emphasis placed on identifying their philosophical and/or psychological dimensions. Research techniques appropriate for industrial education with an emphasis on experimental design and statistical procedures of analysis. Each student will be expected to plan and complete a minor research paper, and to present his findings to the seminar.

IED 667. Thesis Research in Industrial Education. Three-six hours. I, II.
Students preparing theses are expected to register for three hours of thesis research in each of two semesters.

Advanced technical study, research and experimentation in industrial metrology; precision measurement equipment and techniques; high amplification pneumatic, electronic, mechanical, and optical comparators; interferometry, radiography and monochromatic light techniques.

Advanced technical study, research and experimentation in tool design; design and fabrication of tooling jigs, fixtures and dies; modern metal forming production techniques; efficiency in machine utilization; heat treatment of metallic substances.

Advanced technical study, research and experimentation in materials testing; non-destructive tests including Zyglo, Magniglo, dye penetrant, magniflux, X-ray, ultrasonic, nucelonic, and radiographic; destructive tests including tensile strength, compression, shear, torsion, and impact resistance; specimen preparation.

*IED 681D. (INT 681D.) Advanced Technical Study in Metals Technology: Mechanical Power Transmission. Three hours. A.
Advanced technical study, research and experimentation in mechanical power transmission devices; properties and design application of the involute curve; gear types; spherical and planetary application systems; design and fabrication of power transmission devices.

Advanced technical study, research and experimentation in metals assembly processes; adhesive bonding and seals; mechanical fasteners and components; brazing, soldering and welding techniques; pneumatic and hydraulic assembly applications.

*IED 691A. (INT 691A.) Advanced Technical Study in Drafting Technology: Theory of Projection I. Three hours. A.
Advanced technical study, research and experimentation in drafting projection theory; Mongeian method and adaptations; positional change and theorems; force systems; Bow's notation; Pappus and Guldinus Theorem; four-dimensional descriptive geometry.

*IED 691B. (INT 691B.) Advanced Technical Study in Drafting Technology: Theory of Projection II. Three hours. A.
Continuation of IED 691A; axonometric, oblique, perspective, and stereographic projection; shades and shadows applied to pictorial representation.

*Credit is to be granted for only one of these cross-listed courses.
*IED 691C. (INT 691C.) Advanced Technical Study in Drafting Technology: Advanced Illustration. Three hours. A.
Advanced technical study, research and experimentation in industrial illustration; media; pencil, ink, Zip-a-tone, scratchboard, double and triple-tone board, coquille board, intaglio, airbrush, and planographic impression techniques; photo retouching; problems analysis; preparation of presentations.

*IED 691D. (INT 691D.) Advanced Technical Study in Drafting Technology: Drafting Reproduction Processes. Three hours. A.
Advanced technical study, research and experimentation in drafting reproduction processes; exposure and development systems; dry and moist diazo, blueprint. Van Dyke, azograph, offset, microfilm, photostat, and reflex processes.

*IED 691E. (INT 691E.) Advanced Technical Study in Drafting Technology; Drafting Standards. Three hours. A.
Advanced technical study, research and experimentation in drafting standards; study and comparison of ASA, military, SAF, AMS, and selected industrial standards; influences affecting standards; preparation of standards for a manufacturing or architectural establishment.

*Credit is to be granted for only one of these cross-listed courses.

INDUSTRIAL TECHNOLOGY (INT)

K. Hansson, Chairman; Gilliland, Masterson, Prewitt, Sexton, Torbett, Way.

The primary function of the Industrial Technology Department is to prepare persons for entrance into technical occupations. Curricula are designed for those who do not wish to teach, but who desire to secure gainful employment in industry.

The Industrial Technology Curriculum combines a broad and balanced technical program with a sound foundation in mathematics, natural sciences, social sciences, and communications in order to prepare the individual to cope with a wide range of industrial problems.

A first major, second major, or minor in Industrial Technology enables an individual to complement specialized technical preparation in a specific subject matter area with preparation in business organization and management, mathematics, or the sciences.

The two-year curricula leading to an Associate of Arts Degree are designed for students who wish to prepare for gainful employment in certain industrial and technical occupational areas in less than four years. Emphasis in each curriculum is placed on specialized technical preparation. Courses included in each program may be later credited toward a Bachelor of Science Degree.
INDUSTRIAL TECHNOLOGY CURRICULUM

The first two years of this curriculum may be found in the Central University College section.

Third Year

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Fourth Year

| General Elective | 4-6 | *INT Elective | 6 |
| *INT Elective | 6 | |
|                | 13-15 | 14-17 |

*A minimum of thirty-seven hours must be selected from Upper Division Courses.

INT electives should be selected so that at least thirty semester hours will be divided between two of the following departmental areas: architectural drawing, technical drawing, communications electronics, industrial electronics, graphic arts, and metals.

Curriculum for a First Major in Industrial Technology*

A student with a second major or a minor in another field may take the following courses for a first major in Industrial Technology: INT 191, 311, 351, 372, plus the required courses in one area of specialization as follows:

Drafting with emphasis in:


Architectural Drawing: OHO 362; INT 205, 292, 293, 394, 395, 496.

Electricity-Electronics with emphasis in:

Communications: INT 180, 353, 454, 455, Elective (6 hours).

Industrial Electronics: INT 180, 352, 353, 451, 452, Elective (3 hours).


Graphic Arts: INT 180, 205, 312, 315, 411, Elective (3 hours).

*Students planning to follow this curriculum should consult with the head of the Industrial Technology Department.
Curriculum for a Second Major or Minor in Industrial Technology*

A student with a first major or minor in another field may take the following courses for a second major or minor in Industrial Technology:

With emphasis in Technical Drawing:
INT 191, 205, 281, 292, 293, 395, 492, Elective (3 hours).

With emphasis in Architectural Drawing:
OHO 362A; INT 191, 205, 292, 293, 394, 395, 496, Elective (3 hours).

With emphasis in Communications Electronics:
INT 180, 191, 351, 353, 454, 455, Elective (6 hours).

With emphasis in Industrial Electronics:

With emphasis in Metals:

With emphasis in Graphic Arts:
INT 191, 205, 311, 312, 315, 351, 411, Elective (3 hours).

*Students planning to follow this curriculum should consult with the head of the Industrial Technology Department.

**INDUSTRIAL TECHNOLOGY**
**BROADCAST ENGINEERING TECHNOLOGY**

Curriculum with a major in Broadcast Engineering Technology leading to an Associate of Arts Degree.

**First Year**

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**Second Year**

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Summer Term INT 225A                | 2 or 4|                                     |       |
|                                   | 16    | 16-18                               |
# DRAFTING AND DESIGN TECHNOLOGY

Curriculum with a major in Drafting and Design Technology leading to an Associate of Arts Degree

## First Year

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# DRAFTING TECHNOLOGY

Curriculum with a major in Drafting Technology leading to an Associate of Arts Degree

## First Year

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## Second Year

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ELECTRONICS TECHNOLOGY

Curriculum with a major in Electronics Technology leading to an Associate of Arts Degree

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APPLIED ELECTRONICS TECHNOLOGY

Curriculum with a major in Applied Electronics Technology leading to an Associate of Arts Degree

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### INSTRUCTIONAL MEDIA TECHNOLOGY

Curriculum with a major in Instructional Media Technology leading to an Associate of Arts Degree

**First Year**

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<td>INT 205</td>
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**Summer Term**

| INT 225B             | 2 or 4 |

**Second Year**

| ART 317 or 321       | 3     | General Education Elective       | 3     |
| LIB 126              | 3     | INT 220D                         | 3     |
| EDF 202              | 3     | INT 311                          | 3     |
| INT 351              | 2     | INT 353                          | 3     |
| MIL 201 or Option    | 3     | MIL 202 or Option                | 2     |

### PRINTING TECHNOLOGY

Curriculum with a major in Printing Technology leading to an Associate of Arts Degree

**First Year**

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<th>First Semester</th>
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**Second Year**

| INT 205              | 3     | INT 351                          | 3     |
| INT 216              | 5     | Social Science Elective          | 3     |
| INT 411              | 3     | INT 201                          | 3     |
| MIL 201 or Option    | 2     | INT 317                          | 5     |
| OAD 101              | 3     | MIL 202 or Option                | 2     |

**Hours**

| First Year          | 16    |
| Second Year         | 17    |
| Summer Term         |       |
|                    | 2 or 4|

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**PRINTING TECHNOLOGY**

Curriculum with a major in Printing Technology leading to an Associate of Arts Degree

**First Year**

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**Second Year**

| INT 205              | 3     | INT 351                          | 3     |
| INT 216              | 5     | Social Science Elective          | 3     |
| INT 411              | 3     | INT 201                          | 3     |
| MIL 201 or Option    | 2     | INT 317                          | 5     |
| OAD 101              | 3     | MIL 202 or Option                | 2     |

**Hours**

| First Year          | 16    |
| Second Year         | 16    |

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INDUSTRIAL TECHNOLOGY (INT)

**INT 105. Industrial Orientation I.** One hour. I, II.
The evolution of American industry; contemporary industrial organization; wage systems; organized labor and labor-management relationships; impact of automation on industrial operations; current information regarding technical occupations; field trips to selected industrial firms.

**INT 106. Industrial Orientation II.** One hour. I, II.
A continuation of Industrial Technology 105 with emphasis placed on introductory topics related to plant layout, materials handling, methods improvement, motion and time study, work sampling techniques, work simplification, inspection and quality control, and production control; solution of selected problems; in-plant observation.

**INT 141. (IED 141.) Elementary Woodwork.** Three hours. I, II.
Basic instruction in the use of common hand tools; elementary machine operations; problems in wood construction; woodturning; related technical information; finishing and characteristics of common hard and soft woods.

**INT 180. (IED 180.) General Metalwork I.** Three hours. I, II.
Basic hand and machine operations and related information in sheet metal, bench metal, art metal, arc and oxyacetylene welding; projects and problems in each area of activity.

**INT 191. (IED 191.) Technical Drawing I.** Three hours. I, II.
Basic technical drawing involving sketching, lettering, orthographic projection, pictorial representation, drafting techniques, tracing and reproduction of drawings.

**INT 201. (IED 201.) Applied Mathematics in Technology.** Three hours. I, II.
Mathematics involving an intensive study of applied algebra, geometry, and trigonometry with emphasis on the application of mathematics in the solution of technical problems.

**INT 205. Technical Illustration I.** Three hours. A.
Prerequisite: INT 191 or consent of instructor.
Axonometric projection— isometric, dimetric and trimetric; oblique, pseudo representations and perspectives; commercial and technical illustration including airbrush, pencil rendering, ink delineations and other methods.

**INT 216. Production Printing I.** Five hours. A.
Basic printing experiences gained through work in the university print shop or in commercial printing establishments.

**INT 220A. Practicum in Broadcast Operations.** Three hours. A.
Supervised practical experiences in the operation of broadcast communication equipment; includes TV cameras and monitors, master switching panels, recording and projection devices; preparational procedures for FCC Licensing.

**INT 220B. Practicum in Communication Equipment Maintenance.** Three hours. A.
Supervised practical experiences in the maintenance of broadcast communication equipment; includes TV cameras and monitors, master switching panels, audio systems, recording and projection devices; continuation of preparational procedures for FCC Licensing.

**INT 220C. Practicum in Instructional Media Materials.** Three hours. A.
Supervised practical experiences in the design and preparation of instructional devices; includes slides, maps, charts, graphs, diagrams, models, dioramas, and transparencies; local production techniques and equipment.

**INT 220D. Practicum in Instructional Media Equipment.** Three hours. A.
Supervised practical experiences in the selection, installation and maintenance of instructional media equipment; preparation of bid specifications; minor repairs and preventive maintenance.

*Credit is to be granted for only one of these cross-listed courses.*
INT 225A. Internship in Broadcast Engineering. Two or four hours. A.
Coordinated and supervised work experience in broadcast engineering; arranged in
approved University facilities or commercial establishments; credit varies with hours
of employment: half-time, two hours; full-time, four hours.

INT 225B. Internship in Instructional Media. Two or four hours. A.
Coordinated and supervised work experience in instructional media design and
fabrication; arranged in approved University facilities or commercial establishments;
credit varies with hours of employment: half-time, two hours; full-time four hours.

INT 240. Woods and Their Interior Uses. Three hours. A.
Basic characteristics, care and use of various woods; elementary hand tool and
machine woodworking processes; finishing and refinishing of wood; plastic laminate
and other products for interior application.

*INT 242. (IED 242.) Intermediate Woodwork. Three hours. I, II.
Prerequisite: INT 141.
Advanced woodworking operations; instruction in the operation of woodworking
machines; care and sharpening of tools; related technical information; construction
and finishing of projects.

INT 244. (IED 244.) Wood Technology and Utilization. Three hours. A.
Wood as a raw material; manufacture, properties, and applications of wood and
wood-base products; materials and processes involved in the production of fabricated
wood products.

*INT 281. (IED 281.) General Metalwork II. Three hours. I, II.
Basic hand tool and machine operations; foundry; forging; heat treating; machine
shop projects and problems; related information in each area of activity.

*INT 283. (IED 283.) Arc and Oxyacetylene Welding. Three hours. A.
Manipulative processes and related information basic to successful arc, oxyacetylene,
and tungsten inert gas welding; metallurgy of welding; physical testing of weldments.

*INT 292. (IED 292.) Technical Drawing II. Three hours. I, II.
Prerequisite: INT 191.
Preparation of detail and assembly drawings; production illustrations; threaded
and fasteners; shop processes; dimetric projections; secondary auxiliaries; reproduction
processes and materials.

*INT 293. (IED 293.) Technical Drawing III. Three hours. A.
Prerequisite: INT 191.
Advanced drafting techniques with special emphasis on map drafting and element-
ary surveying.

*INT 311. (IED 311.) Graphic Arts I. Three hours. I, II.
General graphic arts with emphasis on hand composition, elementary presswork,
silk-screen principles, linoleum block printing and bookbinding.

*INT 312. (IED 312.) Graphic Arts II. Three hours. I, II.
Prerequisite: INT 311.
Advanced graphic arts with emphasis on automatic machine printing; production
techniques; photography; and offset lithography.

*INT 315. (IED 315.) (Formerly INT 512.) Photography I. Three hours. A.
Picture composition, film developing, printing, enlarging, dodging, contact printing,
photo finishing, study of and care for equipment and materials; visual instruction;
planning of facilities. (Each student required to provide camera.)

INT 317. Production Printing II. Five hours. A.
Prerequisite: INT 312.
Advanced printing experiences acquired through work in the university print shop
or in commercial printing establishments.

*Credit is to be granted for only one of these cross-listed courses.
*INT 351. (IED 351.) Fundamentals of Applied Electricity. Three hours. I, II.
Principles of static and current electricity; measures of electricity; heat, light, and
power applied to the planning and construction of electrical installations.

*INT 352. (IED 352.) Electrical Power and Motor Repair. Three hours. A.
Prerequisite: INT 351.
Generation and distribution of electricity; power distribution systems; maintenance
and repair of electrical power.

*INT 353. (IED 353.) Introduction to Electronics. Three hours. I, II.
Prerequisite: INT 351.
Fundamentals of vacuum tubes; semiconductor devices; AM radio receivers and
servicing techniques.

*INT 372. (IED 372.) Power Mechanics I. Three hours. I, II.
Prerequisite: INT 351.
Principles of power sources and basic mechanisms; disassembly, inspection, meas-
urement, adjustment, and tune-up of the two and four-cycle small gasoline engine.

*INT 373. (IED 373.) Power Mechanics II. Three hours. I, II.
Prerequisite: INT 372.
Study of the multi-cylinder engine; fuels and fuel systems; lubrication, cooling,
ignition, tests, tune-up, adjustment and minor repair.

*INT 382. (IED 382.) Machine Tool Processes I. Three hours. I, II.
Prerequisite: INT 281.
Projects and problems involving machine operations on the lathe; bench work;
blueprint reading; precision measurement; related technical information.

*INT 394. (IED 394.) Architectural Drawing I. Three hours. I, II.
Prerequisite: INT 191.
Basic principles of house planning; styles of home architecture; comparative study
of building materials; the preparation of a complete set of plans and specifications for
a small home.

*INT 395. (IED 395.) Descriptive Geometry. Three hours. A.
Prerequisite: INT 191 or consent of instructor.
Application of the theory of orthographic projection to the graphical representation
and solution of three-dimensional problems.

*INT 411. (IED 411.) Graphic Arts III. Three hours. A.
Prerequisite: INT 312.
Advanced photography; offset lithography; graphic arts materials and processes;
printing management; current trends in the graphic arts industry.

*INT 451. (IED 451.) Industrial Electronics I. Three hours. I.
Prerequisite: INT 353.
Principles of timing, control circuitry, transducers, polyphase systems, and gaseous
tubes as applied to industrial and commercial installations.

*INT 452. (IED 452.) Industrial Electronics II. Three hours. II.
Prerequisite: INT 451.
Applications of industrial control circuitry; generation of electricity; power distrib-
ution systems; maintenance and repair of electrical devices.

*INT 454. (IED 454.) Communications Electronics I. Three hours. I.
Prerequisite: INT 353.
Advanced radio communication receiving principles; quality audio reproducing
deVICES; transmitter procedures; transmitting antennas; communications systems and
electronics servicing techniques.

*Credit is to be granted for only one of these cross-listed courses.
*INT 455. (IED 455.) Communications Electronics II. Three hours. II.
Prerequisite: INT 454.
Principles of television; antenna theory and installation; closed circuit television
operation; television servicing techniques.

*INT 471. (IED 471.) Power Transmission. Three hours. A.
Prerequisite: INT 373.
Principles of mechanical, electrical and fluid power transmission. Disassembly,
service; inspection, and adjustment of mechanical transmission units; construction of fluid
power circuits emphasizing their application to modern machines.

*INT 472. (IED 472.) Chassis and Electrical Systems. Three hours. A.
Prerequisite: INT 373.
Detailed study and application of starting, charging, lighting, and accessory circuits;
suspension, brakes, power brakes, steering, power steering, air conditioning.

*INT 487. (IED 487.) Machine Tool Processes II. Three hours. A.
Prerequisite: INT 382.
Continuation of Industrial Technology 382 with increased emphasis on machine
tool operations; gear cutting; tool and cutter grinding; problems in tool making; related
technical information.

*INT 488. (IED 488.) Machine Tool Processes III. Three hours. A.
Prerequisite: INT 487.
Advanced machine tool operations and tool making; heat treating of metals; related
technical studies and metrology.

*INT 489. (IED 489.) Characteristics and Maintenance of Machine Tools. Two
hours. A.
Prerequisite: INT 487.
Machine design and construction; installing, servicing, powering and rebuilding
machine tools.

*INT 492. (IED 492.) Technical Drawing IV. Three hours. I.
Prerequisite: INT 292.
Advanced machine drafting dealing with detail and assembly drawing, patent
drawing, production illustrations, and tool design.

*INT 496. (IED 496.) Architectural Drawing II. Three hours. II.
Prerequisite: INT 394.
Preparation of complete plans and specifications for small commercial and large
residential buildings; emphasis on modern methods and materials utilized in the building
industry; illustrative rendering; structural modeling.

*INT 501. (IED 501.) Special Problems in Industrial Technology. Three hours.
I, II.
A course for graduates and exceptional undergraduates involving independent study
and research related to problems of a theoretical and/or practical nature.

*INT 502. (IED 502.) Industrial Materials and Processes. Three hours. A.
Characteristics, utilization and processing of industrial materials such as wood,
metals, plastics, clay, glass, concrete, etc.; composition and working qualities; types,
grades, availability, and suitability of materials for varying purposes; shaping, forming,
cutting, and finishing processes; quality, prices and control of materials and products.

*INT 511. (IED 511.) Advanced Technical Problems in Graphic Arts. Two-six
hours. I, II.
Technical instruction in the graphic arts field. Recent developments, advanced
technical and experimental problems, and preparation of technical reports in graphic
arts.

*Credit is to be granted for only one of these cross-listed courses.
*INT 533. (IED 533.) Workshop in Industrial Technology. One-four hours. A. 533b Graphic Arts; 533c Plastics; 533d Power Mechanics; 533c Electronics; 533g Metals. (Maximum credit in any category is limited to four hours.)


*INT 561. (IED 561.) Evaluation in Technical Education. Three hours. A. Methods of evaluation in technical education; elementary statistical procedures; preparation and use of measuring devices; assessing technical competency, creativeness, quality, and quantity; analysis and interpretation of test results.


*INT 591. (IED 591.) Advanced Technical Problems in Drafting. Two-six hours. I, II. Technical instruction in the drafting field. Recent developments, advanced technical and experimental problems, and preparation of technical reports in drafting.

**GRADUATE COURSES**

*INT 611A. (IED 611A.) Advanced Technical Study in Printing Technology: Photography. Three hours. A. Advanced technical study, research and experimentation in photography; cameras and lenses, filters, films, enlarging, dodging, and finishing; color photography; dark-room techniques.

*INT 611B. (IED 611B.) Advanced Technical Study in Printing Technology: Layout and Design. Three hours. A. Advanced technical study, research and experimentation in layout and design; concepts of graphic design related to newspapers, books, brochures, flyers, and posters; practical experience in design and layout of graphic presentations.


*Credit is to be granted for only one of these cross-listed courses.
Advanced Technical Study in Printing Technology: Quality Control. Three hours. A.
Advanced technical study, research and experimentation in printing quality control; plant layout, temperature, humidity, chemicals, papers, and photographic materials.

Creative Problem Solving in Technical Fields. Three hours. A.
A review and analysis of basic and applied research in the development of creative behavior with emphasis on its application to industrial teaching and industrial problem solving.

Advanced Technical Study in Wood Technology: Structure and Characteristics. Three hours. A.
Advanced technical study, research and experimentation in structure and characteristics of wood; species, chemical composition, botanical structure, physical characteristics, and identification techniques.

Advanced Technical Study in Wood Technology: Dimensional Stability. Three hours. A.
Advanced technical study, research and experimentation in dimensional stability of wood; moisture content effects and control, strength and density, seasoning, and drying defects.

Advanced Technical Study in Wood Technology: Veneer and Plywood Production. Three hours. A.
Advanced technical study, research and experimentation in veneer and plywood production; veneer production and specifications; strength characteristics, specifications, grades, and uses of hardwood and softwood plywood; grading and production processes.

Advanced Technical Study in Wood Technology: Wood Substitutes. Three hours. A.
Advanced technical study, research and experimentation in wood substitutes; composition and characteristics of hardboard, particle board and plastic laminates; material specifications; principles of application to industrial use.

Advanced Technical Study in Wood Technology: Adhesives. Three hours. A.
Advanced technical study, research and experimentation in wood adhesives; types, characteristics and application techniques of natural and synthetic adhesives; joinery and control factors; curing and comparative testing.

Advanced Technical Study in Electricity/Electronics Technology: Solid State Electronics. Three hours. A.
Advanced technical study, research and experimentation in solid state electronics; amplifying devices; solid state and integrated circuit analysis and design.

Advanced Technical Study in Electricity/Electronics: Computer Electronics. Three hours. A.
Advanced technical study, research and experimentation in computer electronics; digital systems, logic, component functions, memory systems, and control circuitry.

Advanced Technical Study in Electricity/Electronics: Communicative Systems. Three hours. A.
Advanced technical study, research and experimentation in electronic communicative systems; signal analysis, transmission and modulation; Intelligence and navigational transmission and reception; trouble shooting analysis and procedures.

Advanced Technical Study in Electricity/Electronics: Microwave Electronics. Three hours. A.
Advanced technical study, research and experimentation in microwave electronics; field phenomena; equipment components and characteristics; measurement techniques; communication systems.

*Credit is to be granted for only one of these cross-listed courses.*
*INT 651E. (IED 651E.) Advanced Technical Study in Electricity/Electronics: Instrumentation. Three hours. A.
Advanced technical study, research and experimentation in instrumentation; measurement concepts; industrial considerations; electrical and electronic instruments and applications; control and regulation systems.

INT 665. Thesis I. Three hours. A.

INT 666. Thesis II. Three hours. A.

INT 667. Research in Industrial Technology. Three hours. A. (May be repeated for a maximum of six hours.)
Individual investigations in the field of industrial technology. Investigations may be conducted in the field of laboratory and under the supervision of the research advisor and other staff members.

Advanced technical study, research and experimentation in industrial metrology: precision measurement equipment and techniques; high amplification pneumatic, electronic, mechanical, and optical comparators; interferometry, radiography and monochromatic light techniques.

*INT 681B. (IED 681B.) Advanced Technical Study in Metals Technology: Tool Design. Three hours. A.
Advanced technical study, research and experimentation in tool design; design and fabrication of tooling jigs, fixtures and dies; modern metal forming production techniques; efficiency in machine utilization; heat treatment of metallic substances.

Advanced technical study, research and experimentation in materials testing; non-destructive tests including Zyglo, Magniglo, dye penetrant, magniflux, X-ray, ultrasonic, nucleonic, and radiographic; destructive tests including tensile strength, compression, shear, torsion, and impact resistance; specimen preparation.

*INT 681D. (IED 681D.) Advanced Technical Study in Metals Technology: Mechanical Power Transmission. Three hours. A.
Advanced technical study, research and experimentation in mechanical power transmission devices; properties and design application of the involute curve; gear types; spherical and planetary application systems; design and fabrication of power transmission devices.

*INT 681E. (IED 681E.) Advanced Technical Study in Metals Technology: Assembly Processes. Three hours. A.
Advanced technical study, research and experimentation in metals assembly processes; adhesive bonding and seals; mechanical fasteners and components; brazing, soldering and welding techniques; pneumatic and hydraulic assembly applications.

*INT 691A. (IED 691A.) Advanced technical Study in Drafting Technology: Theory of Projection I. Three hours. A.
Advanced technical study, research and experimentation in drafting projection theory; Mongeian method and adaptations; positional change and theorems; force systems; Bow's notation; Pappus and Guldinus Theorem; four-dimensional descriptive geometry.

*INT 691B. (IED 691B.) Advanced Technical Study in Drafting Technology: Theory of Projection II. Three hours. A.
Continuation of INT 691A; axonometric, oblique, perspective, and stereographic projection; shades and shadows applied to pictorial representations.

*Credit is to be granted for only one of these cross-listed courses.
*INT 691C. (IED 691C.) Advanced Technical Study in Drafting Technology: Advanced Illustration. Three hours. A.

Advanced technical study, research and experimentation in industrial illustration; media; pencil, ink, Zip-a-tone, scratchboard, double and triple-tone board, coquille board, intaglio, airbrush, and planographic impression techniques; photo retouching; problems analysis; preparation of presentations.

*INT 691D. (IED 691D.) Advanced Technical Study in Drafting Technology: Drafting Reproduction Processes. Three hours. A.

Advanced technical study, research and experimentation in drafting reproduction processes; exposure and development systems; dry and moist diazo, blueprint, Van Dyke, azograph, offset, microfilm, photostat and reflex processes.

*INT 691E. (IED 691E.) Advanced Technical Study in Drafting Technology: Drafting Standards. Three hours. A.

Advanced technical study, research and experimentation in drafting standards; study and comparison of ASA, military, SAE, AWS, and selected industrial standards; influences affecting standards; preparation of standards for a manufacturing or architectural establishment.

*Credit is to be granted for only one of these cross-listed courses.

THE KENTUCKY SCHOOL OF CRAFTS (KYC)

K. Hansson, Coordinator

The primary function of the Kentucky School of Crafts is to provide opportunities for teachers and novice craftsmen to gain knowledge and skill and for practicing craftsmen to upgrade themselves in their particular craft through in-service programs and extension type classes. Further information regarding activities of the School may be obtained by contacting the Coordinator.

LAW ENFORCEMENT (LEN)

R. W. Posey, Director; Black, Byrd, McAngus, Moody, Scott, Snarr. Lecturers: Amato, Boucher, Chenault, Easterling, Famularo, Freeman, McGinnis, Watson.

The responsibility of the School of Law Enforcement is to prepare students for careers in police work. The curricula present subjects in organization, supervision, operations, and techniques. Enforcement, utilizing both repressive and preventive approaches, as well as investigative techniques with laboratory participation is treated. The student may expect to acquire a foundation in police history, philosophy, and trends.

Four-year Bachelor of Science degree programs are offered with majors in the areas of law enforcement and corrections. Two-year programs leading to the Associate of Arts degree are available in general law enforcement, juvenile, corrections, and industrial security.

Students completing this program should expect employment in state police organizations, federal law enforcement agencies, county police agencies, city police agencies, various investigative agencies, corrections and social work.
Students will be fully admitted to the Department of Law Enforcement only after a determination of good character has been made. A thorough check will be made of each student’s background during the first semester in which the student enrolls for Law Enforcement courses.

A student may minor in Law Enforcement by taking a minimum of 18 semester hours. He may take LEN 101, LEN 205, LEN 304 and LEN 314. Nine hours must be in upper division courses.

A student who is not proficient in typing will be required to enroll in OAD 151 to remove this deficiency.

**LAW ENFORCEMENT—GENERAL**

Curriculum with a major in Law Enforcement leading to the Bachelor of Science Degree. The first two years of this curriculum may be found in the Central University College section of the catalogue.

### Third Year

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Hours</th>
<th>Second Semester</th>
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<tbody>
<tr>
<td><strong>LEN Elect.</strong></td>
<td>3</td>
<td>LEN 303</td>
<td>3</td>
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<tr>
<td>LEN 301</td>
<td>3</td>
<td>LEN 304</td>
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<tr>
<td>LEN 302</td>
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<tr>
<td>*Minor Subject</td>
<td>3</td>
<td>PSY 308</td>
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<td>PSY 211</td>
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<td>SOC 131</td>
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### Fourth Year

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<tbody>
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<td>LEN 306</td>
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<td>LEN 307</td>
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<tr>
<td>*Minor Subject</td>
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<td>**LEN Elect.</td>
<td>3</td>
</tr>
<tr>
<td>*Minor Subject</td>
<td>3</td>
<td>POL 362</td>
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</table>

*Minors are recommended in the fields of business, psychology, sociology, or political science. The minor field should be selected in consultation with the Director of the School of Law Enforcement. The courses comprising the minor field (18 semester hours) will be selected with the approval of the Director of the School of Law Enforcement and the department head in the minor field.

**Law Enforcement electives selected with approval of the Director of the School of Law Enforcement. Other electives must be approved by the Director of the School of Law Enforcement and should be selected from courses offered by the Department of Anthropology and Sociology.

### CORRECTIONS

Curriculum with a major in Corrections leading to the Bachelor of Science Degree. The first two years of this curriculum may be found in the Central University College section of the catalogue.
### Third Year

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Hours</th>
<th>Second Semester</th>
<th>Hours</th>
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<tbody>
<tr>
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<td>PSY 211</td>
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<td>SOC 320</td>
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<td>PSY 308</td>
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### Fourth Year

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<td>General or Minor electives</td>
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<td>LEN 321</td>
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<td>LEN 307</td>
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<tr>
<td>LEN 420</td>
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<td>LEN or Minor elective</td>
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<td>LEN or Minor elective</td>
<td>3</td>
<td>SWK 500</td>
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Minors: Political Science, Psychology, Social Work or Sociology are recommended. A minor in Business Administration, Recreation and Park Administration, Rehabilitation Education (non-teaching), or other approved field may be chosen.

### LAW ENFORCEMENT—GENERAL

Curriculum for an Associate of Arts Degree

#### First Year

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Hours</th>
<th>Second Semester</th>
<th>Hours</th>
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<tbody>
<tr>
<td>GSC 171</td>
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<tr>
<td>GSE 101</td>
<td>3</td>
<td>GSE 102</td>
<td>3</td>
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<tr>
<td>GSO 100</td>
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<td>GSP 181</td>
<td>1</td>
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<tr>
<td>GSP 180</td>
<td>1</td>
<td>LEN 102</td>
<td>3</td>
</tr>
<tr>
<td>HEA 202</td>
<td>2</td>
<td>LEN 203</td>
<td>3</td>
</tr>
<tr>
<td>LEN 101</td>
<td>3</td>
<td>LEN 205</td>
<td>3</td>
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<td>MIL 101 or option</td>
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#### Second Year

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<th>First Semester</th>
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<th>Second Semester</th>
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<tbody>
<tr>
<td>LEN 301</td>
<td>3</td>
<td>LEN 304</td>
<td>3</td>
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<td>LEN 302</td>
<td>3</td>
<td>LEN 305</td>
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<tr>
<td>LEN 303</td>
<td>3</td>
<td>LEN 306</td>
<td>3</td>
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<td>MIL 202 or option</td>
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<tr>
<td>POL 101</td>
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<td>POL 362</td>
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<td>PSY 211</td>
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## LAW ENFORCEMENT—INDUSTRIAL SECURITY
### Curriculum for an Associate of Arts Degree

### First Year

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<th>First Semester</th>
<th>Hours</th>
<th>Second Semester</th>
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<tbody>
<tr>
<td>GSC 171</td>
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<td>BIO 162 or GSC 172</td>
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</tr>
<tr>
<td>GSE 101</td>
<td>3</td>
<td>GSE 102</td>
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<tr>
<td>GSO 100</td>
<td>1</td>
<td>GSP 181</td>
<td>1</td>
</tr>
<tr>
<td>GSP 180</td>
<td>1</td>
<td>LEN 102</td>
<td>3</td>
</tr>
<tr>
<td>HEA 202</td>
<td>2</td>
<td>LEN 203</td>
<td>3</td>
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<tr>
<td>LEN 101</td>
<td>3</td>
<td>LEN 205</td>
<td>3</td>
</tr>
<tr>
<td>MIL 101 or option</td>
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<td>18</td>
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### Second Year

| LEN 301        | 3     | LEN 304          | 3     |
| LEN 302        | 3     | LEN 306          | 3     |
| LEN 312        | 3     | LEN 307          | 1     |
| MIL 201 or option | 2  | MIL 313          | 3     |
| POL 101        | 3     | POL 202 or option | 2    |
| PSY 211        | 3     | POL 362          | 3     |
|                | 17    | SOC 131          | 3     |

### LAW ENFORCEMENT—CORRECTIONS
### Curriculum for an Associate of Arts Degree

### First Year

<table>
<thead>
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<th>First Semester</th>
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<tr>
<td>General Education Laboratory</td>
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<td>GSE 102</td>
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<td>Science</td>
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<td>GSE 101</td>
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<td>GSO 100</td>
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<td>LEN 120</td>
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<td>GSP 180</td>
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<td>MIL 102 or option (men) or elective (women)</td>
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<tr>
<td>LEN 101</td>
<td>3</td>
<td>SOC 131</td>
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<td>MIL 101 or option (men) or elective (women)</td>
<td>2</td>
<td>SWK 210</td>
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<tr>
<td>POL 100 or 101</td>
<td>3</td>
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### Second Year

| LEN 220        | 3     | LEN 303 or 314   | 3     |
| LEN 221        | 3     | LEN 307          | 1     |
| LEN 311        | 3     | LEN 322          | 3     |
| MIL 201 or Option (men) or elective (women) | 2  | LEN 321          | 3     |
| PSY 211        | 3     | MIL 202 or Option (men) or elective (women) | 2 |
| SOC 320 or 375 | 3     | POL 203 or 362   | 3     |
|                | 17    | PSY 308          | 3     |

|                | 18    |
LAW ENFORCEMENT—JUVENILE  
Curriculum for an Associate of Arts Degree

First Year

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<thead>
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<th>First Semester</th>
<th>Hours</th>
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<tbody>
<tr>
<td>GSC 171</td>
<td>3</td>
<td>BIO 162 or GSC 172</td>
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<tr>
<td>GSE 101</td>
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<td>GSE 102</td>
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<tr>
<td>GSO 100</td>
<td>1</td>
<td>GSP 181</td>
<td>1</td>
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<td>GSP 180</td>
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<td>LEN 102</td>
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<tr>
<td>HEA 202</td>
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<td>LEN 205</td>
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<tr>
<td>LEN 101</td>
<td>3</td>
<td>LEN 205</td>
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<td>MIL 101 or option</td>
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Second Year

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<tr>
<th>First Semester</th>
<th>Hours</th>
<th>Second Semester</th>
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<tbody>
<tr>
<td>LEN 301</td>
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<td>LEN 304</td>
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<tr>
<td>LEN 303</td>
<td>3</td>
<td>LEN 306</td>
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<tr>
<td>LEN 310</td>
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<td>MIL 201 or option</td>
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<td>LEN 311</td>
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<tr>
<td>POL 101</td>
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<td>MIL 202 or option</td>
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<td>PSY 211</td>
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<td>POL 262</td>
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LAW ENFORCEMENT (LEN)

LEN 101. Introduction to Law Enforcement. Three hours. A.
An introduction to the philosophical and historical background; agencies and processes; purposes and functions. An evaluation of law enforcement today; current trends; career orientation.

LEN 102. Police Systems. Three hours. A.
Police Systems established in America and abroad; functions and activities, divisions and subdivisions with responsibilities and functions of each. Contrasting of structures, with a view of transitions.

LEN 120. Introduction to Corrections. Three hours. A.
Philosophical and historical background of corrections; European antecedents and the American evolution of correctional facilities and programs; survey of career opportunities.

LEN 203. Police Patrol and Services. Three hours. A.
Organization, administration and supervision of patrol function. Responsibilities, techniques and methods of police and patrol. Various services and public assistance offered by police organizations.

LEN 205. Police Administration I. Three hours. A.
An examination of the principles of organization, administration and functions of police departments. An evaluation of personnel policies, divisions, operations, command policies, and evaluation of the department as a whole.

LEN 220. Correctional Institutions. Three hours. A.
Prerequisite: LEN 120.
Facilities, treatment and security for detention and incarceration; institutional variations based on the age, sex, and offense of the inmate population; social structure of the inmate population; problems of maintaining an effective balance between security and treatment within the institution.
LEN 221. Probation, Pardons and Parole. Three hours. A.
Prerequisite: LEN 120.
History and philosophy of probation and parole; function and operation of pardon and parole boards; statutory authorization and limitation; modern trends; personnel qualifications.

LEN 301. Introduction to Criminalistics. Three hours. A.
A course designed to give the student a basic knowledge of crime scene protection, collection, preservation and identification of evidence, including proper search, dusting latent print, casting, finger print classification, and use of crime laboratory and crime detection and prosecution.

LEN 302. Motor Vehicle Codes and Traffic Records. Three hours. A.
A study of the development and need for traffic laws with primary attention focused upon the Uniform Motor Vehicle Code and Model Traffic Ordinances including use and implementation. The maintenance and preparation of an adequate records system relative to traffic safety is examined.

LEN 303. Court Procedures and Mechanics. Three hours. A.
Case preparation; officer demeanor in court; effective presentation of evidence; trial procedure; use of written notes; officer appearance; and reaction of cross examination.

LEN 304. Criminal Investigation. Three hours. A.
Fundamentals of criminal investigation, crime scene search and recording, collection and preservation of physical evidence, scientific aids, modus operandi, sources of information, interviews and interrogation, follow-up and case preparation.

LEN 305. Police Administration II. Three hours. A.
Prerequisite: LEN 205.
A detailed study of the organization, administration and function of the police department. The designing of policies; a study of the arrangement within a department of specific operations and commands.

LEN 306. Seminar in Law Enforcement. Three hours. A.
Reviews and synthesis of basic principles, practices, and procedures. Visitation to operating police organization. Final preparation for employment in law enforcement.

LEN 307. Firearms. One hour. A.
This course includes the moral aspects, legal provisions, safety precautions, restrictions covering the use of firearms, nomenclature, and the firing of the sidearm and shotgun.

LEN 309. Prison Security and Administration. Three hours. A.
Selection and training of guard force; dispersal of guard personnel; design and arrangement of physical detention barriers; separation of prisoner personnel; dealing with illegal traffic within the prison; scheduling activities and labor details; prison policies and procedures.

LEN 310. The Juvenile and Police. Three hours. A.
The development of delinquent and criminal behavior; initial handling and proper referrals; preventive police techniques; special police problems with juveniles; juvenile laws; agencies concerned.

LEN 311. Juvenile Procedures. Three hours. A.
A course in organization, function, and jurisdiction of juvenile agencies; the processing and detention of juveniles; case disposition; and juvenile statutes and court procedures.

LEN 312. Business and Industrial Security. Three hours. A.
Selection, training and staffing of security force; security devices available; techniques of internal security; ground security; security techniques applicable to personnel selection; legal problems; employment opportunities.
LEN 313. The Prevention of Fire and Accidents. Three hours. A.
Fire and accident prevention, organization and functioning; recognition and solution of hazards; regulations and enforcement; common and special problems.

LEN 314. Criminal Law. Three hours. A.
The structure, definitions, and interpretations of the most frequently used sections of the penal code and other criminal statutes.

LEN 320. Workshop in Law Enforcement. One to three hours. A.
The workshop is designed primarily for in-service law enforcement personnel and will focus on current problems, issues, and strategies in providing effective enforcement. Students may enroll for a maximum of six semester hours credit in: 320a, Corrections; 320b, Industrial Security; 320c, Juvenile Offenders; and 320d, General Law Enforcement.

LEN 321. Treatment in Corrections. Three hours. A.
Prerequisite: LEN 120.
Problems, procedures and treatment methods unique to corrections; pre-hearing investigations and reports; client supervision, counseling and referral techniques; processing parole and probation violations; developing and utilizing preventive services; classification, rehabilitative and pre-release services within the institution; treatment and security methods in after-care centers; records procedures and confidentiality.

LEN 322. Institutional Security. Three hours. A.
Prerequisite: LEN 120.
Organization, supervision and administration of institutional security; responsibilities and techniques of security in adult and juvenile detention and corrections facilities.

LEN 420. Corrections and Administration. Three hours. A.
Prerequisites: LEN 220 and 221.
Organization and administrative problems, procedures and techniques unique to corrections; security force distribution and coordination with treatment services within detention and corrections institutions; coordination and cooperation with law enforcement and community services agencies; personnel policies, division of labor, budgets.

LEN 423. Seminar in Corrections. Three hours. A.
Prerequisite: Junior standing and approval of the instructor.
Review of the causes of crime and delinquency; examination of prediction techniques; evaluation of preventive and rehabilitative methods and services.

LEN 424. Practicum. Three hours. A.
Prerequisite: Senior standing and approval of the Director of the School of Law Enforcement.

Students may enroll for a maximum of six semester hours credit; field service training designed to broaden the educational experience of the student through appropriate observational and work assignments in governmental and private agencies; correlation of theoretical knowledge with practice in participating agencies.

GRADUATE COURSES IN CRIMINAL JUSTICE

CRJ 540. Special Problems in Criminal Law. Three hours. A.
An advanced study of theories in criminal law and criminal procedure; the relationship of criminal law to the prevention of criminal behavior and to rehabilitation; techniques of legal research.

CRJ 610. Advanced Police Administration. Three hours. A.
An examination of the functions of the police in the system of criminal justice; principles of organization, administration, police formulation, and management of personnel; statutory limitations on authority and jurisdiction; professionalization of the police.
CRJ 620. Seminar in Juvenile Delinquency. Three hours. A.
Theoretical and empirical study of the etiology, distribution, and extent of delinquency; problems involved in measuring delinquency; role of the police and courts; legal statutes; critical examination of treatment and prevention programs.

CRJ 630. Seminar in Criminology and Corrections. Three hours. A.
A seminar designed to explore current criminological theories and practices regarding causes of criminal behavior; contemporary philosophies, legal codes, and methods of treating offenders; the social structure of the Institution; measures for the prevention of crime.

CRJ 611. Applied Study in Law Enforcement. Three hours. A.
Supervised study in an approved law enforcement setting designed to provide the student an opportunity to synthesize theory and on-the-job situations. Individual conferences.

CRJ 621. Applied Study in Juvenile Delinquency. Three hours. A.
Supervised study in an approved agency dealing with juvenile delinquents designed to provide the student an opportunity to synthesize theory and on-the-job situations. Individual conferences.

CRJ 631. Applied Study in Corrections. Three hours. A.
Supervised study in an approved correctional setting designed to provide the student an opportunity to synthesize theory and on-the-job situations. Individual conferences.

CRJ 697. Research in Criminal Justice. Three or six hours. A.
Individual investigations in the field of criminal justice. Investigations may be conducted in the field and under the supervision of the research advisor and other staff members.

CRJ 698. Thesis I. Three hours. A.

CRJ 699. Thesis II. Three hours. A.

NURSING (NUR)

C. Denny, Chairman; Berge, Broughman, Burch, Cloyd, Cooksey, Hitchner, Price, Rogers, Sloan, Vescio.

Students who do not present at least a "C" average in any required nursing course will be required to repeat that course.

CURRICULUM FOR AN AREA MAJOR IN NURSING

(Non-Teaching)

The first two years of this curriculum may be found in the Central University College section.

Third Year

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<tr>
<th>First Semester</th>
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<table>
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<td>General Education Social Science</td>
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<tr>
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18-19 15-16
Fourth Year

NUR 401 .................................................. 5
NUR 402 .................................................. 5
NUR 403 .................................................. 2
Soc 353 .................................................. 3

General Education Humanities .......... 3
General Education Social Studies ....... 3
Electives .............................................. 2-3
NUR 404 or 405 ................................. 2
NUR 406 ................................................. 2
NUR 407 ................................................. 2

15

14-15

NURSING

Curriculum with a major in Nursing leading to an Associate of Arts Degree.**

The Associate of Arts Degree Program in Nursing combines general education and nursing education in a two year collegiate environment. Graduates of this program who pass the state licensing examination are licensed to practice as Registered Nurses.

Students who do not present at least a "C" average in any required nursing course will be required to repeat that course.

First Year

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Hours</th>
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<td>BIO 171</td>
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<td>GSP 180</td>
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Second Year

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<td>*Electives</td>
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*Restricted electives to be selected from General Education Humanities or Social Studies. Psychology may be substituted for one of these.

**Male students must enroll in MIL 101 and MIL 102 or option during the first year and in MIL 201 and MIL 202, or approved military option(s) during the second year.

NURSING (NUR)

NUR 101. Nursing Fundamentals. Five hours, I, II.

Scientific principles underlying nursing care; development of basic skills used in providing patient care; selected clinical experiences required.

NUR 102. Interpersonal Relationships in Nursing. Three hours, I, II.

Principles related to nursing diagnosis and their implications in providing patient care.
NUR 104. Medical—Surgical Nursing I. Four hours. I, II.
Concepts underlying physical and emotional responses to illness; development of general nursing skills applicable to the care of all medical-surgical patients; selected clinical experiences required.

NUR 201. Nursing Care of Children. Four hours. I, II.
Scientific principles used in providing nursing care to children; development of skills used in providing this care; selected clinical experiences required.

NUR 202. Medical—Surgical Nursing II. Four hours. I, II.
Physical disorders of patients and appropriate nursing interventions; selected clinical experiences required.

NUR 203. Psychiatric Nursing. Four hours. I, II.
Concepts and skills needed to interact therapeutically with individuals with emotional problems; selected clinical experiences required.

NUR 204. Medical—Surgical Nursing III. Four hours. I, II.
Continuation of Medical—Surgical Nursing II; emphasis on more complex physical disorders; selected clinical experiences required.

NUR 205. Trends and Issues in Nursing. Two hours. I, II.
Problems in nursing: role of the nurse in working toward their solution.

NUR 206. Nursing Care of Mothers and Newborns. Four hours. I, II.
Scientific principles used in providing nursing care to mothers and newborns; development of skills used in providing this care; selected clinical experiences required.

NUR 220. Medical Terminology. Three hours. I, II.
Emphasis on building vocabulary essential to students in premedical, predental, pre-veterinary medicine, nursing and other health or science curricula. Includes prefixes, suffixes, roots, abbreviations, diseases, operative and drug terms.

NUR 301. Introduction to Professional Nursing. Five hours. II.
Fundamental processes of nursing; development of basic skills in procedures, communication, interaction, problem solving; planning, administering and evaluating patient-centered care to individuals with uncomplicated conditions; focus on knowledge of self and patient reaction to illness; selected clinical experiences required.

NUR 302. Adult Medical-Surgical Nursing I. Five hours. I.
Concepts and skills used in providing professional nursing care to adults with physical and emotional illnesses; focus on problem solving based on principles of human development, pathophysiology, mental health and the nurse-patient relationship; selected clinical experiences required.

NUR 303. Adult Medical-Surgical Nursing II. Five hours. II.
Continuation of NUR 302 with emphasis on increasing nursing skills in dealing with complex nursing problems.

NUR 304. Maternal-Infant Nursing. Five hours. I.
Family-centered nursing care; problem-solving approach to meeting nursing needs of patients during antepartum, intrapartum, postpartum, and newborn periods; resources available for families with special problems; selected clinical experiences required.

NUR 305. Pediatric Nursing. Five hours. II.
Family-centered nursing care; problem solving approach to meeting nursing needs of infants, children and adolescents; anticipatory guidance based on principles of human development; resources available for special problems; selected clinical experiences required.

NUR 401. Psychiatric Nursing of Children and Adults. Five hours. I.
Concepts and skills used in providing professional nursing to individuals and groups of patients in a psychiatric setting; application of psychiatric nursing principles in a nonpsychiatric environment; selected clinical experiences required.
NUR 402. Community Health Nursing. Five hours. I. Concepts of community health; prevention of illness; maintenance, rehabilitation and promotion of higher levels of wellness for individuals, families and the community; role of the nurse in all phases of community health.

NUR 403. Guiding and Directing Patient Care. Two hours. I. Concepts of management in providing patient care; directing and coordinating ancillary help.

NUR 404. Administration of Patient Care in the Institutional Setting. Two hours. II. Experiences in administration of patient care in institutions such as general hospitals, extended care units, and specialized agencies.

NUR 405. Administration of Community Health Nursing. Two hours. II. Experiences in administration of health care in a community setting with focus on meeting needs of individuals, families, and communities.

NUR 406. Seminar in Nursing. Two hours. II. Recent research, theory, issues and developments in the field of nursing.

NUR 407. Special Problems in Nursing. Two hours. II. Independent study and research related to problems of a theoretical and/or practical nature.

MEDICAL ASSISTANT (MAS)

The curricula are designed to prepare students for specialized employment in physicians’ offices, clinics and other health agencies.

Students who do not present at least a “C” average in any medical assistant course will be required to repeat that course.

MEDICAL ASSISTANT—ADMINISTRATIVE

Curriculum with a major in Medical Assistant—Administrative leading to an Associate of Arts Degree.*

First Year

<table>
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<td>GSE 102</td>
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<tr>
<td>GSP 180</td>
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<td>GSP 181</td>
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<tr>
<td>MAS 100</td>
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<td>MRS 110</td>
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<td>OAD 152</td>
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<td>MAS 210</td>
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17 17
Second Year

<table>
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<td>GSP 281</td>
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<td>OAD 301</td>
<td>3</td>
<td>GSS 142</td>
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<tr>
<td>PSY 211</td>
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<td>NUR 102</td>
<td>3</td>
<td>HEA 202</td>
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<td>MAS 225A</td>
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**Male students must enroll in MIL 101 and MIL 102 or option during the first year and in MIL 201 and MIL 202, or approved military option(s) during the second year.

MEDICAL ASSISTANT—CLINICAL

Curriculum with a major in Medical Assistant—Clinical leading to an Associate of Arts Degree.**

First Year

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<th>Second Semester</th>
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<td>GSP 180</td>
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<td>GSE 102</td>
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<td>GSP 181</td>
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<td>MRS 110</td>
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<td>NFA 201</td>
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<td>OAD 152</td>
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Summer Term

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Second Year

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<td>OAD 301</td>
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<td>HEA 202</td>
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<td>14</td>
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</table>

**Male students must enroll in MIL 101 and MIL 102 or option during the first year and in MIL 201 and MIL 202, or approved military option(s) during the second year.

MEDICAL ASSISTANT (MAS)

MAS 100. Introduction to Medical Assisting. Three hours. I.
Medical assisting responsibilities; medical ethics, etiquette and law; human relations; communications; health insurance plans; medical records.

MAS 210. Medical Office Procedures I. Two hours. II.
Prerequisite: OAD 203.
Medical secretarial procedures; medical office accounting; medical insurance theory and procedures; selected experiences required.
MAS 211. Medical Office Procedures II. Three hours. I.
Prerequisite: MAS 210.
Medical administrative procedures; medicolegal responsibilities; credits and collection; income tax reports; employee payroll accounting; selected experiences required.

MAS 220. Medical Office Laboratory Procedures. Three hours. I.
Prerequisite: CHE 101. Corequisite: BIO 273.
Methods of specimen collection; simple diagnostic procedures; physiotherapy techniques; screening tests; sterilization of equipment; selected experiences required.

MAS 221. Medical Assisting Techniques. Five hours. I.
Prerequisite: MAS 220.
Preparation of the patient for examination and treatment; medications and pharmacology; clinical skills; accident prevention and emergency procedures; dietary requirements; medical equipment and supplies; selected experiences required.

MAS 225A. Administrative Medical Office Internship. Two hours. II.
Prerequisite: Sophomore standing, enrolled in Medical Assistant program and grade point standing (GPA) of 2.0 (C).
Experiences in medical offices, clinics and other health agencies.

MAS 225B. Clinical Medical Office Internship. Two hours. II.
Prerequisite: Sophomore standing, enrolled in Medical Assistant program and grade point standing (GPA) of 2.0 (C).
Experiences in medical offices, clinics and other health agencies.

MEDICAL RECORD TECHNOLOGY (MRS)

Curriculum with a major in Medical Record Technology leading to an Associate of Arts Degree.**

Students who do not present at least a “C” in any Medical Record Technology course will be required to repeat that course.

First Year

<table>
<thead>
<tr>
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<th>Second Semester</th>
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Second Year

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</table>

**Men students must enroll in MIL 101 and MIL 102, or option during the first year and in MIL 201 and MIL 202, or approved military option(s) during the second year.
MEDICAL RECORDS (MRS)

MRS 110. Medical Record Science I. Three hours. I.
History, value, uses and legal aspects of medical records with emphasis on basic skills used by medical record technicians.

MRS 111. Medical Record Science II. Five hours. II.
Prerequisite: MRS 110.
Principles, maintenance and control of the unit medical record with emphasis on record management and machine transcription. Clinical practice required.

MRS 210. Medical Record Science III. Five hours. I.
Prerequisite: MRS 111.
A continuation of MRS 111 with emphasis on collecting data for statistical purposes, preparing reports, uses of indexes, and coding of diseases (SNDO and ICDA). Clinical practice required.

MRS 211. Organization and Administration of Medical Records. Three hours. I.
Principles and practice essential to efficient operation of a medical records department.

MRS 212. Medical Record Science IV. Five hours. II.
Prerequisite: MRS 210.
Emphasis on assembling and checking records, reports, correspondence, including legal and ethical aspects of medical records. Clinical practice required.

TRAFFIC SAFETY INSTITUTE

L. Leach, Director, J. Mann, J. Miller, C. Shipley.

The Traffic Safety Institute was established to provide instruction, research, and public service in the broad area of traffic safety. Students wishing to teach driver education in the secondary schools of Kentucky may meet the certification requirements by taking courses offered within the Traffic Safety Institute.

Additional information regarding the Institute may be obtained by writing the Director of the Traffic Safety Institute, Eastern Kentucky University, Richmond, Kentucky 40475.

*TRS 585. Introduction to Driver and Traffic Safety. Three hours. I, II.
Driver and traffic safety education for prospective teachers; analysis of the driving task arranged laboratory experiences in the supervision of practice driving for beginners.

*TRS 586. Methods and Educational Media in Driver and Traffic Safety. Three hours. I, II.
Basic principles of the teaching-learning process through the use of behavioral objectives for driver and traffic safety; factors in learning, variables in instructional program, and instructional design. Techniques in planning and developing instructional materials for use in teaching driver and traffic safety.

*TRS 587. Behavioral Approaches to Driver and Traffic Safety. Three hours. I.
Analyzing and writing objectives in terms of behavioral and environmental variables, designing and evaluating procedures, Instructional materials, and programs in driver education.
KENTUCKY LAW ENFORCEMENT COUNCIL

R. Stone, Executive Director; Allen, Hawkins, Holman, Sayre

The Kentucky Law Enforcement Council is an independent agency of state government. It utilizes the facilities and services of Eastern Kentucky University, and the Executive Director works closely with the Dean of the College of Applied Arts and Technology.

This Council originated on September 1, 1966. It began as the Kentucky Peace Officers' Standards and Training Council supported by a federal grant from the Office of Law Enforcement Assistance, U. S. Department of Justice, and administered by the College of Applied Arts and Technology, Eastern Kentucky University. This Council was the first in the United States to be formed under the Law Enforcement Assistance Act of 1965. It was organized to provide training for all law enforcement officers in Kentucky who want to take advantage of it.

The Council consists of sixteen persons including the Special Agent in charge of the FBI, the Director of the Kentucky State Police, the Attorney General of Kentucky, representatives of the Kentucky State Bar Association, a mayor or city manager, higher education personnel, and members of the major organizations representing policemen and sheriffs throughout the state. In addition to seven ex officio members, nine members are appointed by the governor, serving terms of four years. The Council meets bimonthly, usually on the Eastern Kentucky University campus.

The Council is also a service organization. It has done considerable research in order to suggest minimum standards for police in Kentucky and has helped local police departments in improving their records, training programs and other features of their work.

The Council conducts a basic four-week training course and special courses for law enforcement officers. It also certifies police instructors and approves police training schools located throughout the Commonwealth.

Those police officers who successfully complete the Breathalyzer Operator Training Program conducted by the Traffic Safety Institute, College of Applied Arts and Technology, Eastern Kentucky University, receive certificates to this effect issued by the Kentucky Law Enforcement Council.
College of Arts and Sciences

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Anthropology and Sociology 182
Art 190
Biological Sciences 195
Chemistry 205
Drama and Speech 210
English 215
Foreign Languages 222
Geography 231
Geology 237
History 242
Mathematics 250
Music 256
Philosophy 268
Physics 271
Political Science 276
Psychology 282
COLLEGE OF ARTS AND SCIENCES
Frederic D. Ogden, Dean
Glenn O. Carey, Associate Dean

The role of the College of Arts and Sciences is to provide a basic liberal education for the student and to help him prepare for life in the cultural setting in which he will practice his vocation or profession. A liberal education is designed to free and enlarge the mind and spirit of man, to liberate him from the meanness and meagerness of mere existence, and to enable him to choose in freedom his values and goals. The College offers opportunities for this kind of education not only to its own students but also the students of all divisions of the University. It cooperates with Central University College in providing courses in general education; with the Colleges of Applied Arts and Technology, Business, and Education in providing upper level courses; and with the Graduate School in providing graduate programs and graduate courses.

To fulfill its role, the College offers instruction and conducts research in anthropology, art, biological sciences, broadcasting, chemistry, drama, earth science, English, fisheries management, foreign languages, geography, geology, history, journalism, mathematics, music, philosophy, physics, political science, psychology, regional planning, sociology, social work, speech and wildlife management. Economics may also be studied.

Another important function of the College is to offer courses which are intended to prepare the student for later study of professional courses. Specific preprofessional programs are offered which are designed to prepare the student to qualify for admission to schools of medicine and dentistry. A three-year medical technology curriculum, with the fourth year to be taken in an accredited hospital, is provided. Courses are offered which are designed to prepare the student for further work in dental hygiene, engineering, forestry, law, optometry, pharmacy, and veterinary medicine.

Admission

Students are admitted to the College at the beginning of the junior year. Those students pursuing courses of study offered by departments in the College will be registered in it. Students seeking certification to teach at the secondary level will be registered in the College of Arts and Sciences if their majors are in the College. To be admitted, students must have completed a minimum of sixty semester hours with a grade point average of 1.8 or higher.

Degrees Offered

The College of Arts and Sciences offers curricula leading to the degrees of Bachelor of Arts, Bachelor of Fine Arts, Bachelor of Science, Bachelor of Music Education, and Bachelor of Music. The Bachelor of Arts degree is conferred upon students who major in anthropology, art, broadcasting, drama, economics, English, French, geography, German, history, journalism, Latin, music, philosophy, political science, regional planning, Russian, social science, social work, sociology, Spanish, speech, speech and drama. The Bachelor of Science degree is conferred upon
students who major in biology, chemistry, earth science, fisheries management, geology, mathematics, medical technology, physics, pre-medical sciences, psychology, wildlife management.

Requirements for Graduation

Students file an application for graduation in the Dean's office. They should apply by the end of April if they will complete requirements in December, by October if they will graduate in May or August. It is the student's responsibility to plan his program and to register for the proper courses so that he will have satisfied all requirements at the time he expects to graduate.

Requirements for the Degree:

1. A minimum of 128 hours with a grade-point average of 2.0 overall and in the major. Thirty of the last 36 hours must be earned in residence at Eastern Kentucky University. Credits earned by correspondence study are accepted upon written approval of the Dean. Not more than twenty-five per cent of the total credits offered for the degree may be in correspondence and/or extension work.

2. The 128 hours must include the following general subject requirements:

   6 hours in communications
   12 hours in humanities
   12 hours in social science
   12 hours in mathematics and natural science (all may be in natural science with at least three hours in biological science and three hours in physical science)
   5 hours in health and physical education
   3 hours in military science or four hours in military science and four hours in approved options (men only)

   (See General Academic Information for specific course requirements.)

3. Area, major and minor requirements. Each student must have an area of specialization or a major and minor subject of specialization except that he may have a single major with supporting courses in lieu of a minor if he is obtaining a teaching certificate in the following disciplines: art, biology, chemistry, English, history, mathematics. The minimum total number of hours in the area and in the major-minor combination must equal 48. (See programs outlined under each department for specific course requirements.) The minimum number of hours for a teaching minor is 21.

A student who transfers from another college or university must earn a minimum of six to twelve hours in his area or major at Eastern, the exact minimum to be determined by his advisor. Where a minor is required, he must earn a minimum of one course in the minor at Eastern.

Each student must officially register his area or his major and minor when he is admitted into the College of Arts and Sciences. He does so by applying for a planned curriculum. If he plans to receive a certificate to teach, he applies while enrolled in EDF 202 or EDF 300. Otherwise he applies in the Office of the Dean, College of Arts and Sciences. Each student's planned curriculum will be prepared in consultation with a faculty advisor from the major department staff who
will continue as the student's advisor until graduation. Any change in the planned curriculum must be approved by the advisor, the Dean of the College of Arts and Sciences, and the College of Education (if with right of teaching certification).

**GRADUATE PROGRAMS**

In cooperation with the Graduate School, the College offers Master of Arts programs in English, French, Geography, History, Political Science, Psychology and Spanish; Master of Science programs in Biological Sciences, Chemistry, Geology, Mathematics, Physics and Psychology (Clinical and School); a Master of Music Education program, and a Master of Public Administration program. These programs are described in the Graduate Bulletin under the Departments of Biological Sciences, Chemistry, English, Foreign Languages, Geography, Geology, History, Mathematics, Music, Physics, Political Science and Psychology.

**PRE-PROFESSIONAL CURRICULA**

**PRE-DENTAL HYGIENE CURRICULUM**

Students interested in becoming dental hygienists may take two years of pre-dental hygiene and transfer these credits to a school of dental hygiene. The curriculum complies with the general entrance requirements for dental hygiene schools, although some modification may be necessary to meet the specific requirements of a few schools. A minimum of 64 credit hours (exclusive of physical education and academic orientation) must be completed before transferring to a school of dental hygiene.

<table>
<thead>
<tr>
<th>Course</th>
<th>Freshman Hours</th>
<th>Sophomore Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 141, 211</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>CHE 111, 112</td>
<td>8</td>
<td>11</td>
</tr>
<tr>
<td>GSE 101, 102</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>GSO 100</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>GSP 180, 181</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>MAT 107</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>SPE 100</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>MIL 101, 102 or options</td>
<td>4</td>
<td>4</td>
</tr>
</tbody>
</table>

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**PRE-ENGINEERING CURRICULUM**

A student may take one or two years of fundamental work and then transfer to an engineering college without appreciable loss of credits if he chooses his courses wisely. The pre-professional courses should be chosen from mathematics, chemistry, physics, and other basic subjects.

<table>
<thead>
<tr>
<th>Course</th>
<th>Freshman Hours</th>
<th>Sophomore Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHE 111, 112</td>
<td>9</td>
<td>11</td>
</tr>
<tr>
<td>GSE 101, 102</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td>GSP 180, 181</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>MAT 109 or 111, 111 or 112</td>
<td>8-9</td>
<td>14</td>
</tr>
<tr>
<td>MIL 101, 102 or options</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>INT 191</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Electives*</td>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>

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*To be approved by a pre-engineering advisor.
PRE-FORESTRY CURRICULUM

Arrangements made through the Southern Regional Education Board provide for students who wish to prepare as professional foresters to do the first two years of their work at Eastern Kentucky University and complete their training in two years and one summer at University of Kentucky or any other accredited school of forestry.

The minimum requirements for admission to a school of forestry are given under Agriculture in the College of Applied Arts and Technology.

Students may elect a three-year program and graduate with a Bachelor of Science degree with a major in biology by transferring 30 semester hours from an accredited school of forestry. The following courses are required in addition to the Central University College requirements:

- GLY 210
- AGR 215
- ECO 230
- PHY 131 and 132
- BIO 335, 336 or 328 and 315
- Humanities elective, 6 hrs.

PRE-OPTOMETRY CURRICULUM

Students who plan to enter the field of optometry may elect to take two years of pre-optometry and transfer these credits to an optometry school. A minimum of three years work is required in the optometry school for the Doctor of Optometry (O.D.). Some optometry schools require four years for the O.D. and several universities have graduate programs leading to the M.S. and Ph.D. degrees in addition to programs leading to the O.D.

Requirements for admission to optometry schools vary. The student wishing to enter a pre-optometry program should immediately secure transfer information from the optometry school of his choice and then consult with his pre-optometry advisor.

Courses which students may take to meet requirements for admission to most optometry schools should include the following ones:

<table>
<thead>
<tr>
<th>Freshman</th>
<th>Hours</th>
<th>Sophomore</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 141</td>
<td>4</td>
<td>BIO 211, 221</td>
<td>8</td>
</tr>
<tr>
<td>CHE 111, 112</td>
<td>9</td>
<td>GSP 281</td>
<td>3</td>
</tr>
<tr>
<td>GSE 101, 102</td>
<td>6</td>
<td>MIL 201, 202 or options</td>
<td>4</td>
</tr>
<tr>
<td>GSO 100</td>
<td>1</td>
<td>PHY 131, 132</td>
<td>10</td>
</tr>
<tr>
<td>GSP 180, 181</td>
<td>2</td>
<td>PSY 211</td>
<td>3</td>
</tr>
<tr>
<td>MAT 109, 111</td>
<td>9</td>
<td>SOC. SCI.</td>
<td>6</td>
</tr>
<tr>
<td>MIL 101, 102 or options</td>
<td>4</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Students may elect to obtain a Bachelor of Science degree at Eastern before obtaining the Doctor of Optometry in an optometry school. In this event the curriculum will be outlined by the science department in which each student majors, and approved by the Dean of Arts and Sciences.

A limited number of Kentucky residents may be accepted for a scholarship at the School of Optometry, University of Houston. The Commonwealth of Kentucky will pay the University of Houston the
non-resident differential in an amount not to exceed $375 per academic year for those students who exhibit satisfactory progress toward completion of the prescribed four-year curriculum at the University of Houston.

Application forms may be secured from the Executive Director, Council on Public Higher Education, 319 Ann Street, Frankfort, Kentucky. The quota for new students is limited each year. For further information, students should consult with the chairman, Department of Physics.

**PRE-PHARMACY CURRICULUM**

Students who plan to enter the field of pharmacy may take two years of pre-pharmacy and transfer these credits to a pharmacy school. The curriculum given below will meet the requirements of most pharmacy schools. Students wishing to enter the program should determine the admission requirements of the pharmacy school of their choice and, after consulting their pre-pharmacy advisor, determine which courses to take.

<table>
<thead>
<tr>
<th>Freshman</th>
<th>Hours</th>
<th>Sophomore</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 131</td>
<td>4</td>
<td>BIO 211, 221</td>
<td>8</td>
</tr>
<tr>
<td>CHE 111, 112</td>
<td>9</td>
<td>CHE 213</td>
<td>4</td>
</tr>
<tr>
<td>GSE 101, 102</td>
<td>6</td>
<td>ECO 230</td>
<td>3</td>
</tr>
<tr>
<td>MAT 109</td>
<td>5</td>
<td>GSS 246, 247 or</td>
<td></td>
</tr>
<tr>
<td>GSP 180, 181</td>
<td>2</td>
<td>HIS 202, 203</td>
<td>6</td>
</tr>
<tr>
<td>MIL 101, 102 or options</td>
<td>4</td>
<td>MIL 201, 202 or options</td>
<td>4</td>
</tr>
<tr>
<td>Electives*</td>
<td>6</td>
<td>PHY 131, 132</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>36</strong></td>
<td><strong>Total</strong></td>
<td><strong>35</strong></td>
</tr>
</tbody>
</table>

*Electives should be chosen to meet the requirements of the college in which study for the pharmacy degree will be completed.

**PRE-PHYSICAL THERAPY**

Students who plan to enter the field of physical therapy may elect to take two years of pre-physical therapy and then transfer these credits to another university of their choice. Students in pre-physical therapy should discuss the admission requirements of the physical therapy school with their pre-physical therapy advisor. The two-year curriculum given below will meet the requirements of freshman and sophomore physical therapy curricula at most schools.

<table>
<thead>
<tr>
<th>Freshman</th>
<th>Hours</th>
<th>Sophomore</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 141</td>
<td>4</td>
<td>BIO 211, 242</td>
<td>8</td>
</tr>
<tr>
<td>CHE 111, 112</td>
<td>9</td>
<td>PHY 131, 132</td>
<td>10</td>
</tr>
<tr>
<td>GSE 101, 102</td>
<td>6</td>
<td>PSY 211, 312 or 308</td>
<td>6</td>
</tr>
<tr>
<td>GSO 100</td>
<td>1</td>
<td>*GSS 246, 247 or Gen. Ed. Soc.</td>
<td>6</td>
</tr>
<tr>
<td>GSP 180, 181, 281</td>
<td>5</td>
<td>Sc. elective (Area III, B2)</td>
<td>4</td>
</tr>
<tr>
<td>*GSS 246 (or Humanities elective)</td>
<td>3</td>
<td>MIL 201, 202 or options</td>
<td>4</td>
</tr>
<tr>
<td>*Gen. Ed. Social Science elective (Area III, B1)</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MIL 101, 102 or options</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>35</td>
<td></td>
<td>34</td>
</tr>
</tbody>
</table>

Suggested electives: BIO 131, 315, 316, 318; Humanities; MAT 107, 109, 111, 112

*GSS 246 and 247 must be taken in the first two years. In addition either six hours of Humanities electives or six hours of General Education Social Science electives must be taken in the first two years.
PRE-VETERINARY MEDICINE CURRICULUM

A limited number of students who are residents of Kentucky and who have completed the required pre-veterinary medicine courses are selected each year to study veterinary medicine at Auburn University, Auburn, Alabama; Tuskegee Institute, Tuskegee, Alabama and Ohio State University, Columbus, Ohio.

These students are exempt from the out-of-state tuition charge that would normally apply to a Kentucky resident. They enter the four-year program at the beginning of the fall term each year and are approved for succeeding years so long as normal progress is made toward the degree in veterinary medicine.

The program is made available by an appropriation of the General Assembly to the Kentucky Council on Public Higher Education which administers it in cooperation with The Southern Regional Education Board and the three above named institutions.

Students may be admitted to a school of veterinary medicine with a minimum of two academic years of undergraduate study. See requirements given under Department of Agriculture, College of Applied Arts and Technology. They may elect a three-year program at Eastern and graduate with a Bachelor of Science degree with a major in biology by transferring 30 semester hours from an accredited school of veterinary medicine. This can be done by completing two years as outlined in the Pre-Veterinary Curriculum in the Central University College section and by completing certain other requirements necessary for graduation, including the following:

CHE 361 and 362
BIO 315 and 348
ENG 209 or 211 and 210 or 212

AGR 221
Social Science
electives, 6 hrs.

CURRICULUM PREPARATORY FOR MEDICINE, DENTISTRY AND MEDICAL TECHNOLOGY

The Pre-Medical Sciences curriculum should be followed by both pre-medical and pre-dental students. This curriculum complies with the general entrance requirements for medical and dental schools, although some modification may be necessary to meet the specific requirements of a few schools. Completion of this program fulfills the requirements for graduation from Eastern with a Bachelor of Science degree.

It is recommended that students complete the four-year program before transferring to medical school. Some medical schools require a four-year course for admission.

Students may also elect to complete the first three years of this program and use the first year of work from an accredited medical or dental school to complete the requirements for the Bachelor of Science degree. Medical schools should be approved by the Association of American Medical Colleges and the American Medical Association. Dental schools should be approved by the Council on Dental Education of the American Dental Association.
PRE-MEDICAL SCIENCES CURRICULUM

The first two years of this curriculum may be found in the Central University College section.

In addition to general education requirements the total program shall include BIO 141, 211, 221, 242, 315, 348, 546, and 547; CHE 111, 112, 213, 361, 362, and 570; MAT 109 and 111; PHY 131 and 132.

<table>
<thead>
<tr>
<th>Junior</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 221* or 242*, 315, 348</td>
<td>12</td>
</tr>
<tr>
<td>CHE 361, 362</td>
<td>9</td>
</tr>
<tr>
<td>ENG 209 or 211</td>
<td>6</td>
</tr>
<tr>
<td>PHY 131, 132</td>
<td>10</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Senior</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 546, 547</td>
<td>7</td>
</tr>
<tr>
<td>CHE 570</td>
<td>5</td>
</tr>
<tr>
<td>Foreign Lang.</td>
<td>6</td>
</tr>
<tr>
<td>Electives (Upper Division)</td>
<td>12</td>
</tr>
<tr>
<td>Social Science</td>
<td></td>
</tr>
<tr>
<td>(area III. B. 1.)*</td>
<td>3</td>
</tr>
<tr>
<td>(area III. B. 2., upper division)*</td>
<td>3</td>
</tr>
</tbody>
</table>

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*If not taken in Central University College.

MEDICAL TECHNOLOGY CURRICULUM

Eastern offers students interested in becoming medical technologists the required three years of college work necessary to qualify for training at a school of medical technology.

A Bachelor of Science degree may be obtained from Eastern after completion of the three-year curriculum outlined below and in the Central University College section, and the program of a school of medical technology accredited by the American Society of Clinical Pathologists. Credit equivalent to a fourth year of course work must be transferred back to Eastern.

<table>
<thead>
<tr>
<th>Junior</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 221, 348, 311 or 546</td>
<td>10-11</td>
</tr>
<tr>
<td>CHE 361, 362</td>
<td>9</td>
</tr>
<tr>
<td>PHY 131, 132</td>
<td>10</td>
</tr>
<tr>
<td>Humanities electives</td>
<td>6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Senior</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Work must be taken at an accredited school of medical technology.</td>
<td></td>
</tr>
</tbody>
</table>

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ANTHROPOLOGY AND SOCIOLOGY (ANT & SOC)


The multi-disciplinary nature of the department requires curricula designed to accomplish several purposes:

To provide students with greater understanding of the social world.

To provide students with a fundamental background as preparation for future graduate-level study.
To provide students with training that will fit them for immediate opportunities in public service agencies.

The Department of Anthropology and Sociology offers three majors:

1. The major in Anthropology is intended primarily to prepare students for graduate study in that field. Secondarily, the major is offered as an adjunct for those students who wish to combine Anthropology with another area which will provide them with employment opportunities.

2. The major in Sociology is designed to provide preparation for graduate study, and as a strong major in the social sciences for those with indefinite vocational goals. Persons with Sociology majors find employment and academic opportunities in teaching, social welfare, personnel and industrial placement, research opportunities in public and private agencies, and work in community organizations such as city planning departments, health and recreation facilities, and housing developments.

3. The major in Social Work is designed to serve three purposes:
   a. As preparation for graduate study in a school of social work.
   b. As preparation for entry into public welfare.
   c. As background material so that, as a citizen, the student can understand, discuss, and act on social welfare issues.

Because of these differing academic purposes the student is urged to give special attention to each of the divisions in his choice of courses selected in conference with his advisor.

ANTHROPOLOGY (ANT)

A student may major in Anthropology (non-teaching) by completing a minimum of 30 hours as follows: ANT 201, 202, 330 or 335; 15 hours of upper division Anthropology to include at least 6 hours from the following: ANT 310, 425, and 440; plus 6 hours from outside Anthropology to be selected in consultation with the advisor.*

A student may minor in Anthropology (non-teaching) by taking a minimum of 18 hours as follows: ANT 110, 201, 202, plus 9 hours of upper division Anthropology electives.*

Curriculum for a major in Anthropology:

<table>
<thead>
<tr>
<th>Junior</th>
<th>Hours</th>
<th>Senior</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANT 330 or 335</td>
<td>3</td>
<td>ANT 310, 425, 440</td>
<td>6</td>
</tr>
<tr>
<td>ANT Electives</td>
<td>6</td>
<td>ANT Electives</td>
<td>3</td>
</tr>
<tr>
<td>Supporting Electives</td>
<td>3</td>
<td>Supporting Electives</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td>20</td>
<td>Electives</td>
<td>20</td>
</tr>
</tbody>
</table>

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*Credit not allowed for both general education and major or minor requirements for the following courses: ANT 110, GEO 101, 102, 210, GLY 109, 211.
SOCIETY (SOC)

A student may major in Sociology (teaching and non-teaching) by taking thirty hours. The following Sociology courses are required: SOC 131, 232, 320, 395, 460 and 461. The remaining twelve hours are to be elected as follows with at least 3 hours from each category below:

A. SOC 335, 337, 340, 353, 355, 375
B. SOC 332, 345, 400, 410, 450, 565
C. SOC 360, 425, 455, 463, 470, 520, 585

A student may minor in Sociology (teaching and non-teaching) by completing the following courses: Sociology 131, 232, 460, 461, plus six hours of upper division Sociology electives. A total of 21 semester hours is required for a teaching minor.

It is strongly recommended that students majoring in Sociology also elect nine hours from the following areas: anthropology, economics, philosophy, political science or psychology.

A student with a major in Sociology (teaching) must have a second major or minor in history, English, or political science. The first two years of the curriculum (for teaching and non-teaching) may be found in the Central University College section.

Curriculum for a major in Sociology (teaching):

<table>
<thead>
<tr>
<th>Junior</th>
<th>Hours</th>
<th>Senior</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDF 317</td>
<td>4</td>
<td>SOC Electives</td>
<td>12</td>
</tr>
<tr>
<td>SOC 320, 395</td>
<td>6</td>
<td>Electives</td>
<td>3</td>
</tr>
<tr>
<td>SOC 460, 461</td>
<td>6</td>
<td>ESH 498</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td>15</td>
<td>ESH 499</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ESH 449</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>31</td>
<td></td>
<td>31</td>
</tr>
</tbody>
</table>

Curriculum for a major in Sociology (non-teaching):

<table>
<thead>
<tr>
<th>Junior</th>
<th>Hours</th>
<th>Senior</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOC 320, 395</td>
<td>6</td>
<td>SOC 460, 461</td>
<td>6</td>
</tr>
<tr>
<td>SOC Electives</td>
<td>12</td>
<td>SOC Electives</td>
<td>15</td>
</tr>
<tr>
<td>Electives</td>
<td>15</td>
<td>Electives</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>33</td>
<td></td>
<td>31</td>
</tr>
</tbody>
</table>

SOCIAL WORK (SWK)

A student may major in Social Work (non-teaching) by taking thirty hours. The following courses are required: SOC 131, 232, 335, SWK 370, 415, 500, 505; and nine hours upper division Sociology and/or Social Work electives. To broaden their experience, students are strongly urged to complete their programs with electives selected from anthropology and sociology, economics, philosophy, political science, or psychology. The first two years of the curriculum is the same as for Sociology and is located in the Central University College section.
A student may minor in Social Work (non-teaching) by completing the following courses: SOC 131, SWK 210, SWK 370, SWK 415, SWK 500, plus three hours of upper division Sociology electives.

**ANTHROPOLOGY (ANT)**

ANT 110. Societies Around the World. Three hours. I, II.
Descriptive survey of selected primitive and folk cultures from various parts of the world, with emphasis on material culture and economic, social, political, and religious structure. Attention given to the levels of socio-political and technological development and to the concept of culture areas, as well as to the factor of global distribution.

ANT 201. (Formerly covered in part by ANT 230.) Introduction to Physical Anthropology. Three hours. I, II.
General survey of principal areas of physical anthropology, including an appraisal of man's place within the biological realm; an examination of the fossil evidence for man's origin and early development; formation and spread of modern racial groups; and the role of genetics in the study of man.

ANT 202. (Formerly covered in part by ANT 230.) Introduction to Cultural Anthropology. Three hours. I, II.
Introduction to the anthropological approach to the social sciences with emphasis on culture and related concepts. Brief survey of prehistoric archaeology and linguistics. Development of generalizations concerning material culture, economic organization, social structure, religion, political system, etc., based chiefly on the comparative study of various primitive societies of the present and recent past.

ANT 300. (Formerly ANT 200.) Bio-Anthropology. Three hours. A.
Prerequisite: ANT 201.
Historical and comparative treatment of man's place in the animal world, with emphasis on human fossils and living primates; the various racial groups, with emphasis on genetics and problems of classification; the processes of human growth and the interrelation of the biological with the cultural aspects of man.

ANT 310. Development of Prehistoric Culture. Three hours. A.
Prerequisite: ANT 202.
Stages of cultural growth from earliest times until the beginnings of civilization.

ANT 330. American Indians. Three hours. A.
Prerequisite: ANT 110 or 201 or 202, or consent of instructor.
Descriptive and comparative study of representative native American cultures, with emphasis on Indians of North America. Consideration of the culture area concept, economic, social, political, and religious structure, linguistic classifications, and changes in culture since European contact.

ANT 335. Native African Cultures. Three hours. A.
Prerequisite: ANT 110 or 202.
Descriptive and comparative study of representative native African cultures south of the Sahara. Consideration of the culture area concept, economic, social, political, and religious structure, and problems arising out of contacts with European civilizations.
ANT 340. Folk and Peasant Societies. Three hours. A.
Prerequisite: ANT 110 or 202; or consent of instructor.
Folk or peasant form of adaptation. Emphasis given to the relatively stable nature of these societies, and their extensiveness. Consideration of problems arising when contacts are made with non-peasant societies.

ANT 420. Culture and Religion. Three hours. A.
Prerequisite: ANT 202 or consent of instructor.
Religious ideas, rituals, and organizations of primitive peoples; attention given to theories of origin and development and to function of religion in social systems.

ANT 425. (Formerly ANT 350.) Social Organization. Three hours. A.
Prerequisite: ANT 110 or 202; or consent of instructor.
Relationships between cultural systems and physical environment; marriage and family organization; development of political and legal systems.

ANT 440. Culture and Language. Three hours. A.
Prerequisite: Consent of instructor.
Analysis of the role of language in human experience; mutual effect of language on culture and culture on language.

ANT 465. Field Methods in Anthropology. Three hours. A.
Prerequisite: Twelve hours in courses accepted toward Anthropology major, or consent of instructor.
Primarily for Anthropology Majors. Introduction to methods and techniques in both field and library research. Such topics considered as defining the problem, designing the study, collecting and analyzing the data, and writing the report.

ANT 555. History of Anthropological Theory. Three hours. A.
Prerequisite: ANT 110, 201, and 202; or consent of instructor.
Historical survey of the major theories and schools of thought in the area of scientific anthropology, including an appraisal of the various competing views on the current scene.

ANT 590. Tutorial in Anthropology. Three hours. A.
Prerequisite: Twelve hours in courses accepted toward major in anthropology, including ANT 110, 201, and 202; or departmental approval.
Individual reading and research on a problem or area within the field of anthropology by the student after consultation with the instructor.

GRADUATE COURSES

ANT 600. Anthropology and Modern Life. Three hours. A.
Extensive review of the field of anthropology, with emphasis on implications of recent theoretical and factual developments for man in the modern world.

ANT 610. Anthropology and Education. Three hours. A.
Prerequisite: ANT 600 or an undergraduate background in anthropology.
Cross-culture analysis of educational processes; growth, adaptation, and personality development of the child (enculturation and socialization), including the transmission of skills, knowledge, attitudes and values; the relationship of the educational process to social structure.

SOCIOLOGY (SOC)

SOC 131. (Formerly SOC 231.) Introductory Sociology. Three hours. I, II.
Basic principles and concepts of Sociology, including culture, personality, social structures and groupings, social processes and social change.
SOC 232. Introductory Sociological Analysis. Three hours. A.  
Prerequisite: SOC 131.  
Analysis of sociological concepts in terms of concept formation, measurement, interpretation and presentation in graphic form.

SOC 320. Social Psychology. Three hours. I, II.  
Prerequisite: SOC 131.  
Relation of the individual to his socio-cultural environment, with special reference to personality development, interpersonal role-behavior, motivation, and social attitudes.

SOC 332. Urban Sociology. Three hours. A.  
Prerequisite: SOC 131.  
The Urban Concept; origin and development of urban areas; effects of urbanization on social institutions and social relations; research methods applied to urban life and form.

SOC 335. Social Problems. Three hours. I, II.  
Prerequisite: SOC 131.  
Analysis of selected social problems such as crime, mental illness, homosexuality, divorce, population, and poverty. The analysis includes the definition, causes, and consequences of social problems.

SOC 337. Population and Society. Three hours. A.  
Prerequisite: SOC 131, or consent of Instructor.  
An examination of population problems; national and international policies, and relationships between population and social structure.

SOC 340. Juvenile Delinquency. Three hours. A.  
Prerequisite: SOC 131.  
A survey of theories of juvenile delinquency, including evaluation of the constitutional, psychological, and sociological approaches, and dealing with prediction, treatment, and control.

SOC 345. Sociology of the Family. Three hours. A.  
Prerequisite: SOC 131.  
The family as an institution in society, its relation to cultural transmission and personality development, and its relations to the wider institutional structure of society.

SOC 353. Medical Sociology. Three hours. A.  
Prerequisite: SOC 131, or consent of Instructor.  
The social and cultural dimensions of health and sickness; analysis of the organized medical facilities in society.

SOC 355. Military Sociology. Three hours. A.  
Prerequisite: SOC 131, or consent of Instructor.  
The American Military as a social institution; analysis of stratification and normative systems, socialization processes and role configurations, interrelationships between the military and other institutions in society.

SOC 360. The Community. Three hours. A.  
Prerequisite: SOC 131.  
Characteristics of community relations in society; structure of and changes in community life; changing needs and resources of modern communities.

SOC 375. Criminology. Three hours. A.  
Prerequisite: SOC 131.  
A survey of theories of criminal behavior as applied to the social processes of law making and law breaking; prediction and control of crime.

SOC 395. (Formerly SOC 570.) Research Methods in Sociology. Three hours. I, II.  
Prerequisite: SOC 131.  
Methods and techniques of sociological research, including collecting, measuring, analyzing, and presenting data.
SOC 400. Racial and Cultural Minorities. Three hours. A.
Prerequisite: Six hours in Sociology.
An analysis of minorities and intergroup relations from the point of view of contemporary sociology, anthropology, and social psychology; nature and types of racial and cultural groups; causes and consequences of prejudice and discrimination; the reduction of intergroup tensions.

SOC 410. Political Sociology. Three hours. A.
Prerequisite: SOC 131 or consent of instructor.
An analysis of political behavior and institutions within the structure of society; social attitudes, voting behavior, and political activity.

SOC 425. Sociology of Religion. Three hours. A.
Prerequisite: Six hours in Sociology.
Examination of the relationships between society, culture, and religion. The functioning of religious values, practices, and organizations in society.

SOC 450. Social Change. Three hours. A.
Prerequisite: Six hours in Sociology.
Analysis of theories of social and cultural change in terms of processes and direction; methodological commitments and implications of the various theories.

SOC 455. Collective Behavior. Three hours. A.
Prerequisite: Six hours in Sociology.
Analysis of mass phenomena such as public opinion, rumors, fads, mobs, riots, panics, and social movements, including a consideration of the development and termination of collective behavior forms.

SOC 460. Sociological Theory I—Classical Writers. Three hours. I.
Prerequisite: Nine hours in Sociology.
The early developments in Sociological Theory; definition of the field and formation of schools of theory; the bases upon which contemporary theories are built.

SOC 461. Sociological Theory II—Contemporary Writers. Three hours. II.
Prerequisite: Nine hours in Sociology.
The current state of Sociological Theories; recent formulations, controversies, and trends.

SOC 463. Social Stratification. Three hours. A.
Prerequisite: Six hours in Sociology.
Classic and recent studies of social classes and strata; critical analysis of research methods; social class, mobility aspirations.

SOC 470. Seminar in Sociology. Three hours. A.
Prerequisite: Nine hours in Sociology or consent of instructor.
A systematic overview of Sociology through a general survey of various sub-disciplines of the field with emphasis on recent research, theory, issues and developments in each.

SOC 520. Social Organization. Three hours. A.
Prerequisite: Consent of instructor.
Analysis of various types of organizations in American Society; internal and external processes and organizational structure.

SOC 565. (Formerly SOC 465.) Demography. Three hours. A.
Prerequisite: SOC 131, 337 and 395.
Theories of population growth; factors affecting population size and composition such as mortality, fertility, morbidity, and migration; national population policies.

SOC 585. Sociology of Small Groups. Three hours. A.
Prerequisite: SOC 131 or consent of instructor.
Studies in the way people behave in small groups. The emergence of leadership and coalitions. How changes in task requirements and rules influence the behavior of group members.
SOC 590. Directed Study. Three hours. A.
Prerequisite: Departmental approval.
Individual reading and research on a problem or area within the field of sociology by the student after consultation with the instructor.

GRADUATE COURSES

SOC 620. The Family. Three hours. A.
Prerequisite: Consent of instructor.
A study of the institutions of marriage and family from their earliest forms to present-day patterns; analysis of various forces which affect family structure and functioning.

SOC 625. The Sociology of Minority Groups. Three hours. A.
Prerequisite: Consent of instructor.
An examination of intergroup relations; the sociological significance of race and ethnicity, including the dynamics of prejudice and discrimination. Coping with intergroup tensions.

SOC 690. Survey Design and Analysis. Three hours. A.
Prerequisite: Departmental approval.
Systematic exploration of survey research problems with application of general methodological principles to the operating context of social surveys.

SOCIAL WORK (SWK)

SWK 210. Introduction to Social Welfare. Three hours. A.
The changing relationship of Social Welfare to the socio-economic and political climate of modern industrial society.

SWK 370. Welfare as a Social Institution. Three hours. A.
Prerequisite: SOC 131.
Consideration of welfare as a basic institution in modern society, with emphasis on the functions and philosophy of social welfare as related to the various divisions in the field.

SWK 415. Methods of Social Work. Three hours. A.
Prerequisite: SOC 131 and SWK 370.
The methods used in the various fields of Social Work, including case work, group work, and community organization.

Prerequisite: SOC 131.
A survey of the field of child welfare, its scope, service and functions as practiced by governmental and private social work agencies.

Prerequisite: Six hours In Social Work.
Discussion of current problems and issues in the fields of Social Work and Social Welfare.

SWK 502. Human Behavior and Social Environment. Three hours. A.
Growth processes and development within the family, group, and community; relationship of human behavior and social functioning to native endowment and to cultural patterns.

SWK 505. Field Experience in Social Agency. Three hours. A.
Prerequisite: SWK 500.
Supervised experience in a social agency with emphasis upon interdependence between theory and practice.
GRADUATE COURSES

SWK 607. Social Work and Social Services. Three hours. A.
A survey of the broad field of social welfare including its basic philosophy and objectives. Attention is given to community resources including eligibility requirements and benefits of programs of public and private agencies.

SWK 608. Interviewing and Casework in the School Setting. Three hours. A.
An examination of school social work as it relates to the total field, with emphasis upon casework with the child and his family, and including interviewing with children and adults.

ART (ART)

D. N. Shindelbower, Chairman; Dewey, Dozier, E. Hale, P. Harris, Helmith, Hitner, Isaacs, Newhoff, Palmer, Paul, J. Todd, Whitcopf, and J. Wright.

The Art Department has two undergraduate degree programs, a Bachelor of Arts and a Bachelor of Fine Arts, and one graduate degree program in cooperation with the Graduate School and the College of Education.

Bachelor of Arts

In the Bachelor of Arts Degree program the course requirements are divided into three basic categories, (1) general education, (2) professional education for those who plan to teach and (3) the art major-minor or area.

The general education requirements may be found in the General Education section of this catalog.

The professional education requirements are EDF 202, PSY 211, EDF 317, ESH 440, 498, and 499.

The art major, minor and area requirements are listed below.

The requirements for a major (teaching) are ART 100, 101, 102, 103, 203, 204, 227 or 327 or 328, 229 or 329, 390, 391, 430, 562; a total of 36 semester hours.

The requirements for a major (non-teaching) are ART 100, 101, 102, 103, 203, 227, 229, 330, 390, 391, 562, and a three hour art history elective; a total of 36 semester hours. The art major (non-teaching) is required to take twelve hours in a foreign language if he begins the language in college, or six hours if he continues the language at the intermediate level.

The requirements for an area (teaching) are ART 100, 101, 102, 103, 203, 204, 227, 229, 327 or 328, 329, 330, 390, 391, 430, 562, a three hour art history elective and six hours of general art electives; a total of 54 semester hours.

The requirements for a second major (teaching or non-teaching) are the same as the first major.
The requirements for a minor (teaching) are ART 102, 103, 390 or 391, 430, and nine hours of art electives, a total of 21 semester hours.

The requirements for a minor (non-teaching) are ART 102, 103, 390 or 391, and nine hours of art electives; a total of 18 semester hours.

Bachelor of Fine Arts

In the Bachelor of Fine Arts Degree program the course requirements are divided into two basic categories, (1) general education and (2) art. The general education requirements may be found in the General Education section of this catalog. The art course requirements include a forty-six hour core of art courses, one eighteen-hour major area of emphasis and one nine-hour minor area of emphasis.

The forty-six hour core includes ART 100, 101, 102, 103, 203, 204, 227, 229, 327 or 328, 329, 330, 390, 391, 499, 562, and a three hour art history elective.

The requirements for the major area of emphasis, Painting are ART 303, 304, 331, 403 (repeated once), and 503.

The requirements for the major area of emphasis, Sculpture are ART 324, 326, 328, and 426 (repeated twice).

The requirements for the minor area of emphasis, Painting are ART 303, 304, and 403.

The requirements for the minor area of emphasis, Sculpture are ART 324, 326, and 328.

The requirements for the minor area of emphasis, Drawing are ART 300, 301, and 401.

The Graduate Program

The graduate program offered by the Art Department in cooperation with the Graduate School and the College of Education leads to a Master of Arts in Education Degree with an emphasis in Art. The requirements may be found in the College of Education section of the Graduate Bulletin.

Curricula for Junior, Senior Years

Curriculum for a major in Art (teaching). The first two years of this curriculum may be found in the Central University College section.

<table>
<thead>
<tr>
<th>Junior</th>
<th>Hours</th>
<th>Senior</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 227 or 327 or 328</td>
<td>3</td>
<td>ART 430, 562</td>
<td>6</td>
</tr>
<tr>
<td>ART 229 or 329</td>
<td>3</td>
<td>ESH 498, 499, 440</td>
<td>16</td>
</tr>
<tr>
<td>ART 390, 391</td>
<td>6</td>
<td>Electives (minor)</td>
<td>9</td>
</tr>
<tr>
<td>EDF 317</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>General Education Literature</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Science Elective</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Science or Math Electives</td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electives (Minor)</td>
<td>5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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31
Curriculum for a major in Art (non-teaching). The first two years of this curriculum may be found in the Central University College section.

<table>
<thead>
<tr>
<th>Junior</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 330, 390, 391</td>
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<tr>
<td>General Education Literature</td>
<td>3</td>
</tr>
<tr>
<td>Science or Math Elective (U. D.)</td>
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<tr>
<td>Approved Electives</td>
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</tr>
<tr>
<td>Elective (minor)</td>
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</tr>
</tbody>
</table>

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Curriculum for an area in Art (teaching). The first two years of this curriculum may be found in the Central University College section.

<table>
<thead>
<tr>
<th>Junior</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 327 or 328</td>
<td>3</td>
</tr>
<tr>
<td>ART 329</td>
<td>3</td>
</tr>
<tr>
<td>ART 330, 390, 391</td>
<td>9</td>
</tr>
<tr>
<td>EDF 317</td>
<td>4</td>
</tr>
<tr>
<td>General Education Literature</td>
<td>3</td>
</tr>
<tr>
<td>Social Science Elective</td>
<td>3</td>
</tr>
<tr>
<td>Science or Math Electives</td>
<td>6</td>
</tr>
</tbody>
</table>

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Curriculum for the Bachelor of Fine Arts Degree. The first two years may be found in the Central University College section.

<table>
<thead>
<tr>
<th>Junior</th>
<th>Hours</th>
</tr>
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<tbody>
<tr>
<td>ART 327 or 328, 329, 391</td>
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</tr>
<tr>
<td>ART 330 (Painting)</td>
<td>3</td>
</tr>
<tr>
<td>Minor Area of Emphasis</td>
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<tr>
<td>Major Area of Emphasis</td>
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<tr>
<td>Humanities Elective (Sculpture)</td>
<td>6</td>
</tr>
<tr>
<td>Approved Science or Math.</td>
<td>6</td>
</tr>
<tr>
<td>Approved Social Science</td>
<td>3</td>
</tr>
</tbody>
</table>

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ART

ART 100. Drawing I. Three hours. I.
An introduction to the basic principles of drawing, placing emphasis on design with value, line, and texture.

ART 101. Drawing II. Three hours. II.
Prerequisite: ART 100.
A continuation of Drawing I; observation of natural forms.

ART 102. Design, Two-Dimensional. Three hours. I.
An introduction to the abstract characteristics of design with color, line, and texture.

ART 103. Design, Three-Dimensional. Three hours. II.
An introduction to the methods, materials, and concepts related to the control of space.
ART 117. Drawing and Design. Three hours. I, II.
An introduction to the basic knowledge and skills in art through the use of pencil, tempera, water color, and colored chalks; emphasis placed upon the development of an understanding and appreciation of the principles of creative design in the visual arts.

ART 200. Art Appreciation: Orientation. Three hours. I, II.
Designed to acquaint the student with the visual arts and their purposes, with emphasis placed upon the ways and means available to the artist in his production. Not open to art majors or minors.

ART 202. Ceramics and Ceramic Sculpture. Three hours. A.
Prerequisite: Permission of instructor.
Introductory experiences with ceramic forming methods, decorating techniques, and materials. Emphasis placed upon designing as creative problem solving.

ART 203. Painting I. Three hours. I.
Prerequisite: ART 101, 102.
Design with color, line, and texture; with emphasis on color.

ART 204. Painting II. Three hours. II.
Prerequisite: ART 203.
Problems in color, line, and texture as they relate to painting media.

Prerequisite: ART 103.
Development of concepts related to the additive process of sculpture; plasticine, clay, plaster, and wax.

ART 229. Crafts, Clay. Three hours. A.
Prerequisite: ART 103.
Application of clay to design problems involving aesthetic value (function) and procedure in the making of fine objects.

ART 300. Drawing Media. Three hours. I.
Prerequisite: ART 100, 101.
An intermediate drawing course in which selected drawing media are investigated.

ART 301. Figure Drawing. Three hours. II.
Prerequisite: ART 100, 101.
A course designed to develop an increased understanding of the logic of natural forms with the human figure as the principal source of information.

ART 303. Painting, Figure. Three hours. I.
Prerequisite: ART 203, 204.
Painting problems using the human figure.

ART 304. Painting Media. Three hours. II.
Prerequisite: ART 203, 204.
An investigation of the oil, polymer, encaustic, and lacquer media to determine their applicability to the needs of the contemporary artist.

ART 317. Lettering and Poster Design. Three hours. A.
Application of art principles in the production of hand lettering, lettering structure, spacing, and poster design.

ART 321. Drawing and Illustration. Three hours. A.
The illustration of ideas, with special consideration given to perspective and pictorial composition using pencil, charcoal, water color, and ink.

ART 324. Synthetic Media. Three hours. I.
Prerequisite: ART 103, 227, 327.
Development of sculptural concepts and techniques as they are related to synthetic materials; plexiglass, fiberglass, polyfoams, and rubber.
ART 326. Metal Casting. Three hours. II.
Prerequisite: ART 103, 227, 327.
An investigation of metal casting techniques as they relate to both traditional and contemporary sculptural expression.

ART 327. Sculpture: The Constructive Process. Three hours. A.
Development of concepts related to the constructive process of sculpture; wood, metal, plaster, and related materials.

ART 328. Sculpture: The Subtractive Process. Three hours. A.
Development of concepts related to the subtractive process of sculpture: wood, stone, and related materials.

ART 329. Crafts, Metals. Three hours. A.
Prerequisite: ART 103.
Application of metal to design problems involving aesthetic value (function) and procedure in the making of fine objects.

Prerequisite: ART 101, 102.
Basic experiences in relief, intaglio, and planographic printmaking.

ART 331. Graphics II. Three hours. I.
Prerequisite: ART 330.
Continuation of ART 330 with emphasis placed on the concepts and techniques of Lithography and Etching.

Prerequisite: Open Only to Junior Elementary Education Majors.
A diversified inquiry into art materials, process and procedures in the elementary school.

ART 390. (Formerly in part ART 391.) Survey of Art History. Three hours. I, II.
A study of art from Pre-Historic times through the Gothic period.

ART 391. (Formerly in part ART 392.) Survey of Art History. Three hours. I, II.
A study of art from the Renaissance to the present day.

ART 393. Greek and Roman Art. Three hours. A.
Prerequisite: ART 390, 391.
A study of the history of classical Greek and Roman architecture, sculpture, and painting from the beginnings of Greek art to the time of Constantine.

ART 394. Twentieth Century Painting. Three hours. A.
Prerequisite: ART 390, 391.
A study of the history of European and American painting from 1900 to the present day, including such styles as fauvism, cubism, expressionism, surrealism, abstract expressionism, pop art, etc.

ART 401. (Formerly ART 521.) Advanced Drawing. Three hours. A.
Prerequisite: ART 300, 301.
Advanced problems in drawing with emphasis upon the drawing as a complete work rather than a preliminary study.

ART 403. (Formerly ART 522.) Advanced Painting. Three hours. A.
Prerequisite: ART 303, 304.
Advanced problems in pictorial organization. May be repeated once.

ART 426. Advanced Sculpture. Three hours. A.
Prerequisite: ART 103, 227, 327, and at least 6 hrs. upper division Sculpture. May be repeated twice.
ART 430. Materials Inquiry in Art Education. Three hours. I, II.
Prerequisite: Open Only to Senior Art Students Who Plan to Teach.
A diversified inquiry into art materials and processes in the elementary and secondary schools.

ART 499. Senior Exhibition. One hour. A.
The organization and presentation of an exhibition of the student's work.

ART 503. Independent Work in Painting. Three hours. A.
Prerequisite: ART 403.
Emphasis is placed upon individual expression. May be repeated twice.

ART 562. Seminar in Art Criticism. Three hours. I, II.
Prerequisite: ART 390, 391.
The study of various topics and problems which relate to the student's understanding and critical awareness of the visual arts.

ART 563. Problems in Art. Three hours. I, II.
Prerequisite: All departmental courses in problem area identified. Limited to seniors and graduate students. May be repeated twice.
Continuation of study begun in regular departmental courses.

GRADUATE COURSES

ART 602. The Art Program in the Public School. Three hours. A.
Prerequisite: Six hours in art.
An analysis of the history of art education in the public schools coupled with a study related to planning and organization of contemporary art education programs.

ART 621.* Drawing. Three hours. A.
ART 622.* Painting. Three hours. A.
ART 627.* Sculpture. Three hours. A.
ART 629.* Crafts, Clay. Three hours. A.
ART 630.* Graphics. Three hours. A.

*Courses in the series, Art 621 through Art 630, share the prerequisite of "six hours of work in the specialization named or consent of instructor." Students may register for no more than nine hours of any specialization offered.

BIOLOGICAL SCIENCES (BIO)

Edwin A. Hess, Chairman; Batch, Branson, Creek, Fulton, Harley, S. Jones, Keefe, LaFuze, Larance, M. McGlasson, Otero, Rudersdorf, Schroeder, M. Thompson, Varney, Whitt, J. Williams.

The Department of Biological Sciences provides several different curricula for students interested in a variety of professions related to biology. A student may select courses in areas of specialization in biology, botany, zoology, fisheries management, wildlife management or medical technology. Other areas such as pre-forestry, pre-veterinary medicine, pre-medicine, pre-dentistry, pre-physical therapy and pre-dental hygiene are advised by members of the department.
For the student interested in either biology, botany, zoology, fisheries management or wildlife management, the following core of courses is required:

BIO 131  
BIO 141  
BIO 211

BIO 221 or 242 or 325 or 330  
BIO 328 or 348  
BIO 490

The minimum number of semester hours of biological science courses required for the respective areas of specialization are: biology (non-teaching) 32 hours; biology (teaching) 32 hours; fisheries management 53-55 hours; and wildlife management 58 hours. Advanced course planning is determined in consultation with the student's upper division advisor.

The first two years of each student's curriculum are found in the Central University College section of this catalog.

**BIOLOGY (Teaching)**

- **Junior**
  - BIO* ........................................ 8
  - CHE 361 or minor** ................................ 5
  - General Education Humanities .................. 6
  - ENG 209 or 211 .................................. 3
  - ENG 210 or 212 .................................. 3
  - PHY 131 ......................................... 5
  - EDF 317 ......................................... 4

  **Senior**
  - BIO* ........................................... 5-6
  - PHY 132 or GLY 210 .............................. 4-5
  - ESH 498, 499 .................................... 14
  - ESH 441 ......................................... 3

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*Students interested in botany should select additional courses from: BIO 311, 316, 325, 330, 335, 336, 341, 355, 510, 521, 522, 523, 524, 526, 542, 558 and 598. Students interested in zoology should select additional courses from: BIO 311, 316, 318, 341, 355, 510, 514, 522, 523, 524, 527, 540, 542, 546, 547, 549, 550, 553, 554, 556, 557, 558, and 598. Selection of courses in different areas of specialization is encouraged, especially for those seeking a teaching degree, and should be planned in consultation with the upper division advisor. At least one field course is required unless approved by the Chairman of the Department of Biological Sciences.

**A minor in chemistry is highly recommended. The minor may be obtained by completing CHE 111, 112, 213 and sufficient upper division chemistry to total 21 semester hours for the teaching minor.**
BIOLOGY (Non-Teaching)

Junior | Hours | Senior | Hours
-------|-------|--------|-------
BIO* | 8 | BIO* | 12
CHE 361 | 5 | BIO elective and/or minor** | 15
PHY 131 and 132 | 10 | |
ENG 209 or 211 | 3 | |
ENG 210 or 212 | 3 | |
--- | --- | --- | ---
29 | 27

*Students interested in botany should select from: BIO 311, 316, 325, 330, 335, 336, 341, 355, 510, 514, 521, 522, 523, 524, 526, 542, 558 and 598. Students interested in zoology should select from: BIO 311, 316, 318, 341, 355, 510, 514, 522, 523, 524, 527, 540, 542, 546, 547, 549, 550, 553, 554, 556, 557, 558, and 598. Selection of courses in different areas of specialization is encouraged and should be planned in consultation with the upper division advisor. At least one field course is required unless approved by the Chairman of the Department of Biological Sciences.

**A minor in either chemistry, physics, mathematics or geology is recommended.

FISHERIES MANAGEMENT

The curriculum for specialization in the area of Fisheries Management prepares the student for employment with natural utilization resource agencies at local, state, and federal levels and with private agencies.

Junior | Hours | Senior | Hours
-------|-------|--------|-------
BIO* | 19 | BIO* | 21-23
PHY 131, 132 or GLY 210, 211 | 8-10 | CHE 570 | 4
or CHE 361, 362 | |
ENG 209 or 211 | 3 | |
ENG 210 or 212 | 3 | |
--- | --- | --- | ---
33-35 | 25-27

*BIO 316, 335, 341, 510, 524, 557, 558, 561, 562 and 598 are additional requirements beyond the core courses in biology. The student’s selection should be planned in consultation with his advisor.

WILDLIFE MANAGEMENT

Junior | Hours | Senior | Hours
-------|-------|--------|-------
BIO* | 16 | BIO* | 24-26
PHY 131, 132, GLY 210, CHE 361, 362 or 570/student must complete two courses | 8-10 | |
ENG 209 or 211 | 3 | |
ENG 210 or 212 | 3 | |
--- | --- | --- | ---
30-32 | 24-26

*BIO 316, 335, 361, 382, 489, 585, 587 and 588 are additional requirements beyond the core courses in biology. Any remaining electives should be selected from the following: BIO 318, 341, 355, 521, 523, 546, 547, 553, 554, 556, 557, 558, 561 and 562, GEO 215 or GEO 216.
MINOR IN BIOLOGICAL SCIENCES

A student may obtain a minor in biology (teaching or non-teaching) through the completion of BIO 131, 141, 211 and nine additional semester hours at the 200 through the 500 level in the biological sciences; a total of 21 semester hours. CHE 111 and 112 must be completed as prerequisites for certain courses in biology that are required for this minor.

GRADUATE STUDY IN THE BIOLOGICAL SCIENCES

The Department provides ample opportunities for the competent student to complete graduate work for the degree of Master of Science in the areas of plant or animal morphology, plant or animal physiology, microbiology, genetics, invertebrate zoology, aquatic biology, wildlife ecology and fisheries ecology.

The Department offers graduate work in the degree Master of Arts in Education for the competent secondary education teacher of science. The program offers a broad scope of courses in biology intended to broaden the biological knowledge of career teachers in botany, zoology, genetics, cell biology, microbiology and physiology.

The general requirements for admission to the Graduate School are described under that section of this catalog or more detailed requirements in the Graduate Catalog. Further information may be acquired from Introduction to the Graduate Programs in Biology provided by the Department of Biological Sciences.

The requirements differ for the two graduate degrees, but both include the satisfactory completion of a minimum of thirty semester hours of credit (six of which may be transferred from another institution, subject to the approval of the Graduate School and the Department of Biological Sciences). The curriculum for each prospective graduate student is determined by a Departmental Advisory Committee. The courses required depend on previous undergraduate course work and performance.

BIOLOGICAL SCIENCES (BIO)

BIO 131. General Botany. Four hours. I, II.
Structure and functions of vascular plant organs, and morphology of representatives of the plant kingdom. Two lecture hours and four laboratory hours.

BIO 141. General Zoology. Four hours. I, II.
Morphology, physiology, development, life history, evolution and diversity of animals. Two lecture hours and four laboratory hours.

BIO 161. (Formerly Science 112, GSC 161.) Environmental Plant Science. Three hours. I, II.
(Not open to students who have completed college laboratory courses in botany.)

The relationships of plants to man and his environment. Emphasis will be placed on current and future problems facing mankind. Topics such as the nature of plants; world population and food production; agricultural and forest practices; water and
air pollution; use of herbicides and related environmental aspects will be discussed. Designed to be either followed by or taken concurrently with BIO 162. However, the course may be taken alone. Two lecture and two laboratory hours each week.

BIO 162. (Formerly Science 111, GSC 162). Environmental Animal Science. Three hours. I, II.
(Not open to students who have completed college laboratory courses in zoology.)
The relationships of animals to man and his environment. Emphasis will be placed on current and future problems facing mankind. Topics such as the body functions of man; populations; diseases and health; vanishing species; waste control; pesticides; pollution; and related environmental aspects will be discussed. Designed to be either followed by or taken concurrently with BIO 161. However, the course may be taken alone. Two lecture and two laboratory hours each week.

BIO 171. Human Anatomy. Three hours. I, II.
A comprehensive study of the anatomical structure of the human body. Interrelated functions of the structure are described. Four lecture-laboratory hours.

BIO 211. Principles of Biological Systems. Four hours. I, II.
Prerequisite: BIO 101 or 141; CHE 111 and 112.
Cellular structure and function; tissue-organ system levels of organization; reproduction and development; and heredity and evolution. Three lecture hours and two laboratory hours.

BIO 221. Principles of Microbiology. Four hours. I, II.
Prerequisite: BIO 211 and CHE 112 or consent of instructor.
An introduction to the biology of microorganisms with emphasis placed on the physiology, culture and development of bacteria, fungi and viruses. Their role in medicine, agriculture and industry is also emphasized. Two lecture hours and four laboratory hours.

BIO 242. Comparative Anatomy. Four hours. I, II.
Prerequisite: BIO 141.
Phylogeny and morphology of the classes of vertebrates. Comparative studies of organs and systems of vertebrate animals, based principally on the dogfish, necturus and cat. Two lecture hours and four laboratory hours.

BIO 273. Clinical Microbiology. Four hours. I.
Prerequisites: BIO 171 and CHE 104 or consent of the instructor.
A course designed for allied health fields. No credit allowed towards a major in biology.
Role of microorganisms in the disease of man with emphasis on the differentiation and culture of microorganisms, types of diseases, modes of transmission, prophylactic, therapeutic and epidemiological aspects. Two lecture hours and four laboratory hours.

BIO 301. Human Physiology. Three hours. I, II.
A general course designed for the non-major. No prerequisites. Credit does not apply towards a major or minor in biology.
A general study of the basic functions of the systems of the human body. Students interested in physiology laboratory exercises, may enroll concurrently in BIO 378 for one semester hour of credit. Three lecture hours.

BIO 304. (Formerly BIO 204.) Birds of Kentucky. Three hours. II, S.
A general course designed for the non-science major. No prerequisites. Credit does not apply toward a major or minor in Biology.
A popular consideration of the birds in general of the eastern and central United States from the Atlantic Coast to the 100th meridian in the Great Plains. Special emphasis on the birds of Kentucky and in particular the birds of the local area. Field trips required. Two lecture hours and two laboratory field trip hours.

BIO 305. History and Philosophy of Biology. Three hours. A.
Prerequisite: BIO 161 and 162 or consent of the instructor. Not open to students who have had SCI 310.
The development of biological thought from the time of the earliest man to the present. Special attention will be given to differences in methodology as well as to an analysis of philosophical factors which affect the type of explanations man has proposed for biological phenomena. Three lecture hours.

**BIO 311.** (Formerly BIO 445, 511.) Microtechnique. Two hours, I, II.
Prerequisite: BIO 131 or 141 and 211 or consent of the instructor.
Technique of preparing plant and animal tissues for microscopic study. Four laboratory hours.

**BIO 315.** (Formerly BIO 325, 515.) Genetics. Four hours. I, II.
Prerequisite: BIO 131, 141 and 211.
Introduction to the physical and biochemical principles of heredity and their application to plants and animals. Three lecture hours and two laboratory hours.

**BIO 316.** (Formerly BIO 451 and 517.) Ecology. Four hours. I.
Prerequisite: BIO 131 and 141.
Basic concepts and principles as applied to the study of organisms or groups of organisms in their interrelations to each other and to their environment. Two lecture hours and four field-laboratory hours.

**BIO 317.** Conservation of Wildlife Resources. Three hours. I, II.
A general course designed for the non-science major. No prerequisites. Credit does not apply towards a major or minor in biology.
Introduction to the principles and practices of conservation of plants and animals; requirements and values of wildlife resources; history and agencies of conservation. Three lecture hours.

**BIO 318.** General Parasitology. Three hours. I in even years.
Prerequisite: BIO 211.
Fundamental principles of parasitology, including basic morphology, classification, life cycles and host-parasite relationships. Two lecture and two laboratory hours.

**BIO 325.** (Formerly BIO 525.) Plant Anatomy. Three hours. I in odd years.
Prerequisite: BIO 131, 211 or consent of instructor.
Anatomy and histology of vascular plants, and phylogenetic developments and adaptive modification. One lecture hour and four laboratory discussion hours.

**BIO 328.** (Formerly BIO 32, 334, and 528.) Plant Physiology. Four hours. II in odd years.
Prerequisite: BIO 131, 211, CHE 112 or consent of the instructor.
The chemical, physical and biological processes which occur in vascular plants. Two lecture hours and four laboratory hours.

**BIO 330.** (Formerly BIO 521 and 522.) Plant Morphology. Four hours. II in odd years.
Prerequisite: BIO 131, 211.
Evolutionary morphology and the life histories of vascular and non-vascular plants. Two lecture hours and four laboratory hours.

**BIO 335.** (Formerly BIO 555.) Plant Systematics. Three hours. II.
Prerequisite: BIO 131 and 211.
Identification, classification and phylogeny of vascular plants; principles of taxonomy; field trips required. One lecture hour and four laboratory hours.

**BIO 336.** (Formerly BIO 31, 536.) Dendrology. Two hours. A.
Prerequisite: BIO 151 and 211.
Classification and identification of woody plants and their economical value. Four laboratory discussion hours.

**BIO 341.** (Formerly BIO 44, 446, 541.) Invertebrate Zoology. Four hours. II in even years.
Prerequisite: BIO 141 and 211.
Comparative morphology, physiology, development, evolutionary relationship and life histories of the invertebrate animals. Two lecture hours and four laboratory hours.

**BIO 348. General Physiology.** Four hours. I, II.  
Prerequisite: BIO 211 and CHE 213.  
A study of the general physiological mechanisms which are basic to life processes, interpreted on chemical and physical principles. The course will include general principles of cell physiology, encompassing cellular function and intercellular reaction as related to the whole organism. Emphasis will be placed on organ and system function in relation to homeostatic mechanisms. Two lecture hours and four laboratory hours.

**BIO 355. Entomology.** Three hours. A.  
Prerequisites: BIO 141, 211.  
Taxonomy, identification, life histories, physiology, economic importance, methods of control and collection of insects, with emphasis on local forms. One lecture and four laboratory hours.

**BIO 378. (Formerly BIO 272 in part.) Applied Physiology.** One hour. I, II.  
A general course designed for non-science majors.  
Prerequisite: Majoring in home economics, physical education or special education and concurrent enrollment in BIO 301.  
Laboratory experiments on neuromuscular, special senses, cardiovascular, respiration, digestion and excretion. Some emphasis is given to anatomy of each system. Two laboratory hours.

**BIO 381. Principles of Wildlife Management.** Three hours. II.  
Prerequisite: BIO 211 and 316.  
Basic principles of wildlife management and their application to current problems. Three lecture hours.

**BIO 382. Wildlife Techniques.** Four hours. I.  
Prerequisite: BIO 381.  
Techniques used in habitat evaluation, game mapping, identification, population dynamics and analysis. Two lecture hours, four laboratory hours.

**BIO 403. Human Hereditary and Eugenics.** Three hours. I, II.  
A general course designed for non-science majors. No prerequisites. Credit does not apply towards a Biology major. Three lecture hours.

**BIO 404. Economic Plants.** Three hours. I, II.  
A general course designed for non-science majors. No prerequisites. Credit does not apply toward a major or minor in Biology.  
Origin, domestication, general anatomy, culture and use of plants economically important to man; deleterious effects of certain plants on man; influence of plants on man's aesthetic life, society and on world events. Three lecture-demonstration hours.

**BIO 489. Field Studies in Wildlife.** One to three hours (maximum of three total hours). A.  
Prerequisite: Approval of chairman. Required of all Wildlife Management majors during junior or senior year.  
Field studies performed under the jurisdiction of faculty or a member of a natural resource agency. A minimum of three hours of laboratory per credit hour each week.

**BIO 490. Biology Seminar.** One hour. I, II.  
Prerequisite: Senior status in Biology.  
Required of all Biology majors. Members of the faculty and majors meet weekly for presentation and discussion of classical and current scientific developments in various fields of the biological sciences. One discussion hour.
BIO 510. (Formerly BIO 611.) Quantitative Biology. Two hours. A.
Prerequisite: Three hours of college mathematics or consent of instructor.
Statistical analysis of biological data. Students participate in the taking of data and processing data by the use of well-established statistical techniques. Four laboratory-discussion hours.

BIO 514. Evolution. Three hours. A.
Prerequisite: BIO 315 or consent of instructor.
The processes of organic evolution with emphasis on the theory of natural selection. Three lecture hours.

BIO 521. (Formerly BIO 627.) Advanced Plant Ecology. Three hours. A.
Prerequisite: BIO 316 or consent of instructor.
Plant life in relation to natural habitats and environmental factors; emphasis on instrumentation and methodology for ecological studies. Two lecture hours and three laboratory hours.

BIO 522. (Formerly BIO 627.) Bacterial Physiology. Three hours. A.
Prerequisites: BIO 221 and CHE 362 or consent of instructor.
Advanced study on microbial activity which includes composition of bacteria, growth, energy transaction and nutrition, and the effects of various chemicals and physical environments on bacteria. Two lecture hours and three laboratory hours.

BIO 523. Mycology. Three hours. II in even years.
Prerequisite: BIO 131, 211 or consent of instructor.
The morphology, physiology, taxonomy and economic importance of fungi. Field trips are required. One lecture and four laboratory-discussion hours.

BIO 524. Phycology. Three hours. I in even years.
Prerequisite: BIO 131, 211 or consent of instructor.
Morphology, taxonomy and ecology and the economic importance of algae. Two lecture hours and two laboratory hours.

BIO 526. Plant Pathology. Three hours. I in even years.
Prerequisite: BIO 131, 211 or consent of instructor.
Principles of plant pathology: significance and the nature of plant disease resistance, pathogenesis and control. Two lecture hours and two laboratory hours.

BIO 527. Immunology. Three hours. A.
Prerequisite: BIO 221, CHE 213 or consent of instructor.
Principles of the immune reaction; nature of antigens, antibodies, antigen-antibody reaction, and allergic phenomena. Two lecture hours and three laboratory hours.

BIO 540. Cellular Physiology. Four hours. A.
Prerequisite: BIO 211, CHE 213 and PHY 131 or consent of instructor.
A study of cellular and basic physiological mechanism essential to life processes which will include: cellular growth and environment; cellular organization and control of energy metabolism; energy utilization and transduction in specialized cells. Emphasis will be given to the regulatory mechanisms in homeostasis, with methodology and techniques typical in modern physiological research. Two lecture and four laboratory hours.

BIO 542. Natural History of Invertebrates. Three hours. I in even years.
Prerequisite: BIO 141, 211.
Collection, systematics, distribution, behavior, ecology, and life histories of terrestrial and freshwater invertebrates. One lecture hour and four laboratory hours.

BIO 546. Histology. Three hours. I, II.
Prerequisite: BIO 141 and 242 or consent of instructor.
Microscopic anatomy of the normal vertebrate cells, tissues and organs. One lecture and four laboratory hours.

BIO 547. Comparative Vertebrate Embryology. Four hours. II.
Prerequisite: BIO 242 or consent of instructor.
Gametogenesis, fertilization, morphogenesis and organogenesis of the frog, bird and mammal. Particular emphasis is placed on mammalian development. Two lecture hours and four laboratory hours.

BIO 549. Endocrinology. Three hours. A.
Prerequisite: BIO 348 and CHE 361.
Basic principles of the functions of endocrine glands with emphasis on the hormonal regulation of physiological processes of the body. Two lecture hours and two laboratory hours.

BIO 550. Animal Behavior. Four hours. A.
Prerequisite: BIO 316 or consent of instructor.
The advanced study of behavior with emphasis on inherited behavior patterns in relation to the evolution and ecology of animals. Three lecture-discussion hours and two laboratory hours.

BIO 553. Mammalogy. Three hours. I in even years.
Prerequisite: BIO 242 or consent of instructor.
Classification, distribution and natural history of mammals. One lecture hour and four laboratory hours.

BIO 554. Ornithology. Three hours. II in even years.
Prerequisite: BIO 242 or consent of instructor.
Avian biology with emphasis on field identification of local avifauna, anatomy, physiology, ecology, evolution, migration, economic importance, distribution and behavioral patterns. A special investigative study required for all graduate students. Some early morning field trips required. Two lecture hours and four laboratory hours per week.

BIO 556. Herpetology. Three hours. II in odd years.
Prerequisite: BIO 242, or consent of instructor.
The natural history of the amphibians and reptiles including taxonomy, general ecology, behavior, distribution, breeding and food habits. Two lecture hours and three laboratory hours.

BIO 557. Ichthyology. Three hours. II in even years.
Prerequisite: BIO 242 or consent of instructor.
Internal and external morphology, taxonomy, life histories, ecology and phylogeny of the fishes of North America. Two lecture hours and three laboratory hours.

BIO 558. Limnology. Three hours. II in odd years.
Prerequisite: BIO 211, CHE 112 or consent of instructor.
Ecology of lakes and streams with special reference to physical, chemical and biological factors of lotic and lentic environments. Comparative field investigations, methods and instruments of limnological field investigation of lakes and streams. One lecture hour and four field-laboratory-discussion hours.

BIO 561. Fisheries Biology. Four hours. A.
Prerequisite: BIO 557 or consent of instructor.
Study of the anatomy, life histories, disease, conservation, methods of harvest, economic importance, and ecological interactions of fishes. Two lecture hours and six laboratory hours.

BIO 562. Fisheries Management. Four hours. A.
Prerequisite: BIO 558 and 561 or 557.
Methods of fish-catching in the world, making and setting nets, construction of fish ponds, management of lakes, ponds and streams. The culture of game fishes, fisheries, statistics, and field experiences. Two lecture and six laboratory hours.

BIO 585. Regional Wildlife Ranges. Three hours. II in odd years.
Prerequisite: BIO 382.
Distribution and management of game resources as determined by regional climate, physiographic, vegetative, and land-use factors. Three lecture hours.
BIO 587. Resident Wildlife Resources. Four hours. I.
Prerequisite: BIO 382.
Taxonomy, life histories, distribution, environmental needs, economic status and plans for management of resident wildlife on forest, farm, and rangeland. Two lecture hours and four laboratory hours.

BIO 589. Migratory Wildlife Resources. Four hours. II.
Prerequisite: BIO 382.
Taxonomy, life histories, distribution, environmental needs, economic status and plans for management of doves, waterfowl, and marsh birds. Two lecture hours and four laboratory hours.

BIO 598. (Formerly BIO 498.) Special Problems. One to three hours. A.
Prerequisite: Senior or graduate standing and permission of the chairman or the thesis director. Permission must be obtained before registration in the course. The student may repeat the course for a maximum total of four hours. A study of special problems, special biological techniques or group of organisms. A minimum of three laboratory hours per credit hour. A course designed to expose the undergraduate or graduate student to the problems in biological research and study in the various areas of specialization.

GRADUATE COURSES

BIO 601. Scientific Literature of Biology. Two hours. I.
Directed readings in Biology designed to acquaint the student with the major sources of literature, the delineation of problems, note taking and the making of bibliographies. Two lecture-discussion hours.

BIO 605. Development of Biological Thought. Three hours. A.
The history of man's attempt to discover and explain biological phenomena. Special attention will be given to the interrelation of scientific disciplines as they affect biological thought. Selected case studies will be employed as a means of achieving depth as well as introducing the student to the literature of the history of biology. Three lecture hours.

BIO 612. Cytology and Cytogenetics. Four hours. A.
Cytological basic structures, their function, and their relationships to heredity mechanism in both plants and animals. Two lecture and four laboratory hours.

BIO 616. Biogeography. Three hours. A.
Ecological, faunistic and floristic distribution on a world-wide basis. Theory of distribution pathways as regards final distribution. Three lecture hours.

BIO 623. Advanced Plant Morphogenesis. Three hours. A.
Advanced study of plant growth with respect to cells and meristems; phenomena or morphogenesis, correlation, polarity, symmetry, differentiation, regeneration, and tissue mixtures. Three lecture hours.

BIO 633. Advanced Plant Systematics. Three hours. A.
Principles of the systematics of vascular plants with emphasis on comparative and experimental techniques. Consideration of theory and systems of phylogeny, classification and nomenclature. One lecture hour and four laboratory hours.

BIO 645. Vertebrate Physiological Ecology. Three hours. A.
Comparative study of physiology mechanisms of vertebrates in response to changing environmental conditions. Topics emphasized include: Temperature adaptation, color change, orientation and biological rhythms. Two lecture hours and three laboratory hours.
BIO 647. Advanced Animal Ecology. Three hours. A.
Structure, composition and classification of biotic communities; population growth and regulation; interaction of populations; and techniques for measurement of environmental factors in terrestrial and aquatic environments. Two lecture-discussion hours and three laboratory-field hours.

BIO 649. Experimental Endocrinology. Three hours. A.
The bioassay, synthesis, metabolism and mechanism of action of hormones emphasized through various experimental designs. One lecture hour and four laboratory hours.

BIO 690. Graduate Seminar. One hour. I, II, S.
Required of all graduate students; this course may be repeated for a maximum of two hours of credit. Presentation and discussion of current trends and concepts in the disciplines of the biological sciences. One discussion hour.

BIO 691. Thesis Research. One to three hours. A.
This course may be repeated, but a maximum of six semester hours of credit may be applied toward a degree. The student must apply research in the biological fields towards the preparation of a graduate thesis, as directed by the thesis director.

CHEMISTRY (CHE)

H. M. Smiley, Chairman; Bendall, Byrn, Chaney, Davidson, Luts, Meisenheimer, Powell, Salyer, Schulz, M. Taylor, R. Thompson.

A student may major in Chemistry (non-teaching) by completing CHE 111, 112, 213, 361, 362, 471, 472, 480, 514, 525, 550, 565; (total of 42 hours) MAT 109, 111, 112, 213, (total of 17 hours) PHY 201 and 202; (total of 10 hours) GER 101, 102, 201 and 203, (total of 12 hours). A year of Russian or French and additional courses in chemistry, physics and mathematics are recommended.

A student may major in Chemistry (teaching) by completing CHE 111, 112, 213, 361, 362, 570, and seven elective hours in Chemistry in courses numbered above 300 (total of 33 hours). In addition, PHY 201 and 202, or 131 and 132; MAT 109, and 111, are required. A year of German is recommended.

A student may minor in Chemistry (non-teaching) by taking CHE 111, 112, 213, and seven hours of upper division Chemistry courses (total of 20 hours). A total of 21 semester hours in Chemistry is required for a teaching minor.

The first two years of the curriculum for a major in chemistry may be found in the Central University Section.

Curriculum for a major in Chemistry (non-teaching):

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<td>CHE 361, 362, 471, 472</td>
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<td>CHE 514, 480, 525, 550, 565</td>
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<td>ENG 211, 212, or 209, 210</td>
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<td>GER 201, 203</td>
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*Electives must include six approved hours of social sciences and three hours of biological science.
Curriculum for a major in Chemistry (teaching):

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<td>ENG 211, 212, or 209, 210</td>
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<td>CHE Electives</td>
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<td>CHE 361, 362, 570</td>
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<td>ESH 498, 499</td>
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*Electives must include six hours of social science, and three hours of biological science.

Graduate Study in Chemistry.

The Chemistry Department offers the degree of Master of Science with a major in chemistry. The Chemistry Department in cooperation with the Graduate School and the College of Education also offers an emphasis in chemistry applying toward the Master of Arts degree in Education. The regulations for these advanced degrees may be found in the Graduate Catalog.

CHEMISTRY (CHE)

CHE 101. General Chemistry I. Four hours. I, II.
Designed for students who will take only one year of chemistry. Basic principles of chemical bonding, structure of matter, chemical equilibrium, and descriptive inorganic chemistry. Three lecture and two laboratory hours.

CHE 102. General Chemistry II. Five hours. I, II.
Prerequisite: CHE 101.
Continuation of CHE 101, emphasis on elementary organic chemistry, biochemistry and industrial chemistry. Three lecture, one recitation, and two laboratory hours.

CHE 111. Introductory Chemistry I. Four hours. I, II.
First semester of a three-semester sequence designed to prepare the student for further study in chemistry. Topics include nomenclature, structure of matter, stoichiometry, chemical bonding, and chemical change. Three lecture and two laboratory hours.

CHE 112. Introductory Chemistry II. Five hours. I, II.
Prerequisite: CHE 111.
Continuation of CHE 111. Coordination compounds, descriptive inorganic chemistry, solution chemistry, and analytical chemistry. Three lecture and four laboratory hours.

CHE 213. Introductory Chemistry III. Four hours. I, II.
Prerequisite: CHE 112.
Continuation of CHE 112, emphasis on analytical chemistry, thermodynamics, and kinetics. Three lecture and three laboratory hours.

CHE 330. Introductory Biochemistry. Three hours. I.
Prerequisite: CHE 102 or permission of instructor. Not open for non-teaching chemistry majors.
Compounds and reactions of biological and nutritional importance. Amino acids, proteins, lipids, carbohydrates, vitamins, enzyme systems, digestion, absorption and pathways. Two lectures and two laboratory hours.

CHE 361. Organic Chemistry. Five hours. I, II.
Prerequisite: CHE 213.
Structural theory; hydrocarbons; introduction to stereochemistry; carbonium ion theory; aromatic compounds; applied absorption spectroscopy. Three lecture and six laboratory hours.
CHE 362. Organic Chemistry. Four hours. I, II.
Prerequisite: CHE 361.
Organic halides; alcohols and ethers; carboxylic and sulfonic acids; carbonyl compounds; amines and diazonium salts; polyfunctional compounds. Three lecture and three laboratory hours.

CHE 471. Physical Chemistry. Four hours. I.
Prerequisite: CHE 213, 361; MAT 213 (or concurrent enrollment); PHY 202.
The thermodynamic properties of physicochemical systems; free energy and equilibria; kinetic theory of gases and reaction rates. Three lecture and three laboratory hours.

CHE 472. Physical Chemistry. Four hours. II.
Prerequisite: CHE 471; MAT 213.
Electrochemical processes; electrolytic solutions and activity coefficients; atomic and molecular structure; spectroscopy; partition functions and thermodynamic relations. Three lecture and three laboratory hours.

CHE 480. (Formerly CHE 580.) Seminar. One hour. I, II.
Prerequisite: Senior standing.
Presentation of significant developments from recent literature to members of the chemistry faculty and departmental majors. One weekly meeting. May be repeated for a total of two hours credit.

CHE 513. Principles of Chemistry III. Four hours. A.
The development of the origin of chemistry concepts: atomic theory, chemical bonding, chemical interaction. (This course is designed for NSF Summer Institutes and is not available for chemistry majors or chemistry graduate students in a Master of Science program.)

CHE 514. Chemical Literature. One hour. A.
Prerequisite: CHE 361; 472 or permission of instructor.
Introduction to the use of fundamental periodicals, abstract journals, handbooks, review series and encyclopedias of chemistry. One lecture hour.

CHE 520. Advanced Analytical Chemistry. Three hours. A.
Prerequisite: CHE 362 and 472 or permission of instructor.
Advanced study of analytical methods usually classified as non-instrumental. Precipitation studies, aqueous and non-aqueous solvents, titrations, liquid-liquid extractions, chromatography, ion exchange, kinetics in analytical chemistry, sampling, statistics. Two lecture hours, three laboratory hours.

CHE 525. (Formerly CHE 320 and 420.) Instrumental Methods. Four hours. A.
Prerequisite: CHE 362 and 472 or permission of instructor.
Principles and uses of optical and electrical instruments in analysis. Colorimetric, spectrophotometric (including infra-red), conductometric, potentiometric, polarographic and chromatographic methods and determinations, methods of nuclear chemistry. Two lecture and six laboratory hours.

CHE 530. (Formerly CHE 313). Biochemistry I. Four hours. II.
Prerequisites: CHE 362; 471 or permission of instructor.
Chemistry, metabolism and biosynthesis of carbohydrates, proteins, and lipids, the action of vitamins, hormones and enzymes related to cellular metabolism and body processes. Two lecture hours, three laboratory hours.

CHE 531. Biochemistry II. Four Hours. A.
Prerequisite: Chemistry 530.
A continuation of CHE 530. Topics included are nucleoproteins, energetics, biological catalysis, and functions of biologically important materials. Three lecture and three laboratory hours.

CHE 545. Chemistry Laboratory and Demonstration Techniques. Four hours. A.
Prerequisite: Six semesters of undergraduate work in chemistry or permission of instructor.
Techniques of constructing and demonstrating apparatus to illustrate principles of chemistry. Primarily for high school and junior college science teachers. Three lecture and three laboratory hours.

**CHE 550.** (Formerly CHE 440.) Advanced Inorganic Chemistry. Three hours. I. 
Prerequisite: CHE 472 or permission of instructor.
Modern concepts of atomic nuclei, atomic structure, and classification of elements. Complex ions and coordination compounds. Theories of bonding. Three lecture hours.

**CHE 555.** Inorganic Preparations. Three hours. II. 
Prerequisite: CHE 550 or permission of instructor.
Techniques of crystallization, distillation, furnace methods, electrolytic processes and gas handling as involved in the synthesis of alloys, oxides, salts, coordination compounds, polyacids, anomalous salts, and colloids. One lecture and six laboratory hours.

**CHE 560.** Advanced Organic Chemistry. Three hours. A. 
Prerequisite: CHE 362; 472 or permission of instructor.
Survey of new reactions and comprehensive study of reaction mechanisms. Three lecture hours.

**CHE 565.** Qualitative Organic Analysis. Three hours. A. 
Prerequisite: CHE 362 or permission of instructor.
Identification of unknown organic substances through a systematic study of their physical and chemical properties and their chemical derivatives. One lecture and six laboratory hours.

**CHE 570.** (Formerly 470.) Physical Chemistry for the Biological Sciences. Four hours. I. 
Prerequisite: CHE 213 or permission of instructor.
Recommended for premedical students and students in the biological sciences or related disciplines. Topics considered: states of matter, colligative properties of solutions, thermodynamics, equilibrium, electro-chemistry, colloids, and reaction kinetics. (Chemistry majors will take Chemistry 471 and 472.) Three lecture and three laboratory hours.

**CHE 575.** Radiochemistry. Three hours. A. 
Prerequisite: CHE 471 or permission of instructor.
The nature and uses of radioactive substances in chemistry. Radiolysis, isotope exchange, radiotracer applications; isotope dilution methods; applications to structural and kinetics studies, including solvent extraction and chromatography. Some demonstration experiments. Three lecture hours.

**CHE 595.** (Formerly called Research in Chemistry.) Introduction to Research. Three to five hours. I, II. 
Prerequisite: CHE 361; 471 or permission of instructor.
Objectives and techniques of chemical research. Problems in all fields of chemistry.

**GRADUATE COURSES**

**CHE 610.** History of Chemistry. Three hours. A. 
Consideration of the role of chemistry in the history of man, the development of chemical concepts, and the contributions of famous chemists. Research will include inspection of various problem-solving philosophies of chemistry. Three lecture hours.

**CHE 625.** Spectroscopy. Three hours. A. 
Prerequisite: CHE 525 or 472.
The origin of spectra; arc and spark spectra; excitation energies; flame photometry; emission methods; the photographic process; Raman and atomic absorption methods; mass spectroscopy. Two lecture and three laboratory hours.
CHE 626. Electroanalytical Chemistry. Three hours. A.
Prerequisite: CHE 525.
Study of the fundamental principles underlying potentiometric measurements and
titrations, conductometric titrations, polarographic analysis, amperometric titrations,
coulometric titrations, chronopotentiometry, and other electrochemical methods in
analytical chemistry. Two lecture and three laboratory hours.

CHE 630. Advanced Biochemistry. Three hours. A.
Prerequisite: CHE 530.
Advanced study of metabolic processes and biosynthetic routes. Three lecture hours.

CHE 652. Chemistry of the Transition Elements. Three hours. A.
Prerequisite: CHE 550.
A detailed treatment of the chemistry of the transition elements, the lanthanides
and actinides, including the structure of coordination complexes, bonding, reaction
mechanisms, and preparations. Three lecture hours.

CHE 653. Chemistry of Solutions. Three hours. A.
Prerequisite: CHE 550.
Reactions and substances in aqueous and non-aqueous media. Three lecture hours.

CHE 660. Organic Synthetic Methods. Three hours. A.
Prerequisite: CHE 560.
Modern synthetic methods with an emphasis upon mechanism. Topics will include
oxidation, reduction, Diels-Alder reactions, 1,3-dipolar addition and synthesis using
carbene and aryne intermediates. Three lecture hours.

CHE 662. Quantum Organic Chemistry. Three hours. A.
Prerequisites: CHE 362 and 472 or permission of instructor.
The basic principles of molecular orbital theory and its application to organic
chemistry. Three lecture hours.

CHE 663. Stereochemistry of Organic Compounds. Three hours. A.
A study of configurations and conformations of organic molecules and the influence
of molecular structure on reactions. Three lecture hours.

CHE 670. Advanced Physical Chemistry. Three hours. A.
Prerequisite: CHE 472; MAT 453 recommended.
Introduction to quantum theory; simple quantum mechanical systems; energy
levels and statistical mechanics; atomic and molecular structure. Three lecture hours.

CHE 671. Chemical Kinetics. Three hours. A.
Prerequisite: CHE 472.
Theory of rate processes; reaction order and molecularity; mechanisms of reaction.
Three lecture hours.

CHE 673. Chemical Thermodynamics. Three hours. A.
Prerequisites: CHE 472; MAT 453.
Variables and state functions; entropy, enthalpy, and free energy in ideal and non-
ideal systems; activity and fugacity; partial molal quantities and chemical potential;
thermodynamic properties from spectroscopic data. Three lecture hours.

CHE 680. Graduate Seminar. One hour. I, II.
Presentation of significant developments in chemistry to members of the chemistry
faculty and department majors. One weekly meeting. May be repeated for a maximum
of two hours credit.

CHE 681. Seminar in the Teaching of Chemistry. One hour. A.
Topics include the discussion of trends in chemistry teaching, application of
research to chemistry teaching, and special problems that occur in schools. May
be repeated for a maximum of two hours credit. One weekly meeting.

CHE 690. Graduate Literature Program. Three hours. I, II.
An extensive survey of the literature related to a specific research program.
CHE 695. Graduate Research. One to six hours. I, II.
Laboratory research in one of the major areas of chemistry. May be repeated for a maximum of six credit hours.

SCIENCE (SCI)

SCI 310. History of Science. Three hours. I, II.
The development of scientific concepts through the ages; contribution of science to civilization; philosophy of science; biographical sketches. Students may not receive credit for both SCI 310 and BIO 305. Three lecture hours.

DRAMA AND SPEECH (DRA & SPE)

Richard Benson, Chairman; Kelley, Laughlin, Richman, Smeyak, Smith

The Department of Drama and Speech offers four majors: Speech (teaching and non-teaching), Speech and Drama (teaching and non-teaching), Drama (non-teaching), and Broadcasting (non-teaching).

SPEECH MAJOR (teaching and non-teaching): 30 hours in addition to SPE 100, including SPE 150, 205, 240, 300; 330 or 420 or 430.

SPEECH AND DRAMA MAJOR (teaching and non-teaching): 30 hours in addition to SPE 100, including SPE 150, 205 or 240, 300; DRA 110, 231, 341, 501.

DRAMA MAJOR (non-teaching): 30 hours in addition to SPE 150, including DRA 110, 231, 341, 500, 501; SPE 240 and up to 6 hours of supporting courses in dramatic literature (chosen in consultation with the advisor) may be included as drama electives.

BROADCASTING MAJOR (non-teaching): 30 hours in addition to SPE 100, including JOU 200; SPE 150, 290, 390, 395; 3 hours in Practicum Courses (SPE 393 and 398). Students are encouraged to take a wide range of courses in the social and behavioral sciences.

SPEECH MINOR: 18 hours in addition to SPE 100, including SPE 150, 205 or 240, 300.

SPEECH AND DRAMA MINOR: 18 hours in addition to SPE 100, including SPE 150, 205 or 240, 300; DRA 110, 341.

DRAMA MINOR: 18 hours in addition to SPE 150, including DRA 110, 341, 501.

The curriculum for the junior and senior years should be worked out in consultation with the advisor. The first two years of the curriculum may be found in the Central University College section.

DRAMA (DRA)

DRA 100. Forms and Philosophy of Theatre. Three hours. I, II.
Understanding and appreciating the arts of the theatre, development of dramatic forms and practices, consideration of the elements of contemporary theatrical practice. Analysis of plays. Attendance at selected play productions required.
DRA 110. Technical Theatre. Three hours. A.
Problems of technical production dealing with the scenic process: use of materials, methods of construction and handling of scenery, fabrication and construction of properties. Practical experience in the university theatre required.

DRA 215. Make-up. Two hours. A.
All types of theatrical make-up.

DRA 231. (Formerly DRA 130.) Acting I. Three hours. I.
Stage movement, characterization, and projection through exercises in improvisation and pantomime.

DRA 310. Technical Production. One hour (may be repeated for a total of three hours.) I, II.
Prerequisite: DRA 110.
Study and practice of technical production through participation in directed departmental activities.

DRA 311. Advanced Technical Theatre. Three hours. A.
Prerequisite: DRA 110.
Emphasis upon participation in planning and executing scenery, lighting and properties for University Theatre productions.

DRA 315. Stage Costume. Three hours. A.
Design and execution of theatrical costumes with emphasis on originality, color and line. Attention given to costumes of various periods and styles.

DRA 330. Rehearsal and Performance, One hour (may be repeated for a total of three hours.) I, II.
Prerequisite: DRA 231.
Study and practice of acting through participation in directed departmental productions.

DRA 331. (Formerly DRA 230.) Acting II. Three hours. II.
Prerequisite. DRA 231.
Continuation of Acting I, culminating in presentation of scenes in class.

DRA 341. (Formerly DRA 440.) Directing I. Three hours. A.
Prerequisite: DRA 110, 231.
Basic fundamentals of play direction.

DRA 370: Playwriting. Three hours. A.
Prerequisite: Permission of instructor.
Structural analysis of the play form and the writing of a short or full length play.

DRA 411. (Formerly DRA 210.) Stage Design. Three hours. A.
Prerequisite, DRA 110.
Principles and problems of scenic and lighting design through assignments in various styles and periods; practice in research and techniques of rendering and preparation of working drawings and models; basic theories of stage lighting from a technical and aesthetic viewpoint and practice in planning of light plots for individual plays.

DRA 441. Directing II. Three hours. A.
Prerequisite: DRA 341.
Theory and technique of play direction. Individual directing projects provide for application of principles to specific problems.

DRA 460. (Formerly DRA 545.) Creative Dramatics. Three hours. A.
Principles and techniques of leading children in the creation of informal dramatic activities.

DRA 465. (Formerly DRA 540.) Children's Theatre. Three hours. A.
Prerequisites: DRA 341.
Principles and practice of play production for children by adults or children.
DRA 499. (Formerly DRA 400, 410, and 420). Special Problems in Theatrical Performance, Production, Research. One to Three hours. A.
Independent study in the various areas of the theatre. Departmental permission required. May be taken for a maximum of six hours credit.

DRA 500. History of Theatre I. Three hours. I.
Intensive examination of development of theatre and drama from the Greeks to the Elizabethans.

DRA 501. History of Theatre II. Three hours. II.
Development of drama and theatre from the Elizabethans to the modern period.

DRA 541. Special Problems in Play Direction. One to three hours. A.
Prerequisites: DRA 341, 441.
Direction of a studio or major production under faculty guidance. Departmental permission required.

DRA 550. Play Production. Three hours. A.
Non-specialized course dealing with the basic elements of play production; selection, casting, rehearsals, types of dramatic literature, styles of acting, elementary principles of set design and decoration, costuming, make-up, lighting, and house management. Primarily for prospective teachers who may direct dramatics. Open to speech and/or drama majors only with the consent of instructor.

DRA 555. Special Problems in Play Production. One to three hours. A.
Prerequisite: Departmental permission.
Directed projects in theatrical production.

SPE 100. Oral Communication. Three hours. I, II.
Principles and practice of oral communication. Study of the process of communication; opportunity to reinforce that study through speaking.

SPE 150. Improvement of Voice and Articulation. Three hours. A.
Basic theory of speech production; drills for improvement of voice and articulation; adapted to students' individual speech needs.

SPE 205. Argumentation and Advocacy. Three hours. I.
Prerequisite: SPE 100.
Principles and practice of argument in logical discourse with attention to research, evidence, analysis, methods of attack and defense, organization of ideas, and presentation.

SPE 220. Communication in Groups. Three hours. II.
Prerequisite: SPE 100.
Principles and practice of group inquiry; investigation and analysis of problems in selected group situations.

SPE 240. Oral Interpretation of Literature I. Three hours. I.
Basic techniques of reading aloud; analysis of selections of prose and poetry; practice in reading aloud.

SPE 290. Introduction to Radio and Television. Three hours. A.
Survey of the industry. Development of broadcasting; its responsibilities and job opportunities; organization of stations and networks; federal regulation and industry codes; technical aspects of radio and television; brief consideration of programming and production techniques; field trips to area radio and television stations.

SPE 300. Forms of Public Address. Three hours. A.
Principles and practice of contemporary forms of public address developed through a study of selected historically significant speeches.

SPE 315. Forensics. One hour. (May be repeated for a total of three hours.) I, II.

Prerequisites: SPE 205 and permission of instructor.
Study and practice of discussion and debate with required participation in intercollegiate forensic activities.

SPE 320. (Formerly SPE 400) Persuasion. Three hours. A.
Prerequisite: SPE 100.
Methods of influencing human belief and behavior through communication; special attention to psychological motivation.

SPE 330. Rhetorical Theory. Three hours. A.
Study of selected theories of public address from the classical period to the modern era.

SPE 340. Oral Interpretation of Literature II. Three hours. A.
Prerequisite: SPE 240.
Advanced techniques of oral interpretation; attention to individual problems. Final recital program of readings required.

SPE 360. (CL SED 360.) Speech and Language Development. Three hours. A.
The normal patterns of speech and language acquisition; application of learning theory and linguistic concepts.

SPE 390. Radio Production. Three hours. A.
Prerequisite: SPE 290.
Fundamentals of technical artistic elements of radio production. Practical experience at Radio Station WEKU-FM required.

SPE 392. Radio Practicum. One hour. (May be repeated for a total of three hours.) I, II.
Prerequisite: Permission of instructor.
Supervised practical experience on the staff of Radio Station WEKU-FM. Students will participate in the various aspects of radio station operation.

SPE 395. Television Production. Three hours. A.
Prerequisite: SPE 290.
A study of the basic elements of television production, including an introduction to writing, producing, directing, and other technical aspects of commercial television. Two hours lecture-discussion and two hours lab.

SPE 398. Television Practicum. One hour. (May be repeated for a total of three hours.) I, II.
Prerequisite: Permission of instructor.
Supervised practical experience on the staff of Eastern Kentucky University Instructional Television; participation in various aspects of television production including camera work, lighting graphics, set design and construction.

Rhetorical analysis of the formation and structure of American public opinion applied of major institutional and political propaganda campaigns of the 20th Century. The adaptation of propaganda themes to social and cultural groups are studied by the case method.

SPE 420. (Formerly SPE 333) History and Criticism of Public Address: 18th and 19th Century Spokesmen. Three hours. A.
Study of selected eighteenth and nineteenth century speakers; critical analysis of selected speech texts.
SPE 430. (Formerly SPE 335) History and Criticism of Public Address: 20th Century Spokesmen. Three hours. A. Study of selected twentieth century speakers; critical analysis of selected speech texts.

SPE 440. (Formerly SPE 305) Great Speeches. Three hours. A. A survey of great speeches from ancient times to the present; designed to establish a basis for judgment and appreciation of masterpieces of public speaking: analysis of selected texts.

SPE 450. (Formerly SPE 550.) Phonetics of the English Language. Three hours. A. Phonetic analysis of contemporary American speech practice in broad and narrow transcription.

SPE 485. Television Film Production. Three hours. A. Prerequisite: Permission of instructor. Examination and practical application of basic motion picture production techniques. Emphasis on filming, editing and scripting.

SPE 490. Radio and Television Management. Three hours. A. Prerequisite: SPE 290. A study of the elements basic to successful operation of a radio and television station: staffing, budgeting, types and sources of programs, equipment evaluation and purchase, public relations and promotion, and federal and industry-wide regulatory codes.

SPE 495. Advanced Television Production. Three hours. A. Prerequisite: SPE 395. A continuation of SPE 395. Advanced study and practice of various aspects of commercial television production. Two hours lecture-discussion and two hours lab.

SPE 498. Special Problems in Broadcasting. One to three hours. A. Independent study in Broadcast Research, Production, Writing. Departmental permission required. May be taken for a maximum of six hours credit.

SPE 499. Special Problems in Rhetoric and Public Address. One to three hours. A. Independent study in Speech Research. Departmental permission required. May be taken for a maximum of six hours credit.

SPE 560. (Also SED 560.) Introduction to Speech Correction. Three hours. A. Prerequisite: SPE 100. Designed to help identify and deal with speech defects. Study of basic types of disorders, emphasis on good environment for the handicapped and sources of specialized help.

ECONOMICS

The Department of Economics is in the College of Business and the course offerings may be found in the College of Business section of this catalog. A student in the College of Arts and Sciences may major or minor in Economics. For a major, he is required to take thirty hours which must include the following courses: ECO 230, 231, 324, 593, 597, and 550 or 492. For a minor, he is required to take eighteen hours which must include the following courses: ECO 230, 231, 324, 593, and 550 or 492.
ENGLISH (ENG)


The following courses are required for a major in English (teaching or non-teaching): GSE 101; 102; ENG 209 or 211; 210 or 212; 301; 350; 351; 411; 539 (540 or 541). In addition, at least 9 hours of restricted English electives are required, selected so that a minimum of one course is taken from each of the following groups, to make a minimum total of 30 hours excluding GSE 101 and 102: Group I (521, 522, 523, 524); Group II (321, 422, 525, 526, 534); Group III (312, 317, 323).

The student must take 12 hours (or equivalent) of a foreign language; HIS 345 or 346 (or equivalent); and SPE 100 or 300.

The student may take a teaching area in English by earning at least 51 semester hours including GSE 101 and 102. In general the student may follow the curriculum for a major, adding at least 15 hours selected in conference with his advisor.

The following courses are required for a minor in English (non-teaching): GSE 101 and 102; ENG 209 or 211; 210 or 212; 301; 350 or 351; 411 and one additional upper division course in literature. The same courses are required for a minor in English (teaching) except that a course in linguistics (ENG 539, 540 or 541) must be taken in lieu of the additional upper division course in literature. A total of 24 semester hours in English is required for a minor.

Curriculum for a major in English (teaching): The first two years of this curriculum may be found in the Central University College section.

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MASTER OF ARTS DEGREE IN ENGLISH

The Master of Arts Degree in English is offered under Option A or Option B. Under either option, work includes both preparation for independent study leading toward the Ph.D. in English and for teaching on the college and pre-college levels. Under either option a student must pass a language reading examination in one foreign language (normally French, German, or Latin) before the Master's degree will
be granted; however, the student may instead elect, unless he has already met the requirement, the completion of 12 hours (or the equivalent) of study in at least one language, acceptable to the student's graduate advisory committee. Also, under either option, at least 16 hours must be at the 600 level.

For further information concerning the objectives and areas of course work leading to the M.A. degree in English, admission requirements, the Graduate Record Examination, residence requirements, grade-point average requirement for graduation, comprehensives and orals, and other pertinent matters, see the Graduate Catalog.

MASTER'S DEGREE IN EDUCATION

The Department of English, in cooperation with the Graduate School and the College of Education, offers an emphasis in English applying toward the M.A. degree in Education. Students obtaining this degree should have a minimum total of 30 graduate hours, 10 of which should be in education and 20 of which should be in English. For further requirements see the Graduate Catalog.

ENGLISH (ENG)

ENG 150. (Formerly English 216.) Introduction to the Short Story. Two hours. I, A.
   Readings in the modern short story from its origins to the present; special emphasis on understanding and enjoying short fiction.

ENG 151. Introduction to Dramatic Literature. Two hours. II, A.
   Readings in selected classic and modern plays with emphasis on appreciation and interpretation.

ENG 209. Survey of English Literature I. Three hours. I, II.
   Prerequisite: GSE 101 and 102.
   English literature from Beowulf through the 18th Century; special emphasis on Chaucer, Spenser, Shakespeare, Donne, Milton, Dryden, Pope, Swift, and Johnson.

ENG 210. Survey of English Literature II. Three hours. I, II.
   Prerequisite: GSE 101 and 102.
   English literature from the Romantics to the present; emphasis on Wordsworth, Keats, Tennyson, Browning, Arnold, Hardy, Yeats, and Joyce.

ENG 211. Survey of World Literature I. Three hours. I, II.
   Prerequisite: GSE 101 and 102.
   Selected readings from masterpieces of world literature from ancient times through the Renaissance.

ENG 212. Survey of World Literature II. Three hours. I, II.
   Prerequisite: GSE 101 and 102.
   Selected readings from Continental, English, and American writers from the 17th Century to the present.

ENG 214. Introduction to the Novel. Three hours. A.
   Prerequisite: GSE 101 and 102.
   Readings from selected English and American novels.

ENG 215. Introduction to Poetry. Three hours. A.
   Prerequisite: GSE 101 and 102.
   Readings in selected poems with major emphasis on understanding and enjoying poetry; training in the explication of poems.
ENG 301. Advanced Composition and Rhetoric. Three hours. I, II.
Prerequisite: GSE 101 and 102.
Study of grammar and rhetoric in relation to expository writing; special attention
given to preparing a research paper on a topic related to an appropriate phase of
English.

ENG 312. Modern Drama. Three hours. A.
Prerequisite: GSE 101, 102, and two courses in literature.
Study of representative Continental, British, and American plays from Ibsen to
the present.

ENG 317. The Modern Novel. Three hours. A.
Prerequisite: GSE 101, 102, and six hours of literature.
Study of important British and American novels of the 20th Century.

ENG 319. Kentucky Literature. Three hours. I, A.
Prerequisite: GSE 101 and 102, and two courses in literature.
Study of prominent Kentucky writers from the time of statehood to the present;
students encouraged to work with the John Wilson Townsend Collection.

ENG 321. The Age of Wordsworth and Keats. Three hours. I, A.
Prerequisites: GSE 101, 102, and two courses in literature.
Primary emphasis on the poetry of the Romantic period.

ENG 323. Modern Poetry. Three hours. II, A.
Prerequisite: GSE 101, 102, and six hours of literature.
Study of contemporary British and American poets; analysis, interpretation and
criticism of modern poetry.

ENG 350. American Literature I. Three hours. I, II.
Prerequisite: GSE 101, 102, and two courses in literature.
Survey of American literature from the beginnings to Whitman; emphasis on
Cooper, Bryant, Emerson, Poe, Hawthorne, Melville, and Thoreau.

ENG 351. American Literature II. Three hours. I, II.
Prerequisite: GSE 101, 102, and two courses in literature.
Survey of American literature from Whitman to the present; emphasis on Whit-
man, Dickinson, Twain, James, Faulkner, Frost, and Eliot.

ENG 411. Shakespeare. Three hours. I, II.
Prerequisite: GSE 101, 102, and two courses in literature.
Study of Elizabethan England as a background for Shakespeare's works; extensive
reading of several plays; intensive reading of selected drama and poetry.

ENG. 420. The Local Colorists and the Regional Realists. Three hours. A.
Prerequisite: GSE 101, 102, and two courses in literature.
Rise of local color and regional realism; survey of the movements from the begin-
nings to the present in the United States.

ENG 422. Poetry and Prose of the Victorian Period. Three hours. A.
Prerequisite: GSE 101, 102, and two courses in literature.
Survey of prose and poetry of the Victorian period; reading of selected writers.
excluding fiction.

ENG 425. The Old Testament as Literature. Three hours. A.
Prerequisite: GSE 101, 102, and two courses in literature.
Selected readings in the literature of the Old Testament; emphasis upon its dra-
matic, lyric, and narrative qualities.

ENG 502. Creative Writing I. Three hours. I, A.
Prerequisite: GSE 101, 102, and two other English courses; permission of in-
structor.
Open to students who desire to have their manuscripts criticized; fiction, drama,
poetry, biography, or the informal essay accepted; guest lectures by and discussion
with writers-in-residence.
ENG 503. Creative Writing II. One to three hours. II, A.
Prerequisite: GSE 101, 102; permission of instructor.
A continuation of ENG 502 but open also to students enrolling for a writer's conference, which is a one-week course of fifteen informal lectures and discussions by faculty and visiting lecturers. Each student registering for the writer's conference must submit a short story, a one-act play, four poems, or the equivalent.

ENG 521. Renaissance Literature. Three hours. I, A.
Prerequisite: GSE 101, 102, and two courses in literature.
Study of poetry and prose of the English Renaissance, with emphasis on Sidney, Spenser, and Bacon.

Prerequisite: GSE 101, 102, and two courses in literature.
Survey of poetry and prose of the first half of the 17th century, with emphasis on Donne, Jonson, Herbert, Crashaw, Browne, and Burton.

ENG 523. Milton and His Age. Three hours. A.
Prerequisite: GSE 101, 102, and two courses in literature.
Study of the most important works of Milton; attention to the historical setting and to Milton's contemporaries.

ENG 524. Chaucer. Three hours. II, A.
Prerequisite: GSE 101, 102, and two courses in literature.
Intensive reading of such works as THE CANTERBURY TALES and TROILUS and CRISEYDE; other readings as time permits.

ENG 525. The Age of Dryden and Pope. Three hours. A.
Prerequisite: GSE 101, 102, and two courses in literature.
Poetry, prose, and drama of the Restoration Period with emphasis on Dryden; poetry of the Augustan period with emphasis on Pope.

ENG 526. The Age of Jonson. Three hours. A.
Prerequisite: GSE 101, 102, and two courses in literature.
Poetry, prose, and drama of the later eighteenth century with emphasis on Johnson and Boswell.

ENG 534. The Nineteenth-Century English Novel. Three hours. A.
Prerequisite: GSE 101, 102, and two courses in literature.
Study of the great 19th century English novelists from Jane Austen through Hardy: Austen, Scott, Dickens, the Brontes, Thackeray, Eliot, Meredith, Trollope, and Hardy.

ENG 539. Introduction to Linguistic Theory. Three hours. I, A.
Prerequisite: GSE 101, 102, and at least six additional hours of English.
Detailed attention to the International Phonetic Alphabet, phonemics, and morphemes. Some attention to structural and transformational methods of analysis. Introduction to the study of dialect.

Prerequisite: GSE 101, 102, and six additional hours.
Study of ways in which modern linguistic theory is put into practice. Emphasis on linguistic field work, comparison of languages, and investigation of English as a second language.

ENG 541. History of the English Language. Three hours. A.
Prerequisite: GSE 101, 102, and six additional hours.
Study of the history of the English language in terms of social, historical and linguistic forces from which it developed into modern English.

ENG 546. (Formerly ENG 646.) American Novel. Three hours. I, A.
Prerequisite: GSE 101, 102, and six additional hours of English.
Survey of the American novel from its beginning to the present.
ENG 547. Age of Emerson. Three hours. A.
Prerequisite: GSE 101 (or equivalent), 102, and two courses in literature.
Intensive study of the prose and poetry of the American Renaissance; emphasis
on the writings of Emerson, Thoreau, Hawthorne, Melville, and Whitman.

ENG 550. Realism and Naturalism In American Fiction. Three hours. A.
Prerequisite: GSE 101 (or equivalent), 102, and two courses in literature.
Study of the development of the realistic novel in the 19th century and the rise
of naturalism in the twentieth; emphasis upon Howells, James, Garland, Norris, Crane,
and Dreiser.

ENG 560. Continental Fiction. Three hours. A.
Prerequisite: GSE 101 (or equivalent), 102, and two courses in literature.
Extensive reading in translation of important fiction of the Western world; em-
phasis on selected novelists of the 19th and 20th centuries.

ENG 565. Greek and Roman Drama as Literature. Three hours. A.
Prerequisite: GSE 101 (or equivalent), 102, and two courses in literature.
Brief study of dramatic criticism, theory of tragedy, and the Greek and Roman
theater; reading of plays by Aeschylus, Sophocles, Euripides, Aristophanes, Plautus,
and Seneca.

ENG 575. Poetry, Prose, Composition. Nine hours.
Intensive analysis of poetry and prose; laboratory in composition; demonstrations
of recent instructional media. Designed to prepare elementary and secondary teachers
for more effective teaching.

GRADUATE COURSES

ENG 601. Bibliography and Research. Three hours. A.
Work in critical theory and practice with attention to bibliography and resources.
Each student compiles an extensive bibliography on a subject or author of his or his
instructor's choice.

ENG 605. Seminar in Linguistics. Three hours. A.
Examination of various descriptive and comparative approaches to the study of
language.

ENG 611. English Drama to 1642. Three hours. A.
English drama from its beginning in the Middle Ages to the closing of the theaters
in 1642, excluding Shakespeare.

ENG 615. Literary Criticism. Three hours. A.
Study of the development of literary criticism from its beginning to the present.

ENG 625. Old English. Three hours. A.
Reading and study of selected works in original Old English dialects.

ENG 626. Middle English Literature. Three hours. A.
English literature from 1200 to 1500; emphasis on poetry; readings done primarily
in the original dialect.

ENG 627. Seminar in Tudor Literature. Three hours. A.
Studies in depth of two or more major poets or prose writers of the period.

ENG 628. Seminar in Donne and Jonson: Poetry and Prose. Three hours. A.
Detailed study of the poetry of John Donne and Ben Jonson; some emphasis on
17th century prose.

ENG 630. Studies in the Romantic Period. Three hours. A.
Study in depth of selected major figures of the Romantic Period from the pre-
romantics and Blake through Wordsworth, Coleridge, Byron, Shelley, and Keats.
ENG 631. Seminar in Nineteenth-Century English Prose. Three hours. A. Studies in depth of two or more major English prose writers (fiction or non-fiction) or the 19th century.

ENG 632. Seminar in the Age of Tennyson and Browning. Three hours. I, A. Primary emphasis on the poetry of Tennyson and Browning; selected readings from other Victorian writers.


ENG 660. The Epic. Three hours. A. A study of the epic tradition; readings from Homer, Virgil, Dante, Milton, and others.

ENG 672. Seminar in Eighteenth-Century English Literature. Three hours. A. Studies in depth of two or more major figures of the Augustan Age.

ENG 686. Literary Theory. Three hours. A. Studies in the relationship of imaginative and non-imaginative literature; emphasis on philosophical approaches to English and American Literature.

ENG 690. Special Studies. One to three hours. A. Independent research and writing designed to fulfill the individual needs and interests of advanced students.

ENG 692. Seminar in Shakespeare. Three hours. A. Concentration on selected works of Shakespeare; investigation and research of scholarly problems.

ENG 698. Thesis I. Three hours. A.

ENG 699. Thesis II. Three hours. A.

**JOURNALISM (JOU)**

Students majoring in journalism will complete JOU 200, 201, 303 (one hour), 305, 307, 310, 490, MKT 320, and ENG 539 or ENG 541. In addition, at least seven hours of journalism electives are required. A maximum of four hours may be accepted from the following courses in lieu of journalism electives: IED 315, Photography I; SPE 290, Introduction to Radio and Television; ENG 301, Advanced Composition and Rhetoric; ENG 502, Creative Writing I; ENG 503, Creative Writing II. A total of 30 hours is required.

A journalism major should take twelve hours in a foreign language if he begins the language in college, or six hours if he continues the language at the intermediate level.

Students minoring in journalism will complete JOU 200, 201, 303 (one hour), 310, and ENG 539 or ENG 541. In addition, at least six
hours of journalism electives are required for the non-teaching minor and eight hours for the teaching minor, for a total of 19 and 21 hours, respectively.

The teaching minor in journalism is open to those with a first major in art, business education, English, history or physical education.

**JOURNALISM (JOU)**

**JOU 200. Introduction to Mass Communication. Three hours. I.**
Analysis of the growth and impact of news media upon the social, political, and economic forces in society.

**JOU 201. Newswriting. Three hours. A.**
Prerequisite: GSE 101 and 102.
Study of the elements of news: the lead, style and structure of news stories, news sources, readability, types of stories, and ethics; practice in gathering, writing and evaluation of news.

**JOU 303. Journalism Practicum. One hour. (May be repeated for a total of 4 hours.) I, II.**
Prerequisite: GSE 101 and 102.
Instruction and practice in journalism techniques such as reporting, photography, writing and editing a newspaper; organization and procedure in operating a communications reference library with special emphasis given to maintenance of source materials.

**JOU 305. Feature Writing. Three hours. A.**
Prerequisite: GSE 101 and 102.
Writing and submitting articles for publication in newspapers, magazines and syndicates; study requirements of periodicals to which sale is attempted and freelancing methods in general.

**JOU 307. Editorial Writing. Three hours. A.**
Prerequisite: JOU 200, 201, 305, or ENG 301.
Study of editorials, editorial columns and editorial pages; practice in writing editorials for publication.

**JOU 310. News Editing. Three hours. I, II.**
Prerequisite: JOU 201.

**JOU 401. Advanced Newswriting. Three hours. A.**
Prerequisite: JOU 201.
A study of current reporting in specialized fields of state and local government, labor, science, research, and business. Practical experience in covering state and local non-campus news.

**JOU 405. Communications Law and Press Freedom. Three hours. A.**
Prerequisite: JOU 200 and 201.
Consideration of the legal philosophies bearing upon the mass media. Study of news as property and the regulatory provisions of state and federal statutes. Emphasis will be given to the privileges and restraints affecting media.

**JOU 475. Public Relations. Three hours. A.**
Prerequisite: JOU 200 and 201.
Survey of methods of disseminating public information and information intended for internal consumption as practices by business, industrial, educational, and social organizations. Practice in preparing promotional materials and campaigns.
JOU 490. Senior Press Conference. One hour. II.
Prerequisite: Permission of the instructor.
Weekly two-hour press conferences with university, governmental, and other professional representatives in which the relations of the press to other disciplines will be explored. Professional journalists will discuss media problems and opportunities.

JOU 501. School Publications Supervision Conference. Two hours. (May be repeated for a maximum of 4 hours.)
Prerequisite: Permission of the instructor.
A two-week course of lectures and discussion by faculty and visiting lecturers. Each student will supervise secondary school students in the production of specimen school publications.

FOREIGN LANGUAGES


A student may complete a teaching major in one foreign language by earning 27 semester hours in courses of that language numbered from 200 and above. A student may take a first major in Russian, but without right of teaching certificate. For a major or minor in Russian, a student may include RUS 101, 102 in his total hour requirements.

A two language teaching major-minor combination may be earned with 27 hours of one language chosen from courses numbered 200 and above, and at least 18 hours in a second language in courses numbered from 200.

A student who majors in Foreign Languages (non-teaching) will take a minimum of 30 hours in courses numbered from 200 in the chosen language.

A student who wishes to minor will take a minimum of 18 hours in courses of the language numbered from 200 upwards. A total of 21 semester hours which may include 101-102, is required for a teaching minor.

Curriculum for a major in a foreign language (teaching, non-teaching). The first two years of this curriculum may be found in the Central University College section.

<table>
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<th>Hours</th>
<th>Senior Year</th>
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<td>*ESH 498</td>
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*Non-teaching majors and minors may omit these courses and take 15-18 hours of foreign languages and electives to be chosen in consultation with adviser.
GRADUATE PROGRAMS

MASTER OF ARTS DEGREES IN FRENCH LANGUAGE AND LITERATURE AND SPANISH LANGUAGE AND LITERATURE:

The Department of Foreign Languages, in cooperation with the Graduate School, offers graduate programs leading to the Master of Arts in French Language and Literature and Spanish Language and Literature. For requirements concerning these degrees see the Graduate Catalog.

MASTER OF ARTS IN EDUCATION:

The Department of Foreign Languages, in cooperation with the Graduate School and the College of Education, offers two programs applying toward the M.A. degree in Education. These consist of an emphasis in French and an emphasis in Spanish. For requirements concerning the M.A. degree in Education with emphasis in French or Spanish see the Graduate Catalog.

FRENCH (FRE)

FRE 101. Elementary French I. Three hours. I, II.
Pronunciation; grammar; conversation in French on material studied. Some drill in language laboratory required.

FRE 102. Elementary French II. Three hours. I, II.
Prerequisite: FRE 101 or equivalent proficiency.
Continuation of grammar study begun in FRE 101, and oral work based on reading material. Some drill in language laboratory required.

FRE 201. Intermediate French I. Three hours. I, II.
Prerequisite: FRE 102 or equivalent proficiency.
Grammar review; controlled conversation; selected readings.

FRE 202. Intermediate French II. Three hours. I, II.
Prerequisite: FRE 201.
Emphasis on reading and writing French.

FRE 206. Intermediate Conversation. Three hours. I, II.
Prerequisite: FRE 202 or equivalent proficiency.
Required of all majors and minors. (Waived in case of demonstrable oral proficiency, but not open to native speakers.)

FRE 303. Introduction to French Literature I. Three hours. I.
Prerequisite: FRE 202 or equivalent proficiency. Survey of nineteenth and twentieth century French literature. Required of all majors.

FRE 304. Introduction to French Literature II. Three hours. II.
Prerequisite: FRE 202 or equivalent proficiency.
A survey of major works of French literature from Middle Ages through the eighteenth century. Required of all majors.

FRE 307. The Nineteenth Century Novel. Three hours. A.
Prerequisite: FRE 303-304.
Selected complete novels from such writers as Chateaubriand, Hugo, Balzac, Flaubert, Zola.
FRE 308. Nineteenth Century Poetry and Drama. Three hours. II.
Prerequisite: FRE 303-304.
Musset, Vigny, Lamartine, Hugo, Baudelaire, de Lisle, Verlaine, Rimbaud and Mallarme.

FRE 311. The Age of Classicism. Three hours. I.
Prerequisite: FRE 303-304.
Selected works from such writers as Descartes, Pascal, Corneille, Scarron, Molieres, Racine and La Fontaine.

FRE 312. The Age of Enlightenment. Three hours. II.
Prerequisite: FRE 303-304.
Selected works of Le Sage, Montesquieu, Voltaire, Prevost, Diderot, Rousseau and Beaumarchais.

FRE 360. Intermediate Grammar and Composition. Three hours. I.
Prerequisite: FRE 202 or equivalent proficiency.
A writing course designed to teach the composition of themes, essays and letters in the French language.

FRE 380. Culture and Civilization. Three hours. I and II.
Prerequisite: FRE 206 or equivalent proficiency.
Broad survey of French culture and civilization for the French major.

FRE 411. Contemporary French Literature. Three hours. A.
Prerequisite: FRE 303-304.
Gide, Apollinaire, Valery, Malraux, Cocteau, Giraudoux, Sartre, Anouilh, Ionesco.

FRE 495. Independent Work in French. One to Three hours. I, II.
Prerequisite: Consent of the Department.
May be repeated for a maximum of six hours.

FRE 505. (Formerly FRE 405). Advanced Grammar and Composition. Three hours. I, II.
Prerequisite: FRE 202 or equivalent proficiency.

FRE 511. Twentieth-Century French Novel. Three hours. A.
Prerequisite: FRE 303 or equivalent.
Extensive readings from the works of contemporary French novelists.

FRE 535. (Formerly FRE 399). Introduction to French linguistics. Three hours. II.
Applied linguistics for the prospective teacher of French.

FRE 540. Advanced French Conversation. Three hours. I, II.
Prerequisite: FRE 206 or equivalent proficiency.

FRE 563. Laboratory Techniques in Foreign Language Teaching. Two hours, I, II.
Advanced methods in the coordination of electronic teaching devices to the total foreign language program.

FRE 570. Sixteenth-Century French Literature. Three hours. A.
Prerequisite: FRE 304 or equivalent.
A survey of the major works of the Renaissance, with emphasis on those of Rabelais, Montaigne and Ronsard.

GRADUATE COURSES

FRE 610. Bibliography and Research Methods. Three hours. A.

FRE 620. The Classical Drama of the Seventeenth-Century. Three hours. A.
A detailed study of the principal plays of Moliere and Racine.

FRE 630. Post-Romantic Poetry of the Nineteenth Century. Three hours. A.
Intensive analysis of the works of Baudelaire and the symbolist poets.
FRE 635. Eighteenth Century French Literature. Three hours. A.
A study of the works of Montesquieu, Voltaire, Diderot, Rousseau.

FRE 640. The Contemporary French Theatre. Three hours. A.
An in-depth study of one or more of the following dramatists: Giraudoux, Cocteau, Anouilh, Ionesco, Camus, Sartre, Beckett.

FRE 650. History of the French language. Three hours. A.
A survey of the evolution of the French Language from its origins to the present day.

FRE 660. Medieval French Literature. Three hours. A.
A survey of the French literature of the Middle Ages through the fifteenth century. Readings in Modern French translation where needed.

FRE 670. Seminar in French Literature. Three hours. A.
A study of a literary movement or an individual author. Topic offered on demand. May be repeated once for a total of six hours.

FRE 680. Special Studies. One to three hours. A.
Independent study in either language or literature on a subject of special need or interest to the advanced student. May be repeated for a maximum of six hours.

FRE 698. Thesis I. Three hours. A.

FRE 699. Thesis II. Three hours. A.

GERMAN (GER)

GER 101. Elementary German I. Three hours. I, II.
Essentials of grammar with practice in pronunciation, reading, writing, and some conversation. Some drill in language laboratory required.

GER 102. Elementary German II. Three hours. I, II.
Prerequisite: GER 101 or equivalent proficiency.
Continuation of GER 101 with more advanced exercises in reading, writing, and comprehension of spoken German. Some drill in language laboratory required.

GER 201. Intermediate German I. Three hours. I, II.
Prerequisite: GER 102 or equivalent proficiency.
Continuation of the elementary course on a more advanced level.

GER 202. Intermediate German II. Three hours. I, II.
Prerequisite: GER 201 or equivalent proficiency.
Continuation of 201.
Certain selected texts are read with emphasis on translation and grammar.

GER 203. Scientific German. Three hours. I and II.
Prerequisite: GER 201 or equivalent proficiency.
Alternate course for GER 202. Certain selected scientific texts are read with emphasis on translation and grammar. Recommended for science majors.

GER 206. Intermediate Conversation. Three hours. I and II.
Prerequisite: GER 202 or equivalent proficiency.
Required of all majors and minors. (Waived in case of demonstrable oral proficiency, but not open to native speakers.)

GER 303. Introduction to German Literature I. Three hours. I.
Prerequisite: GER 202 or equivalent proficiency.
A survey of major works of German Literature from the beginning to the seventeenth century. Required of all majors.
GER 304. Introduction to German Literature II. Three hours. II.
Prerequisite: GER 202 or equivalent proficiency.
Survey of German literature from the seventeenth century to the present time.
Required of all majors.

GER 305. Main Themes of German Literature I. Three hours. I.
Prerequisite: GER 202.
Special attention to dramas which best reflect the main currents in each period.
Dramas by Lessing, Goethe, Kleist, Grillparzer, and Hebbel.

GER 306. Main Themes of German Literature II. Three hours. II.
Prerequisite: GER 202.
Continuation of GER 305.
Emphasis on the works of Hauptmann, Schnitzler, Kaiser, Brecht, Frisch, Durrenmatt, and Grass.

GER 330. Culture and Civilization. Three hours. I and II.
Taught in English with an English textbook. Broad survey of German culture and civilization. Special conditions for the German major and minor.

GER 411. Contemporary German Literature. Three hours. A.
Prerequisite: GER 303-304.
The works of writers, such as Grass, Johnson, Boll, Durrenmatt, and Frisch are read and discussed.

GER 495. Independent Work in German. One to Three hours. I, II.
Prerequisite: Consent of the Department.
May be repeated for a maximum of six hours.

GER 505. (Formerly GER 405). Advanced Grammar and Composition. Three hours. I, II.
Prerequisite: GER 202 or equivalent proficiency.

GER 511. Twentieth-Century German Novel. Three hours. A.
Prerequisite: GER 303 and GER 304 or equivalent proficiency.
In-depth study of one or more of the following novelists: Thomas Mann, Heimito von Doderer, Robert Musil, Hermann Broch.

GER 521. The Age of Classicism. Three hours. A.
Survey of the Classical Period with emphasis on the classical works of Goethe and Schiller.

GER 531. Survey of German Poetry. Three hours. A.
Designed to acquaint students with the characteristics of German prosody and to instruct them in the techniques of explication.

GER 535. Applied German Linguistics. Three hours. II.
Prerequisite: Consent of the department.
A historical and structural approach to German language and linguistics, Necessary for those who plan to teach the language.

GER 540. (Formerly GER 406). Advanced Conversation. Three hours. II.
Prerequisite: GER 206 or equivalent.
A conversation course for seniors or graduate students who need practice in speaking and understanding German.

GER 550. Brecht's Drama. Three hours. A.
Intensive study of works of one man to prepare students for advanced work and research on their own. Emphasis on Brecht's philosophical development as evidenced in his dramas.

GER 555. Literature of the Baroque Period. Three hours. A.
In-depth study of the drama and poetry of the period. Among authors included are: M. Opitz, A. Gryphius, D. V. Lohensteln, P. Fleming, P. Gerhardt, F. V. Logau, etc.
GER 570. Romanticism. Three hours. A.
A study of its philosophical basis, its themes and forms. Included among the authors are: Schlegel, Novalis, Tieck, etc.

GER 590. Nineteenth Century German Drama and Prose, (Realism and Naturalism). Three hours. A.
Study of works of Buchner, Stifter, Hebbel, Keller, Meyer, Fontane, Hauptmann, Sudermann.

GREEK (GRE)

GRE 101. Elementary Greek I. Three hours. I.
Introduction to the grammar of classical Greek and the Kolne Greek of the New Testament and to the reading of elementary texts. Recommended for students majoring in languages, ancient history, and Bible.

GRE 102. Elementary Greek II. Three hours. II.
Continuation of GRE 101 with more advance work in grammar and syntax and the reading of Xenophon’s Anabasis.

LATIN (LAT)

LAT 101. Elementary Latin I. Three hours. I.
A study of basic inflexions, syntax, pronunciation, and vocabulary necessary for the reading and progressive understanding of the Latin language. Particular attention is given to the relationship of Latin to English and other languages.

LAT 102. Elementary Latin II. Three hours. A.
Prerequisite: One unit of high school Latin or LAT 101. A continuation of the study of the elements of Latin grammar with additional work in translation of selections from Latin writers of appropriate difficulty. Some composition included.

LAT 201. Intermediate Latin I. Three hours. A.
Prerequisite: Two or three units of high school Latin or LAT 102. Rapid review of grammar. Selections from such writers as Caesar, Cicero, Nepos, Ovid, Catullus, Horace, and Vergil.

LAT 202. Intermediate Latin II. Three hours. A.
Prerequisite: Two or three units of high school Latin or the equivalent. Continuation of LAT 201.

LAT 301. Selections from Livy. Three hours. A.
Prerequisite: Three units of high school Latin or equivalent.
Survey of Roman history from the foundation of Rome to the close of the second Punic War; assigned readings from such historians as Mommsen, Heitland, and others; comparative study of Rome and Carthage; critical study of Livy’s style.

LAT 302. Selections from Horace. Three hours. A.
Prerequisite: Three units of high school Latin or equivalent.
Selected odes, epodes, and satires from Horace; study of Augustan Age from both a literary and political point of view; study of Horace’s philosophy; various meters employed by Horace.

LAT 303. The Writing of Latin Prose. Three hours. A.
Prerequisite: LAT 301 or equivalent proficiency.
Selections from various texts; review of syntax, sight reading.

LAT 304. The Latin Dramatists. Three hours. A.
Prerequisite: LAT 301 or equivalent proficiency.
Dramas of Plautus, Terence, and Seneca; two plays of Plautus for intensive study; rapid reading of other representative plays.
LAT 401. Latin Prose of the Silver Age. Three hours. A.
Prerequisite: LAT 302 or equivalent proficiency.
Letters of Pliny the Younger; selections from the writings of Tacitus.

LAT 402. Satire and Epigram. Three hours. A.
Selected satires of Juvenal; selected epigrams of Martial; development of satire in Latin literature, with assignments from Horace; satire in English; epigram as a literary expression.

LAT 495. Independent Work in Latin. One to three hours. I, II.
Prerequisite: Consent of the Department.
May be repeated for a maximum of six hours.

LAT 503. (Formerly LAT 403.) Latin Literature of the Early Empire. Three hours. A.
Prerequisite: LAT 302 or equivalent proficiency.
Selections from a connected and contemporaneous discussion of politics, education, literature, philosophy, social types, and town and country life.

LAT 504. (Formerly LAT 404.) Latin Literature of the Late Republic. Three hours. A.
Prerequisite: LAT 302 or equivalent proficiency.
Selections from the works of Caesar, Sallust, Nepos, and Cicero, with emphasis on Ciceronian prose as a basis of much of the thinking and writing since his day; selections from works of poets of this age, with emphasis on the works of Catullus and Lucretius.

LAT 505. (Formerly LAT 405.) Roman Private Life. Three hours. A.
Lectures, discussions, and readings on Roman family, home, marriage, education, clothing, food, amusements, travel, religion, town, and country life.

RUSSIAN (RUS)

RUS 101. Elementary Russian I. Three hours. I.
Elements of the language studied through grammar, pattern practice, drills, reading, and conversation. Some drill in language laboratory required.

RUS 102. Elementary Russian II. Three hours. II.
Prerequisite: RUS 101 or equivalent proficiency.
Continuation of RUS 101.
Some drill in language laboratory required.

RUS 201. Intermediate Russian I. Three hours. I.
Prerequisite: RUS 102 or equivalent proficiency.
Continuation of Russian grammar; emphasis on vocabulary building and conversation. Reading selections from Russian prose, poetry, and politics (newspaper and magazines). Oral reports and discussion of texts.

RUS 202. Intermediate Russian II. Three hours. II.
Prerequisite: RUS 201 or equivalent proficiency.
Continuation of RUS 201.

RUS 206. Intermediate Conversation. Three hours. II.
Designed to be taken simultaneously with RUS 202, with permission of instructor.
One hour of laboratory per week. (Waived in case of demonstrable oral proficiency but not open to native speakers.)

RUS 303. Survey of Russian Literature I. Three hours. I.
Prerequisite: RUS 202 or equivalent proficiency.
Selected readings from Pushkin, Gogol, Turgenev, Chekhov, and others. Assigned reading in English on Russian history, culture, and civilization.
RUS 304. Survey of Russian Literature II. Three hours. II.
Prerequisite: RUS 202 or equivalent proficiency.
Readings from the time of Tolstoy and Dostoevsky to the present.

RUS 380. Culture and Civilization. Three hours. I and II.
Prerequisite: RUS 202.
Broad survey of the development of Russian culture and civilization.

RUS 405. Advanced Composition. Three hours. A.
Prerequisite: RUS 202 or equivalent proficiency.
Morphology and syntax of Russian grammar. Study of composition and stylistics.

RUS 495. Independent Work in Russian. One to three hours. I, II.
Prerequisite: Consent of the Department.
May be repeated for a maximum of six hours.

SPANISH (SPA)

SPA 101. Elementary Spanish I. Three hours. I, II.
Grammar; pronunciation; reading of basic Spanish. Some drill in language laboratory required.

SPA 102. Elementary Spanish II. Three hours. I, II.
Prerequisite: SPA 101 or equivalent proficiency.
Continuation of SPA 101. Some drill in language laboratory required.

SPA 201. Intermediate Spanish I. Three hours. I, II.
Prerequisite: SPA 102 or equivalent proficiency.
Review of grammar. Selected materials about Spain and Latin America. Representative short stories of authors throughout the Spanish-speaking world.

SPA 202. Intermediate Spanish II. Three hours. I, II.
Prerequisite: SPA 201 or equivalent proficiency.
Continuation of SPA 201.

SPA 206. Intermediate Conversation. Three hours. I, II.
Prerequisite: SPA 202 or equivalent proficiency.
Required for all majors and minors. (Waived in case of demonstrable oral proficiency but not open to native speakers.)

SPA 303. Introduction to Spanish Literature I. Three hours. I.
Prerequisite: SPA 202 or equivalent proficiency.
Middle Ages through the Eighteenth Century. Required of all majors.

SPA 304. Introduction to Spanish Literature II. Three hours. II.
Prerequisite: SPA 202 or equivalent proficiency.
Nineteenth and twentieth centuries. Required of all majors.

SPA 380. Culture and Civilization. Three hours. I and II.
Prerequisite: SPA 202 or equivalent proficiency.
Broad survey of the development of Spain and Latin America.

SPA 495. Independent Work in Spanish. One to three hours. I, II.
Prerequisite: Consent of the Department.
May be repeated for a maximum of six hours.

SPA 505. (Formerly SPA 405.) Advanced Composition. Three hours. I.
Prerequisite: Senior status or graduate status. Required of all undergraduate majors.

SPA 507. (Formerly SPA 407.) Spanish Drama. Three hours. I.
Prerequisite: SPA 303 and 304 or equivalent.
Intensive study of Spanish Drama from the Middle Ages through the seventeenth century.
SPA 508. (Formerly SPA 408) Spanish Drama. Three hours. II.
Prerequisite: SPA 303 and 304 or equivalent.
Intensive study of Spanish drama of the eighteenth, nineteenth and twentieth centuries.

SPA 509. (Formerly SPA 309) Spanish Prose. Three hours. I.
Prerequisite: SPA 303 and 304 or equivalent.
Intensive study of Spanish prose from the Middle Ages through the eighteenth century.

SPA 510. (Formerly SPA 310) Spanish Prose. Three hours. II.
Prerequisite: SPA 303 and 304 or equivalent.
Intensive study of Spanish prose of the nineteenth and twentieth centuries.

SPA 511. (Formerly SPA 409) Spanish Poetry. Three hours. I.
Prerequisite: SPA 303 and 304 or equivalent.
Intensive study of Spanish poetry from its beginnings through the seventeenth century.

SPA 512. (Formerly SPA 410) Spanish Poetry. Three hours. II.
Prerequisite: SPA 303 and 304 or equivalent.
Intensive study of Spanish poetry of the eighteenth, nineteenth and twentieth centuries.

SPA 535. (Formerly SPA 399) Linguistics. Three hours. I, II.
Prerequisite: SPA 303-304 or equivalent.
Introduction to linguistics for the Spanish major.

SPA 540. Advanced Spanish Conversation. Three hours. II.
Prerequisite: SPA 206 or equivalent. (not open to native speakers)

SPA 563. Laboratory Techniques in Foreign Language Teaching. (Same as FRE 563). Two hours. A.
Advanced methods in the coordination of electronic teaching devices to the total foreign language program.

**GRADUATE COURSES**

SPA 610. Bibliography and Research Methods. Three hours. A.

SPA 620. Medieval Spanish Literature. Three hours. A.
Spanish literature to 1492.

SPA 625. Golden Age Prose. Three hours. A.
Representative works and authors of the sixteenth and seventeenth centuries with an emphasis on Cervantes.

SPA 630. Golden Age Drama. Three hours. A.
Representative works and authors of the sixteenth and seventeenth centuries with an emphasis on Lope, Tirso, Calderon, and Alarcon.

SPA 635. Nineteenth-Century Prose. Three hours. A.
Representative works and authors with an emphasis on the development of the realistic novel.

SPA 640. The Generation of 1898 and Modernism. Three hours. A.
Principal writers of Spain and Latin America from 1898 to 1920.

SPA 645. Contemporary Spanish Literature. Three hours. A.
Representative figures since 1920 in the various literary genres.

SPA 650. History of the Spanish Language. Three hours. A.
The evolution of the Spanish language from its origins to modern Spanish.

SPA 670. Seminar in Spanish Literature. Three hours. A.
Special problems in Spanish Literature.
SPA 671. Seminar in Latin American Literature. Three hours. A.
Special problems in Latin American Literature.

SPA 680. Special Studies. One to three hours. A.
Independent study in either language or literature on a subject of special need
or interest to the advanced student. May be repeated for a maximum of six hours.

SPA 698. Thesis I. Three hours. A.

SPA 699. Thesis II. Three hours. A.

GEOGRAPHY (GEO)
J. R. Schwendeman, Jr., Chairman; Adams, Bladen, Lathrop, Marion-
neaux, Monsebroten, Quillen, J. Schwendeman, Sr., Sebor.

UNDERGRADUATE PROGRAMS

The Department offers three major programs; a major in geography (teaching), a major in geography (non-teaching), and a degree in regional planning. The non-teaching and planning programs are directed towards students pursuing the geography/planning discipline as a profession. The required semester hours for the geography degrees vary between 51 and 58 including a minor program, while the composite program in planning totals 60 semester hours.

A minor program in geography is offered. A minor with right of teaching requires 21 hours; a non-teaching minor 18 hours.

Students considering advanced degrees in geography are strongly encouraged to take two years of German, French, or Russian.

Curriculum For a Major in Geography (Teaching)

GEO 210, 216, 220, 330, 331, 340, 402, 421 or 422, 442, plus a 3 hour geography elective, and GLY 108 are required for satisfactory completion of this major, a total of 30 hours.

The first two years of this curriculum may be found in the Central University College section.

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<td>Electives or Minor</td>
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The second major or minor must be approved by the Chairman of the Department of Geography and the Chairman of the Department of Secondary and Higher Education.

Curriculum For a Major in Geography (Non-teaching)

The major may pursue either a Physical or Cultural-Economic Orientation. The course requirements for these two orientations, refer-
red to as Plan A and Plan B, follow. The first two years of this curriculum may be found in the Central University section.

Plan A: Courses required for the Physical Orientation are GEO 210, 215, 216, 220, 313, 330, 340, 355, 421 or 422, 442, 499, 553, 3 hours of electives in geography, GLY 210, and a course in algebra; a total of 45 hours.

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<td>GEO 442, 499, 553</td>
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<td>3-5</td>
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<tr>
<td>GEO 313, 331, 340, 355, 421 or 422</td>
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<td>Electives or Minor</td>
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</table>

30-32

Plan B: Courses required for the Cultural-Economic Orientation are GEO 210, 216, 220, 330, 331, 340, 355, 421, 422, 442, 499, 553, 3 hours of electives in geography, GLY 210, and algebra; a total of 45 hours.

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<thead>
<tr>
<th>Junior</th>
<th>Hours</th>
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<td>GEO electives</td>
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<tr>
<td>Electives or Minor</td>
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30-32

Curriculum for a Major in Regional Planning (Non-teaching)

Candidates for a Bachelor's degree in Regional Planning must complete 60 hours in planning and related disciplines. In addition, certain other supporting courses will be recommended to majors. Specifically, the 60 required hours include PLA 220, 221, 362, 490; GEO 331, 355, 421, 553; INT 191; ECO 230, 231; POL 101, 320, 362; SOC 131, 332, 360, 465; GLY 390, 410. These reflect a composite, integrated program, rather than a major and minor combination. The last two years of the suggested curriculum appear below. The first two years of this program may be found in the Central University section of the catalog.

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<tr>
<th>Junior</th>
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<td>GEO 553, 421</td>
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<td>GLY 410</td>
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<td>SOC 465</td>
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<td>SOC 332, 360</td>
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<td>Electives</td>
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<tr>
<td>PLA 362</td>
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<tr>
<td>ECO 231</td>
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Minor Program in Geography

A teaching minor requires 21 semester hours; a non-teaching minor requires 18 semester hours.
Geography Minor: GEO 210, 216, 220, 330 or 331, plus six or nine upper division hours of geography electives, dependent upon type of minor.

GRADUATE PROGRAMS

The Geography Department offers three advanced degree programs in Geography: Master of Arts with thesis, Master of Arts without thesis, and Master of Arts in Education with emphasis in Secondary Education—Geography. Information pertaining to graduate degrees may be found in the appropriate sections of the Graduate Bulletin.

REGIONAL PLANNING (PLA)

PLA 220. Planning Theories. Three hours. I.
An introduction to the basic goals of urban, regional, state, and national planning as a profession; its philosophy, methodology, and vocabulary; the relation between planning and the other disciplines.

PLA 221. Urban Design. Three hours. II.
An introduction to the study of the relationship between the Man and his environment, with an emphasis on development of design, on understanding of the design process, and on space-time considerations. The design of new towns with an emphasis on the cultural and historical determinants; the redesign of a section of a large city or a whole of a small city. Synthesizing basic research, program definition, policy determination, programming. Two hours lecture and two hours laboratory.

PLA 362. Legal Aspects of Planning. Three hours. II.
Planning legislature, procedures, client contracts, organization of planning on the municipal, county, state, national, private, and corporate level. Three hours lecture.

PLA 490. Planning Seminar. Three hours. A.
Prerequisite: Departmental permission.
Discussion of the past, current, and future trends in the United States and abroad; selected topics. Students may take this course for a maximum of six credit hours.

GEOGRAPHY (GEO)

(Departmental approval in lieu of course prerequisite is dependent upon an equivalent background.)

Study of the physical environment of man, including space relation, weather and climate, soils, vegetation, landforms and resources.

GEO 102. Principles of Geography II. Three hours. I, II, S.
World Geography designed for general knowledge, including essential characteristics and significant problems of the major regions and cultures of the world.

GEO 210. Physical Geography. Three hours. I, II.
Intensive study of space relations, maps and mapping, weather and climate, soils, vegetation, and resources. Required of all departmental majors. Two hours lecture and two hours laboratory.

GEO 215. Meteorology. Three hours. I.
Elements and physical processes in the atmosphere, air masses and associated weather, frontogenesis and associated weather, and introduction to forecasting. Two hours lecture and two hours laboratory.
GEO 216. Climatology. Three hours. II.
Elements of weather and climate, methods of climate classification, distribution and characteristics of climatic types. Two hours lecture and two hours laboratory.

GEO 220. Cultural Geography. Three hours. II.
Introduction to basic concepts of cultural geography, emphasis on analysis of various culture elements and reasons for their regional character and variations.

GEO 300. Geography (..........................). One to nine hours. A.
A geography course designed for undergraduate institute participants. Course content will be developed to adequately serve the aims of the Institute, and the specific orientation will appear in parenthesis behind the course title; that is, Earth Science, Regional, Education, etc. The designated semester hours which can be earned will also be specified for a given institute.

GEO 301. Aviation Meteorology. Three hours. II.
Study of the elements of weather, air masses, stability, fronts, upper air characteristics, flight hazards and combative procedures. Analysis and understanding of Weather Bureau information for flight planning and cross sectional diagramming. Designed primarily for those interested in aviation as a career or as a valuable aid in another profession.

GEO 313. Geomorphology. Three hours. I.
Study of the surface features of the earth, their form, nature, origin, and stage of development. Two lecture hours and two laboratory hours.

GEO 320. Economic Geography I. Three hours. I.
Description and analysis of the world pattern of major resources with consideration to their origin, development, and use. Major emphasis is on the primary activities of agriculture, forestry, fishing, and mining, and their regional variations and characteristics.

GEO 321. Economic Geography II. Three hours. II.
Description and analysis of secondary and tertiary economic systems and functions. The major topics are related to origin, development, transportation, and distribution of goods and services, manufacturing, trade centers, and area-economic organization, supplemented with case studies.

GEO 340. Approach to Regional Geography. Three hours. I.
Techniques of approach in regional studies, including micro and macro areas, along with case studies.

GEO 341. (Formerly GEO 541.) Geography of Latin America. Three hours. I of alternate years.
Physical, cultural, and economic geography of Latin America, with emphasis on underdeveloped areas or areas of current political concern.

GEO 342. (Formerly GEO 573, 542.) Geography of Asia. Three hours. II of alternate years.
Physical, cultural, and economic geography of Asia, with emphasis on areas of current concern.

GEO 343. (Formerly GEO 575, 543.) Geography of Africa. Three hours. II of alternate years.
Physical, cultural, and economic geography of Africa, with emphasis on areas of current concern.

GEO 345. Regions and Nations of the World I. Three hours. I.
A survey of the importance, geographic characteristics, and the major problems of the Eurasian and Australian continents and Pacific islands. Geography majors and minors may not take this course.

GEO 346. Regions and Nations of the World II. Three hours. II.
A survey of the importance, geographic characteristics, and the major problems of the Americas and Africa. Geography majors and minors may not take this course.
GEO 355. Cartography. Three hours. I.
Map projections, construction, and representation of data on maps and charts. One hour lecture, four hours laboratory.

GEO 358. Mapping Techniques. Two hours. I.
Techniques of field mapping including the use of the telescopic alidade and plane table. Emphasis is given to practical application and to instrument familiarization. One hour lecture, two hours laboratory.

GEO 402. Conservation of National Resources. Three hours. II, S.
Conservation of physical, cultural, and human resources of nations, including history of conservation, current conservation practices and laws, and the future direction of conservation.

GEO 421. Urban Geography. Three hours. II.
Study of city function, patterns, and past and current problems confronting the city, including the problems of planning, zoning, community housing, shopping centers, and urban renewal.

GEO 422. Political Geography Three hours. II, S.
Study of the development of political geography and geopolitics, conditions influencing political structures through time, with special attention to areas of current major international concern.

GEO 440. Geography of Kentucky. Three hours. I, S.
Physical, cultural, and economic geography of the State of Kentucky; special emphasis in physical and human resources, problems confronting the State, future of the State.

GEO 441. Geography of the South. Two hours. II, alternate summers.
Study of the physical, cultural, and economic geography of Southeastern United States with special emphasis on physical and human resources, current problem of this region, and the future of this region.

Study of the physical, cultural, and economic geography of Anglo-America with special emphasis on physical and human resources, current problems of this region, and the future of this region.

GEO 445. (Formerly GEO 540.) Geography of Europe. Three hours. I of alternate years.
Physical, cultural and economic geography of Europe, with emphasis on problem areas or areas of current interest.

GEO 498. Independent Study. One to three hours. I, II, S.
Prerequisite: Department major with a senior standing.
Research topic to be selected in counsel with student's advisor.

GEO 499. Senior Thesis. Two hours. I, II, S.
Required of all Geography majors (non-teaching).

GEO 500. Geography (.........................). One to nine hours. A.
A geography course designed for undergraduate and graduate institute participants. Course content will be developed to adequately serve the aims of the Institute, and the specific orientation will appear in parenthesis behind the course title; that is, Earth Science, Regional, Education, etc. The designated semester hours which can be earned will also be specified for a given institute.

GEO 513. Physiography of Eastern United States. Three hours. I of alternate years.
Prerequisite: GEO 313, or departmental permission.
Detailed study of the physiographic regions and features of Eastern United States. Two hours lecture and two hours laboratory.
GEO 514. Physiography of the Western United States. Three hours. II of alternate years.
Prerequisite: GEO 313, or departmental permission.
Intensive study of the physiographic regions and features of Western United States. Two hours lecture and two hours laboratory.

GEO 516. Advanced Climatology. Three hours. I.
Prerequisite: GEO 216, or departmental permission.
Current methods utilized in climatic studies of micro and macro areas, alternate climatological classification systems, and techniques employed in data collection, processing, and presentation.

GEO 530. Advanced Economic Geography. Three hours. II.
Prerequisite: GEO 330 and 331, or departmental permission.
Distribution and characteristics of various kinds of economic systems, and cultural and physical bases accounting for economic differentiation. Included are origin, development, and transformation of systems, comparative advantages and techniques for independent analysis. Research paper required.

GEO 546. Regional Geography. Three hours. A.
Intensive study of a selected area of less than continental size offered upon demand and by an instructor who has done extensive research in the selected region, or by a visiting lecturer. May be taken for a maximum of six hours. Research paper required.

GEO 533. Quantitative Applications in Research. Three hours. II.
Prerequisite: Departmental permission.
Study of data type normally encountered in social and earth science research, valid sampling techniques in regard to development of this data, analysis of samples by appropriate statistical methods, testing for validity and significance, and conclusion drawn. Two hours lecture and two hours laboratory.

GEO 535. Advanced Cartography. Three hours. II.
Prerequisite: GEO 335 or departmental permission.
Advanced techniques of cartographic presentation of data and use of aerial photographs in map construction. One hour lecture and four hours laboratory.

GEO 556. Remote Sensing. Three hours. II, A.
Prerequisite: Departmental permission.
The mechanics and limitations inherent to remote sensing imagery, and the interpretation and use of this data in geographic research.

GRADUATE COURSES

GEO 600. Geography (..............................). One to nine hours. A.
A geography course designed for graduate institute participants. Course content will be developed to adequately serve the aims of the Institute. The specific orientation will appear in parenthesis behind the course title, that is, Earth Science, Regional, Education, etc. The designated semester hours which can be earned will also be specified for a given institute.

GEO 610. Seminar in Physical Geography. Three hours. I.
Prerequisite: Adequate background in physical geography as determined by department.
Seminar in some aspect of physical geography dictated by student interest, faculty specialty, or current problems in the field.

GEO 613. Research in Geomorphology. Three hours. II and alternate summers.
Prerequisite: Geography 313, or departmental permission.
Directed research in selected geomorphological problems, such as hydrologic anomalies, sedimentation rates, quantitative geomorphology, and glacial studies.
GEO 616. Research in Climatology. Three hours. II and alternate summers.
Prerequisite: Geography 516, or departmental permission.
Directed research in selected climatological problems, such as evapotranspiration, probability of single or multiple occurrences of weather phenomena, and flood forecasting.

GEO 621. Special Problems in Planning. Three hours. I and alternate summers.
Prerequisite: GEO 421 or equivalent in related social science.
Directed research in urban or regional planning, such as functional zoning of cities and underdeveloped areas.

GEO 640. Directed Studies in Regional Geography. Three hours. A.
Prerequisite: Departmental permission.
Directed studies in micro regional geography. A student may take a maximum of six credit hours under this course number.

GEO 650. Field and Research Methods in Geography. Three hours. I and alternate summers.
Detailed reconnaissance field work, including classification of natural and cultural features, interview procedures, preparation of geographical reports and maps based on field data. Library facilities and research are also included.

GEO 651. Seminar in History and Philosophy of Geography. Three hours. II.
A discussion of the history and development of geographic thought, various schools of geography, philosophies in geography, current and future trends.

GEO 690. Geography Seminar. Three hours. A.
Prerequisite: Departmental permission.
Selected geography topics for seminar discussion as student demand and faculty background dictate. Students may take this course for a maximum of six credit hours.

GEO 698. Independent Study. One to three hours. I, II, S.
Prerequisite: Departmental permission.
Semi-directed research on selected topics.

GEO 699. Thesis. Three to six hours. I, II, S.

GEOLOGY (GLY)

D. C. Haney, Chairman; Hunt, Hoge, Leung, Nichols and Wigley.

The Department offers two major programs: a major in earth science (teaching) and a major in geology (non-teaching). The geology major is directed toward students pursuing geology as a profession.

Minor programs in earth science and geology may be pursued. Though no distinction is made respective to teaching, the earth science minor is not recommended for students not entering the teaching profession. A total of 21 semester hours in geology is required for a teaching minor.

Students considering geology as a profession are strongly encouraged to take one year of foreign language.

The first two years of the geology program may be found listed in the Central University College section.

Curriculum for a Major in Earth Science (Teaching)

GLY 210, 211, 310, 351, 411, 414, and GEO 210, 216, and 313 are required; total of 30 hours.
Junior Year Hours  Senior Year Hours
Soc. Sci. Elective, B-2 .......... 3  GLY 351, 411, 414 or AGR 215 ... 10 or 11
ENG 211, 212 .................. 6  Humanities Electives ................ 6
GEO 216, 313 .................. 6  ESH 498, 499 ....................... 13
GLY 310 ........................ 4  ESH 451 ...........................  3
EDF 317 ........................ 4
PHY 230 ........................ 3
Electives ..................... 6-11

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The second major or minor must be approved by the Chairman of the Department of Geology and the Chairman of the Department of Secondary and Higher Education.

Curriculum for a Major in Geology (Non-Teaching)

GLY 210, 211, 310, 311, 312, 351, 410, 411, 412, 490, Geology field camp, six hours technical elective, and GEO 355 are required; total of 41 hours plus field camp (optional).

Junior Year Hours  Senior Year Hours
ENG 211, 212 .................. 6  GLY 312, 351, 410, 411, 412, 490 ... 17
GLY 310, 311 .................. 8  GEO 355 ...........................  3
PHY 131, 132 .................. 10  Technical Elective ................ 6
Humanities Elective ............ 6  Elective .......................... 6
*MAT 112 ........................ 4
Soc. Sci. Elective, B-2 .......... 3

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*MAT 112 may be replaced by Statistics or Computer courses with departmental approval.

Minor Programs in Geology.

A minor requires a minimum of 18 semester hours, except that 21 hours are required for teacher certification.

Earth Science Minor: GLY 210, 211, 310, 351, 390, GEO 215, PHY 230. For teacher certificates one year of chemistry and/or physics and one year of mathematics (none below the level of college algebra) are required. An Earth Science minor is not recommended for non-teaching majors.

Geology Minor: GLY 210, 211, 310, 410, 411 and GLY elective. For certification in teacher education one year of chemistry and/or physics, one year of mathematics (none below college algebra), and a course in meteorology or climatology are required in addition to the 18 hours of geology.

GRADUATE PROGRAMS

The Department of Geology offers two advanced degree programs: Master of Science with Thesis, and Master of Arts in Education with emphasis in Earth Science. Information pertaining to these graduate degrees may be found in the appropriate sections of the Graduate Catalog.
GEOLOGY (GLY)

General geology including the study of common minerals and rocks and geologic processes. Designed primarily for non-science majors. Two lecture and two laboratory hours. (Credit not allowed for both GLY 108 and 210.)

Prerequisite: GLY 108 or equivalent.
Chronologic history of the earth and its inhabitants. Designed primarily for non-science majors. Two lecture and two laboratory hours. (Credit not allowed for both GLY 109 and 211.)

GLY 207. Engineering Geology. Three hours. I.
Prerequisite: Pre-engineering majors.
Physical geology related to engineering problems; including structural geology, groundwater, solid study, rock and mineral identification, and geologic and topographic map interpretation. Two lecture and two laboratory hours plus field trips.

GLY 210. Physical Geology. Four hours. I, II.
Fundamental composition and structure of the earth, rocks and minerals, and landform origins and modifying agents. Three lecture and two laboratory hours, plus field trips.

GLY 211. Historical Geology. Three hours. II.
Prerequisite: GLY 210 or departmental approval.
Principles of the interpretation of earth history. Evolution of continents, mountain systems and oceans, and the development of the earth's animals and plants. Two lecture and two laboratory hours.

GLY 300. Geology (__________________). One to nine hours. A.
A geology course designed for undergraduate institute participants. Course content will be developed to adequately serve the aims of the institute. The specific orientation will appear in parenthesis behind the course title, that is, Earth Science, Physical Geology, Education Geology, etc. The designated semester hours which can be earned will also be specified for a given institute.

GLY 302. Earth Science. Three hours. I, II, S.
Solar system and the heavenly bodies, their motions and laws which control them, atmosphere and weather, atmospheric motions and their effects, climatic elements and controls, structure and surface forms of the earth, flora, fauna and resources.

GLY 310. Mineralogy. Four hours. I.
Prerequisite: GLY 210, CHE 111.
Mineral classes and occurrences, principles of crystallography, and techniques of mineral identification. Two lecture hours and four laboratory hours.

GLY 311. Optical Mineralogy and Petrography. Four hours. II.
Prerequisite: GLY 310.
Identification of non-opaque minerals by immersion methods using petrographic microscopes. Two lecture and four laboratory hours.

GLY 312. Petrology. Three hours. I.
Prerequisite: GLY 311.
Origin and nature of igneous, sedimentary, and metamorphic rocks. Important rock types are studied and classified by standard identification techniques. Two lectures and two laboratory hours.

GLY 351. Field Geology. Three hours. I or II.
Prerequisite: GLY 108 or 210.
Field techniques, plane table surveying, description and measurement of stratigraphic section; fundamental geologic mapping. One lecture and four hours in the field (Saturdays).
GLY 390. Environmental Geology. Three hours. A.
Prerequisite: GLY 108, or GLY 210 or departmental consent.
A general course designed primarily for non-science majors. Gives the students
an awareness of the relationship of geology to his environment. Specific topics will
deal with the role of geology in urban and rural planning, water resources, waste
disposal and land fill projects, conservation, and other environmentally related areas.

GLY 410. Structural Geology. Three hours. I.
Prerequisite: GLY 210, 211, MAT 109 or consent of instructor.
Architecture of the earth. Properties and behavior of rocks under different
geologic conditions, geologic structure, and solution of structural problems are studied.
Two lecture and two laboratory hours plus field trips.

GLY 411. Introduction to Invertebrate Paleontology. Four hours. I.
Prerequisite: GLY 211, BIO 141 or departmental approval.
Morphology, distribution in time and space, evolution and paleoecology of fossil
invertebrates. Two lecture and four laboratory hours.

GLY 412. Stratigraphy and Sedimentation. Three hours. II.
Prerequisite: GLY 211.
Principles of stratigraphy and sedimentation illustrated with reference to the
geologic columns on a world-wide basis. Two lecture and two laboratory hours.

GLY 414. Geology of Soils. Three hours. A.
Prerequisite: CHE 111, 112.
Chemical and physical characteristics of soils and soil morphology. Includes field
trips. Two lecture and two laboratory hours.

GLY 430. Economic Geology. Three hours. II.
Prerequisite: GLY 310, 410.
Formation of mineral deposits and their distribution within the earth’s crust. Two
lecture and two laboratory hours.

GLY 440. Geology of Kentucky. Three hours. I, II, S.
Prerequisite: GLY 108, 210, or departmental approval.
General geologic study of Kentucky including landforms, waters, rock distribution
and soils.

GLY 450. Aerial Photography and Map Interpretation. Two hours. A.
Prerequisite: GEO 313 and GLY 410.
Methods of analyzing and interpreting geologic, physiographic, and cultural
features from geologic and topographic maps and from aerial photographs using the
stereoscope. One lecture and two laboratory hours.

GLY 490. Geology Senior Seminar. One hour. II.
Prerequisite: Departmental approval.
Topic selected by class from list submitted by seminar chairman. One hour each
week, seminar leadership rotating among students. Students may take this course for
a maximum of three credit hours.

GLY 500. Geology (...........................). One to nine hours. A.
A geology course designed for undergraduate and graduate institute participants.
Course content will be developed to adequately serve the aims of the institute. The
specific orientation will appear in parenthesis behind the course title, that is, Earth
Science, Physical Geology, Educational Geology, etc. The designated semester hours
which can be earned will also be specified for a given institute.

GLY 510. Advanced Structural Geology. Three hours. A.
Prerequisite: GLY 410 or consent of instructor.
Advanced study of the architecture of the earth. Structures of mountains, regionally
and world-wide, and mechanisms of deformation are considered in detail.
GLY 511. Advanced Paleontology. Three hours. A.
Prerequisite: GLY 411 or consent of instructor.
Study of taxonomy, biostratigraphy, and paleoecology of fossils. Emphasis placed on foraminifera, brachiopods, mollusks, ostracodes, and conodonts. Two lectures and two laboratory hours plus field trips.

GLY 512. Sedimentology. Three hours. A.
Prerequisite: GLY 411 or departmental approval.
Study of sediments. Physical condition of deposition, time of formation of deposits, and provenance emphasized. Size, shape, and composition of sediments analyzed statistically. Two lecture and two laboratory hours.

GLY 513. (Formerly 313.) X-ray Diffraction and Spectroscopy. Three hours. A.
Prerequisite: PHY 131, 132. GLY 310, or departmental consent.
Principles of X-ray Diffraction as a tool for analysis of crystalline substances. Special attention is given to mineral identification, analysis of mineral structures, and elemental analysis by X-ray diffraction and emission.

GLY 532. Geology of Fuels. Four hours. A.
Prerequisite: GLY 430.
Origin, occurrences, and uses of natural fuels. Three lecture and two laboratory hours, plus field trips as deemed appropriate.

GLY 533. Industrial Minerals. Four hours. A.
Prerequisite: GLY 430.
Origin, occurrence, and use of industrial rocks and minerals. Three lecture and two laboratory hours.

GLY 550. Geochemistry. Four hours.
Prerequisites: CHE 112, and GLY 310 or departmental approval.
Principles of the distribution of the elements in the earth’s crust. Phase equilibria pertinent to geologic problems. Major methods of geochemical analysis and exploration. Introduction to isotypes and their uses in geochronology. Three lectures and two laboratory hours.

GLY 570. Volcanology. Two hours. A.
Prerequisite: Consent of Instructor.
The course will consist of an analysis of extrusive and intrusive processes. The characteristics of lava flows, pyroclastic rocks, and volcanoes will be considered in some detail. Two lecture hours.

GLY 598. Special Problems in Geology. One to four hours. I, II, S.
Prerequisite: Departmental approval.
Course topic determined by student and instructor.

GRADUATE COURSES

GLY 600. Geology (............................). One to nine hours. A.
A geology course designed for graduate institute participants. Course content will be developed to adequately serve the aims of the institute. The specific orientation will appear in parenthesis behind the course title, that is, Earth Science, Physical Geology, Education Geology, etc. The designated semester hours which can be earned will also be specified for a given institute.

GLY 610. Geotectonics. Three hours. A.
Prerequisite: Departmental approval.
Topic selected by students and instructor in the area of structural geology.

GLY 612. Clay Mineralogy. Four hours.
Prerequisite: GLY 313 or departmental approval.
Structure, origin, occurrence, and use of clay minerals. X-ray diffraction techniques and differential thermal analysis will be used to identify clay minerals. Two lecture and four laboratory hours.
GLY 622. Igneous and Metamorphic Petrology. Four hours.
Prerequisites: GLY 311 and 312.
Origin and occurrence and composition of igneous and metamorphic rocks. Emphasis on Precambrian batholiths and associated rocks. Three lecture and two laboratory hours.

GLY 623. Sedimentary Petrology. Four hours.
Prerequisites: GLY 311 and 312.
Origin, occurrence, and composition of sedimentary rocks. Three lecture and two laboratory hours.

GLY 630. Geophysical Exploration. Four hours.
Prerequisite: Departmental approval.
Principles and techniques of gravimetric, seismic, magnetic, and other geophysical methods of exploration for petroleum and economic minerals. Three lecture and two laboratory hours.

GLY 680. Seminar (..........................). One to four hours.
Prerequisite: Departmental approval.
A geology course designed to fit specialized needs of individual students. May be taken in stratigraphy, paleontology, mineralogy, petrology, geomorphology, or structural geology. May be repeated for a maximum of four hours.

GLY 699. Thesis. Three to six hours.

HISTORY (HIS)

G. W. Robinson, Chairman; Algier, W. Berge, Bliss, Coe, Duszak, R. Forderhase, N. Forderhase, Graybar, Keen, C. Lewis, B. Mutersbaugh, Odum, O'Neill, R. Stebbins, Tsao, Yeo.

A student may major in History (teaching) by completing the following courses: HIS 202, 203, 448, 449, nine hours elective in U. S. History, and nine hours elective in non-U.S. History for a total of 30 hours. Six hours of humanities may be elected from the following: HIS 398, HIS 399, PHI 110, PHI 130, PHI 240, PHI 300, PHI 301 or six hours of one foreign language. Six hours of one foreign language is strongly recommended.

Courses for a history major for the first two years may be found in the Central University College section. Courses for the last two years are as follows:

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<tr>
<th>Junior</th>
<th>Hours</th>
<th>Senior</th>
<th>Hours</th>
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<tr>
<td>EDF 317</td>
<td>4</td>
<td>HIS 448, 449, ESH 449, and three hours HIS elective</td>
<td>12</td>
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<tr>
<td>Non-U.S. HIS electives</td>
<td>6</td>
<td>ESH 498, 499</td>
<td>13</td>
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<tr>
<td>U.S. HIS electives</td>
<td>6</td>
<td>Electives (Minor)</td>
<td>6</td>
</tr>
<tr>
<td>General Education Science or Math elective &amp; SCI 310</td>
<td>6</td>
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<td>HIS elective or GSS 248</td>
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<tr>
<td>Electives (Minor)</td>
<td>9</td>
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<td>34</td>
<td></td>
<td>31</td>
</tr>
</tbody>
</table>

History major (non-teaching) requires twelve hours in one foreign language. Courses for a history major for the first two years may be found in the Central University College section. Courses for the last two years are as follows:
For a minor in history (non-teaching and teaching) the following courses are required: HIS 202, 203, GSS 246, 247, six hours upper division U.S. electives and six hours upper division non-U.S. electives.

HISTORY AND SOCIAL SCIENCE AREA
(Teaching Only)

The student who wishes to take an area in History and Social Science (teaching) must take the following courses for a total of 54 hours: HIS 202, 203, 448, 449, 398, 399, six hours elective U.S. History, and six hours elective in non-U.S. History. Two of the following five social science fields may be elected: anthropology, economics, geography, political science and sociology. The student must take twelve hours from each of the two fields elected in the following way: ANT 201, 202, and six hours upper division anthropology; ECO 230, 231, and six hours upper division economics; GEO 101, 102, and six hours upper division geography; POL 100, 101, and six hours upper division political science; SOC 131, 232, and six hours upper division sociology.

There is no non-teaching history and social science area major.

Courses for an area in history and social science for the first two years may be found in the Central University College section. Courses for the last two years are as follows:

GRADUATE PROGRAMS


Candidates for the Master of Arts with thesis are required to prepare in one of three major fields—American History or European History or Latin American History plus a minor field for a total of
30 hours. Degree requirements include, in addition, successful completion of the following: (1) Graduate Record Examination, (2) a foreign language examination, (3) a comprehensive written examination over the fields of major and minor interest, (4) a thesis, and (5) an oral defense of the thesis.

Candidates for the Master of Arts without thesis are required to prepare in one of three major fields, American or European or Latin American History plus one or two minor fields and must complete 36 hours altogether. Degree requirements include, in addition, successful completion of the following: (1) Graduate Record Examination, (2) comprehensive written examinations over major and minor fields, and (3) oral examination of the candidate's mastery of historical knowledge.

Candidates for the Master of Arts in Education (Secondary Education-History) are required to prepare in a major field—American or European History plus a minor field. Degree requirements include, in addition, successful completion of the following: (1) Graduate Record Examination, (2) nine hours of course work in Education, and (3) an oral examination over the fields of major and minor interest.

See the Graduate Bulletin for additional information concerning the M.A. programs in history.

**HISTORY (HIS)**

**HIS 202.** American Civilization to 1877. Three hours. I, II.
Patterns of discovery, exploration, conquest and colonization by European peoples; relationship between European and frontier culture; revolution; establishment of government and development of nationalism; sectionalism; Civil War and Reconstruction. Required of all majors and minors in history.

**HIS 203.** American Civilization since 1877. Three hours. I, II.
Rise of industrialism; problems of the American farmer; social and cultural advance; the last American frontier; American imperialism; World Wars; Progressive movement and New Deal; America as a great power since World War II. Required of all majors and minors in history.

**HIS 305.** (Formerly HIS 520.) The Afro-American in U. S. History. Three hours. A.
African heritage; middle passage; the peculiar institution; the Negro and the Civil War; reconstruction; the strange career of Jim Crow; modern emancipation; black nationalism.

**HIS 339.** Medieval Civilization. Three hours. A.
Prerequisite: GSS 246.
Survey of Western, Byzantine, and Saracenic cultures from the breakdown of the Roman Empire to the emergence of modern national states.

**HIS 340.** European History from 1300 to 1815. Three hours. A.
Prerequisite: GSS 246.
Renaissance and Reformation; rise of the national state and royal absolutism; decline of manorialism; rise of capitalism and mercantile system; British revolutions of the seventeenth century; international rivalries; age of reason and enlightened despotism; French Revolution and Napoleon.
HIS 345. English History to 1603. Three hours. I.
Prerequisite: GSS 246.
Roman Britain; Anglo-Saxon Civilization; Normans and Angevins; Norman Feudalism; growth of royal power; English Common Law; baronial opposition to the Crown; rise of Parliament; medieval government and administration; Hundred Years' War; York vs. Lancaster; transition from mediævalism; Tudor Monarchy; Reformation; Parliamentary progress; Elizabethan Age.

HIS 346. English History from 1603 to the present. Three hours. II.
Prerequisite: GSS 246.
Early Stuarts and national crisis; Civil War and Interregnum; later Stuarts; Imperial expansion and intellectual ferment; Hanoverian Era; Parliamentary and Cabinet government; beginnings of industrialization; impact of French Revolution and Napoleonic Wars; Age of Reform; Victorian Liberalism and culture; Industrialization; two World Wars and after.

HIS 347. Recent and Current World History, 1914 to the present. Three hours. A.
Prerequisite: GSS 247.
World War I; peace settlement of 1919; problems of security; war debts and reparations; disintegration of peace settlement; World War II; the Cold War.

HIS 356. German History from the French Revolution to the Present. Three hours. A.
Prerequisite: GSS 247.
Nature of the German problem and how it has been a product of the German historical experience; conservatism, liberalism, and the solution to the National Question; industrial revolution and the rise of socialism; culture and intellectual developments; evolution of political parties; World Wars I and II; Weimar democracy and the rise of the Nazi Party; totalitarianism; the nation divided.

HIS 360. (Formerly HIS 560.) History of Russia I. Three hours. A.
Prerequisite: GSS 246.
Formative period of Slavic states. Establishment and development of the Kievan and Muscovite states. Social and economic forces that led to the rise of autocracy. Foreign policy from Peter the Great to Alexander I.

HIS 361. (Formerly HIS 561.) History of Russia II. Three hours. II.
Prerequisite: GSS 247.

HIS 366. Imperial Spain, 1489-1815. Three hours. A.
Prerequisite: GSS 246.
Political and cultural history from the period of its predominance in European and American affairs until its decline in the 17th and 18th centuries.

HIS 370. (Formerly HIS 570.) Far Eastern History to the 19th Century. Three hours. I.
Prerequisite: GSS 246.
Survey of China and Japan from ancient times to the end of the 18th century, emphasizing characteristic political, economic, social, religious, and cultural developments. Reference made to peripheral areas.

HIS 371. (Formerly HIS 571.) Far Eastern History in the 19th and 20th Centuries. Three hours. II.
Prerequisite: GSS 247.
Survey of China and Japan in the 19th and 20th Centuries. Attention given to impact of the West, Intellectual and cultural movements, political, economic, and social developments.

HIS 380. (Formerly HIS 580.) History of Latin America. Three hours. I.
Prerequisite: GSS 246.
European and American background; discovery, conquest, expansion; techniques of government; social and economic institutions to independence.
HIS 331. (Formerly HIS 581.) History of Latin America. Three hours. II.
Prerequisite: GSS 247.
Comparative treatment of political, economic, and social institutions of Latin American republics from attainment of independence to the present.

HIS 398. (Formerly HIS 498.) (CL PHI 398.) Ideological Foundations of Western Civilization. Three hours. I, II.
Not applicable as history elective.
Introduction to basic concepts in the ideological heritage of the Western World from the end of the medieval age through the Enlightenment. Readings consist largely of selections from great books and documents in religion, science, economics, political theory, and philosophy.

HIS 399. (Formerly HIS 499.) (CL PHI 399.) Ideological Foundations of Western Civilization. Three hours. I, II.
Not applicable as history elective.
Introduction to basic concepts in the ideological heritage of the Western World from the Enlightenment to the present. Readings consist largely of selections from great books and documents in religion, science, economics, political theory, and philosophy.

HIS 401. (Formerly HIS 501.) American Colonial Period. Three hours. A.
Prerequisite: HIS 202.
Political and social history of the thirteen colonies and their neighbors; European background, settlement, westward expansion; intercolonial conflicts; beginnings of culture; colonial opposition to imperial authority.

HIS 405. America's Westward Expansion. Three hours. A.
Prerequisite: HIS 202.
Colonial frontier; conflicts of Empire; trans-mountain movements; Ohio-Mississippi valleys; Indian problems; Manifest Destiny; the West and the sectional struggle; trans-Mississippi frontier of mining, railroads, cattle, and agriculture; West versus East.

HIS 406. The South in American History. Three hours. A.
Prerequisite: HIS 202.
Colonial developments in society and politics; origins of sectional consciousness; institutions of Negro slavery and plantation system; southern ideas and ideals; Civil War and Reconstruction; modern South.

HIS 410. (Formerly HIS 510.) The Gilded Age, 1877-1888. Three hours. A.
America's industrial expansion; rise of labor unions; the farm protest; political bossism.

HIS 413. (Formerly HIS 513). The United States and World Responsibility, 1945-Present. Three hours. A.
Prerequisite: HIS 203.
Problems of post-war adjustment; the cold war; the affluent society; problems inherent in world leadership.

HIS 433. American Diplomatic History. Three hours. A.
Prerequisites: HIS 202 and HIS 203.
American foreign relations from 1776 to present; emphasis on development of major trends such as isolationism, imperialism, and internationalism.

HIS 440. (Formerly HIS 540.) Renaissance and Reformation. Three hours. A.
Prerequisite: GSS 246.
Transformation of European civilization from medieval to modern period, 1350-1650. Emphasis upon changes in political, religious, and economic institutions of Europe, reflection of these changes in intellectual thought.

HIS 445. Europe from 1815 to 1870. Three hours. A.
Prerequisite: GSS 247.
Congress of Vienna and reaction following Napoleonic wars; revolutions of 1820, 1830, and 1848; liberalism, realism, and nationalism; growth of science and technology.
HIS 446. Europe from 1870 to 1914. Three hours. A.
Prerequisite: GSS 247.
Survey of the rapidly growing European society, economy, and world-wide impact in the period prior to the First World War; industrialism; imperialism; diplomatic background of World War I.

HIS 448. Topics in History and Social Science. Three hours. I, II.
Prerequisite: History major and six hours upper division history.
An introduction to the elements of research in social science and history. Development of facility of expression in writing. Study topics made on basis of training and special interests of students. Varies each semester according to the specialties of instructor.

HIS 449. Readings in History. Three hours. I, II.
Prerequisite: History major and three hours upper division history.
Introduction to the most important literature in various historical fields. Varies each semester according to the specialties of instructor.

HIS 461. Kentucky History. Three hours. I, II.
General, social, economic, and political history, influence in development of American democracy; periods of leadership in the nation; educational system; her great men and women; historical sources.

HIS 475. Islamic Empires. Three hours. I.
Prerequisite: GSS 246.
Growth and spread of Islam, the Umayyed, Abbasid, Fatimid, and Ottoman Empires. Focus on Islamic institution and broad comparative analysis.

HIS 476. The Modern Middle East. Three hours. II.
Prerequisite: GSS 247.
Breakdown of the Ottoman Empire, growth of Arab nationalism and emergence of Arab states, Iran and Turkey, their problems in the contemporary world.

HIS 483. Modern India. Three hours. A.
Prerequisite: GSS 247.
Present-day India, emphasizing post independence developments. Some stress on ancient influences upon the modern scene such as religious, social institutions, foreign rule, economic systems.

HIS 502. American Revolution and the Constitution. Three hours. A.
Prerequisite: HIS 202.
Colonial background of Revolution; internal and external nature of Revolution; problems associated with Confederation; events leading to the American Constitution.

HIS 503. Jacksonian Democracy. Three hours. A.
Prerequisite: HIS 202.
Criticism of the concept. Party issues, nationalism, and the importance of the age.

HIS 507. Civil War and Reconstruction. Three hours. A.
Prerequisite: HIS 202.
Causes, nature, and consequences of U. S. Civil War and Reconstruction.

HIS 508. Rise of American Nationalism to The Early Republic, 1789-1924. Three hours. A.
Prerequisite: HIS 202.
Federalists; Republicans and the Constitution; America and the French Revolution; War of 1812; breakup of political parties; emergence of new political divisions.

HIS 511. The Progressive Era and World War I, 1898-1920. Three hours. A.
Prerequisite: HIS 203.
Progressive movement; imperialism; American entry into war; the Treaty of Versailles, League of Nations.
HIS 512. Prosperity, Depression, and War, 1920-1945. Three hours. A. 
Prerequisite: HIS 203.
Internationalism and isolationism; prosperity in the twenties; depression and ef-
forts to cope with it; the coming of World War II; United States participation in war.

HIS 525. Twentieth Century Afro-American History. Three hours. A. 
Prerequisite: HIS 203 or consent of instructor.
An in-depth study of the contributions of Afro-Americans and their struggles for the priviledges and immunities of citizenship, interwoven with the experiences of the United States from world power to prober of outer space.

HIS 530. American Social and Intellectual History to 1850. Three Hours. A. 
Prerequisite: HIS 202.
European influences; the colonial mind; revolutionary attitudes; New England’s 
leadership; the movement of protest and reform; the rise of a native literature.

HIS 531. American Social and Intellectual History since 1850. Three hours. A. 
Prerequisite: HIS 203.
The Civil War; Protestantism and capitalism; Social Darwinism; literature of 
naturalism and realism; the twentieth-century mind.

HIS 535. Ancient History in the Near East and Greece. Three hours. A. 
Prerequisite: GSS 246.
Ancient Near East and Greece from prehistoric times to Alexander the Great 
and his successors; early food production; rise of civilization in Babylonia and Egypt; 
development of economic and political institutions; art; science; literature; and re-
ligion.

HIS 536. History of Rome. Three hours. A. 
Prerequisite: GSS 246.
Rome from prehistoric village to the dominant power in the Mediterranean world; 
rise and decline of the Empire in the West.

HIS 541. The Age of the Enlightenment. Three hours. A. 
Prerequisite: GSS 246.
European intellectual history, 1650-1789; scientific revolution. Cartesian and New-
tonian schools; enlightenment as an European phenomenon; emphasis on the eighteenth 
century as an age of political and social criticism.

HIS 542. The French Revolution and Napoleon, 1789-1815. Three hours. A. 
Prerequisite: GSS 247.
Background, analysis of various stages of the Revolution and their reflection of 
foreign policy; establishment of the First Empire; reasons for its collapse; effects 
of the Revolution upon France and Europe; 1815 as a watershed of European history.

HIS 544. Modern European Intellectual History. Three hours. A. 
Prerequisite: GSS 247.
European civilization in the 19th and 20th centuries; emphasis upon institutions, 
ideas, and cultural forms distinguishing the period.

HIS 547. Tudor England, 1485-1603. Three hours. A. 
Prerequisite: HIS 348 or consent of instructor.
Henry VII and resurgence of the monarchy; Henry VIII and revolt against Rome; 
Protestant Reformation; Cromwell’s reforms; Edward VI and Marian Reaction; char-
acter and policies of Elizabeth I; Elizabethan settlement; Catholics vs. Puritans; 
Elizabethan diplomacy and Spanish War; Tudor Constitution and rise of Parliament; 
Elizabethan Renaissance.

HIS 548. Stuart England, 1603-1714. Three hours. A. 
Prerequisite: HIS 348 or consent of instructor.
Characters and policies of early Stuarts; constitutional conflicts; Anglicanism vs. 
Puritanism; collapse of Tudor Constitution; English Civil War; Cromwell and Inter-
regnum; Charles II and Restoration; growth of the Empire; Glorious Revolution; 
Britain as a great power; reign of Queen Anne.
HIS 550. Emergence of Victorian Britain. Three hours. A.
Prerequisite: HIS 346 or consent of instructor.
Economic and intellectual backgrounds of 19th century; French Revolution and Napoleonic threat; reaction and reform after 1815; Victorian thought; origins of the Commonwealth; age of Palmerston in foreign affairs.

HIS 551. Britain and the Empire in Adversity, 1867-Present. Three hours. A.
Prerequisite: HIS 346 or consent of instructor.
Characteristics of a new era; Reform Bill of 1867; economic and intellectual trends in late 19th century; decline of liberalism in politics; revival of imperialism; coming of World War I; emergence of the Commonwealth; impact of World War II; Conservative-Labor contention; Britain's role in the "cold" war.

HIS 557. Germany since 1870. Three hours. A.
Prerequisite: GSS 247.
Background; rise of Prussia; German nationalism and particularism; creation of the German Empire; its rule under Bismarck and William II; Peace Treaty and Weimar Republic; Nazi Germany; Second World War; allied occupation.

HIS 562. History of the Soviet Union. Three hours. II.
Prerequisite: GSS 247.
The 1917 revolution to the present. Establishment of the Soviet regime; New Economic Policy; Five-Year Plans; Soviet system of government; World War II; post-war years; cultural trends underlying political, economic, and social developments of the Soviet era.

HIS 564. (Formerly HIS 364.) History of Russian-American Relations. Three hours. A.
Prerequisite: GSS 246, 247.
Origin of Russian-American relations during the Colonial Period. Development of commercial relations and beginning of Russian-American diplomacy of Imperial Russia. Evolution of Soviet-American relations during the 20th century.

HIS 572. (Formerly HIS 372.) History of Southeast Asia. Three hours. A.
Prerequisite: GSS 246, 247.
History of Burma, Thailand, Laos, Cambodia, Vietnam, Malaysia, Indonesia, and the Philippines from the earliest time to the present. Special attention given to economic, social, and cultural change.

HIS 573. Twentieth Century China. Three hours. A.
Prerequisite: GSS 247.
Origin of communism in China; Revolution of 1911; Kuomintang; Mao Tso Tung; the Long March; World War II; Defeat of Chiang Kai-shek; Red China.

HIS 582. History of Mexico. Three hours. A.
Prerequisite: GSS 246, 247.
Mexican History from the Spanish conquest to present with emphasis on Mexican Revolution of 1910 and its effect on political, economic, social, and military institutions.

HIS 585. History of Brazil. Three hours. A.
Prerequisite: GSS 246, 247.
An examination of Brazil's history from 1500 to the present with emphasis on developments since 1930.

GRADUATE COURSES

HIS 601. Survey of Historiography. Three hours. II.
Seminar approach to the history of historical writings and interpretation. Attention to selected works of great historians from Herodotus to the present. Required of all candidates.
HIS 603. Historical Criticism. Three hours. A.
Seminar in fundamental techniques of the historian; using basic bibliographical tools; locating and evaluating source materials; writing book reviews; critically interpreting historical evidence. Required of all candidates.

HIS 604. History as a Social Science. Three hours. A.
Scientific approach to social problems and their historical interpretations; analysis of economic, social intellectual, and political backgrounds of contemporary civilization.

HIS 605. The Humanities approach to History. Three hours. A.
The "American Character" and its development as an example of the humanities approach to the study of history.

HIS 606. Problems in Interpreting World History. Three hours. A.
Seminar on selected controversial developments in World History. May be repeated for a maximum of nine hours credit providing the course content is different each time.

HIS 607. Problems in Interpreting American History. Three hours. A.
Seminar on selected controversial developments in American History. May be repeated for a maximum of nine hours credit providing the course content is different each time.

HIS 610. Seminar in American History. Three hours. A.
Reading and investigations in a field other than the student's specialty. Required of all American history thesis majors.
Techniques of research, note-taking, documentation; occasional lectures and class discussions on major problems and controversies. Fields vary each semester. Required of all American history thesis majors.

HIS 620. Topics in Early 19th Century English History, 1815-1867. Three hours. A.
Seminar in the Victorian era. Students conduct original research; prepare papers; submit work to class for criticism and discussion. Required of all English history thesis majors.

HIS 625. Seminar in Latin American History. Three hours. A.

HIS 611. Seminar in 20th Century American History. Three hours. A.
Research, discussion, and writing in Latin American history with special emphasis on Mexico. Required of all Latin American history thesis majors.

HIS 649. Readings and Research. Three hours. A.
Independent study in a specific field.

HIS 698. Thesis Tutorial I. Three hours. A.

HIS 699. Thesis Tutorial II. Three hours. A.

MATHEMATICS (MAT)
B. R. Lane, Chairman; Bland, Brashear, Brooks, Ecklar, A. Howard, J. LeVan, M. LeVan, A. McGlasson, Nayle, Ng, Pierce, F. Scorsone, Short, Stephens.

A student may major in Mathematics (teaching) by completing the following courses: MAT 111, 112, 213, 214, 308, 334, 370 and six hours elected from courses numbered above 300, for a total of 30 hours. It is strongly recommended that at least one of the following be elected: MAT 309, 371, 533.

A student may major in Mathematics (non-teaching) by completing the following courses: MAT 111, 112, 213, 214, 308, 370, 414, 453,
480, and six hours elected from courses numbered above 300 (except 380), for a total of 34 hours. It is strongly recommended that at least one of the following be elected: 309, 371, 410, 540.

All Mathematics majors must take PHY 201 and 202 (or equivalent courses approved by the Chairman of the Mathematics Department).

A student may minor in Mathematics (teaching) by completing the following courses: MAT 109* or 110*, 111, 112, 213, and electives chosen from courses numbered above 300 to total a minimum of 21 hours.

A student may minor in Mathematics (non-teaching) by completing the following courses: MAT 109* or 110*, 111, 112, 213, and electives chosen from courses numbered above 300 to total a minimum of 18 hours.

The first two years for the major in Mathematics (teaching and non-teaching) may be found in the Central University College section. Courses for the last two years (teaching) are as follows:

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<th>Junior Year</th>
<th>Hours</th>
<th>Senior Year</th>
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<td>EDF 317</td>
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<td>MAT Electives</td>
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<td>MAT 308, 334, 370</td>
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<td>ESH 450</td>
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<td>Electives (minor)</td>
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Courses for the last two years (non-teaching) are as follows:

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<th>Junior Year</th>
<th>Hours</th>
<th>Senior Year</th>
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<tr>
<td>MAT 214, 308, 453</td>
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<td>MAT Electives</td>
<td>3 or 6</td>
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<tr>
<td>MAT 370 or Elective</td>
<td>3</td>
<td>MAT 414, 480</td>
<td>4</td>
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<tr>
<td>Humanities Electives</td>
<td>6</td>
<td>Electives</td>
<td>23-26</td>
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<tr>
<td>Electives (minor)</td>
<td>12-15</td>
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</tbody>
</table>

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*MAT 109 and 110 may be waived. Placement in the beginning mathematics courses will be determined by the Mathematics Department. If a student does not take MAT 109, he may include MAT 214 as an elective to complete the hours for a minor.

MASTER OF SCIENCE DEGREE IN MATHEMATICS:

The Master of Science Degree in Mathematics is offered with areas of specialization in algebra, analysis and topology; a thesis is optional in this program. The degree is designed to prepare the student for advanced graduate study in mathematics, for positions in government or industry and for teaching on the college and pre-college levels.

Further information and degree requirements may be found in the Graduate Bulletin.

MASTER OF ARTS IN EDUCATION:

The Mathematics Department, in cooperation with the Graduate
School and the College of Education, also offers an emphasis in Mathematics applying toward the M.A. degree in Education.

The regulations for the M.A. degree in Education program may be found in the College of Education section of the Graduate Bulletin. Students obtaining the M.A. degree in Education with the emphasis in Mathematics must select courses in conference with their advisor.

**MATHEMATICS (MAT)**

**MAT 107.** College Algebra. Three hours. I, II.
For students who are not majors or minors in Chemistry, Mathematics, or Physics. Sets and logic; number systems; integers, rational numbers, real numbers, complex numbers; equations and inequalities; functions and their graphs; systems of equations.

**MAT 109.** Algebra and Trigonometry. Five hours. I, II.
May not be taken for credit by students who have credit for MAT 107 or 113; offered for students who need this background for MAT 111. Sets; real numbers, functions and graphs; trigonometric, exponential and logarithmic functions; polynomial functions, equations and inequalities; inverse trigonometric functions; complex numbers.

**MAT 110.** Analytic Trigonometry. One hour. I.
Prerequisite: Approval of the Mathematics Department.
Corequisite: MAT 111.
The study of the properties of the circular functions; properties of the logarithmic functions. For students with adequate background in algebra who have studied high school trigonometry, but have insufficient trigonometry background as determined by the department.

**MAT 111.** Analytic Geometry and Calculus I. Four hours. I, II.
Prerequisite: MAT 109 or equivalent.
Rectangular coordinates; straight lines; limits and continuity; the derivative; algebraic functions and their derivatives; applications of differentiation; the differential; the law of the mean and applications.

**MAT 112.** Analytic Geometry and Calculus II. Four hours. I, II.
Prerequisite: MAT 111.
Continuation of MAT 111. Definite integral and applications; conics; differentiation and integration of transcendental functions; parametric equations and polar coordinates.

**MAT 200.** Fundamental Principles of Mathematics. Three hours. I, II.
Not open to Mathematics majors. Provides general college student with an understanding of basic meanings and concepts in mathematics. Selected topics from set theory, logic and proof, number and numeration, algebra, measurement, geometry and statistics.

**MAT 201.** Understanding Arithmetic. Three hours. I, II.
Not open to students who have taken MAT 203. For future teachers in elementary grades. Emphasis put on meaning rather than upon manipulation as such. Topics covered are number and numerals, sets and numbers, number operations, fundamental operations, number scales, number structure, fractions, decimals and the real number system.

**MAT 202.** Understanding Elementary Mathematics. Three hours. I, II.
Prerequisite: MAT 201; not open to students who have taken MAT 203.
Continuation of MAT 201 with the introduction of the ideas of modern mathematics, elementary logic, geometry, number concept, extending the number system, numeration, exponents, measurement, functions and graphs.
MAT 203. Structure of the Number System. Three hours. I, II.
Prerequisite: Permission of Mathematics Department. Not open to students who
have taken MAT 201 or MAT 202.
For future teachers in elementary grades. Properties of sets, whole numbers,
operations, numeration, integers, rational numbers, real numbers.

MAT 204. Informal Geometry. Three hours. I, II.
Prerequisite: MAT 202 or 203.
For future teachers in elementary grades.
An Informal (non-rigorous) study of both metric and non-metric geometry.
Properties of lines, planes, congruence, parallelism, triangles, circles, solid figures,
and compass-straight edge constructions.

MAT 207. Introduction to Statistics. Three hours. I, II.
Prerequisite: MAT 107 or equivalent.
Elementary probability, probability distributions, sampling, estimation, testing
hypotheses, correlation and regression.

MAT 211. (CL PHI 211.) Introductory Logic. Three hours. I, II.
Principles of modern logic through the propositional calculus and elementary
quantification. Attention paid to historical development and philosophical foundations
of logic.

MAT 213. Analytic Geometry and Calculus III. Four hours. I, II.
Prerequisite: MAT 112.
Continuation of MAT 112. Formulas and methods of integration; infinite series;
hyperbolic functions; solid analytic geometry; partial derivatives; multiple integrals.

MAT 214. Linear Algebra and Matrices. Three hours. I, II.
Prerequisite: MAT 112.
Real and complex vector spaces; linear transformations, matrix theory and appli-
cations through the introduction to eigenvalues and eigenvectors, determinants and
inner product spaces.

MAT 272. Introduction to Digital Computer Techniques. One hour. I, II.
Prerequisite: MAT 107 or equivalent.
Communication with the modern electronic digital computer. Basic principles of a
problem-oriented programming language (FORTRAN). Selected problems for com-
puter solution from the natural, social, and behavioral sciences.

MAT 308. Introduction to Modern Algebra I. Three hours. I, II.
Prerequisite: MAT 213.
Fundamental concepts; sets, mappings, relations and operations; rings; isomor-
phism; integral domains and properties of integers; fields, rational numbers, real num-
bbers, complex numbers.

MAT 309. Introduction to Modern Algebra II. Three hours. II.
Prerequisite: MAT 308.
Continuation of MAT 308. Polynomials; groups; vector spaces; systems of linear
equations; determinants; linear transformations and matrices.

MAT 334. Modern College Geometry. Three hours. I, II.
Prerequisite: High School Geometry and MAT 112.
Logical systems and basic laws of reasoning; special topics of axiomatic geometry;
Menelaus's and Ceva's theorems; harmonic elements and cross ratio; projective geo-
metry; basic axioms; quality; Desargue's theorem; perspective figures; coordinate projec-
tive geometry; transformation theory.

MAT 370. Mathematical Statistics I. Three hours. I, II.
Prerequisite: MAT 213.
Algebra of sets, set functions; distributions of random variables, conditional prob-
ability and stochastic independence, correlation coefficient; special distributions; mathe-
matical expectations of functions of random variables; random intervals, confidence
intervals for means of variances, Bayesian interval estimates; order statistics, limiting
distributions, central limit theorem.
MAT 371. Mathematical Statistics II. Three hours. A.
Prerequisite: MAT 370.
Hypothesis testing confidence intervals, special distribution functions, order statistics, central limit theorem, correlation and regression, analysis of variance.

Prerequisite: MAT 112 or consent of the instructor.
Solving of problems of mathematics, science, engineering, statistics, and other sciences by computer. FORTRAN IV is primary language to be developed. Emphasis on programming; however, development of the FORTRAN language is illustrated with elementary numerical methods and scientific applications. Students write programs for the H 200 computer.

MAT 389. History of Mathematics. Three hours. II.
Prerequisite: MAT 213.
Number systems; Babylonian, Egyptian and Greek contributions; Pythagorean mathematics; Euclidean and non-Euclidean Geometry; three famous problems of antiquity; Hindu and Arabian contributions; mathematics during the Dark Ages and Renaissance; modern mathematics, beginning with the invention of analytic geometry and calculus.

MAT 410. Introduction to Set Theory and Point Set Topology. Three hours. A.
Prerequisite: MAT 308.
Sets, relations and functions; countability; axiom of choice; neighborhoods; limits and continuity; topological spaces; connectedness; compactness; finite product spaces; applications to the real line and to metric spaces.

MAT 414. (Formerly covered in part by MAT 454.) Introduction to Analysis I. Three hours. I.
Prerequisite: MAT 213. MAT 410 recommended.
The real number system; sets and functions; limits; continuity, uniform continuity; multivariable differentiation; Taylor's theorem; laws of the mean; the Riemann-Stieltjes integral; allied topics.

MAT 430. Symbolic Logic. (CL PHI 430.) Three hours. II.
Prerequisite: MAT 211 (CL PHI 211).
An advanced course in logic which examines in depth the meaning of statement connectives, the structure of the propositional calculus, quantification and set theory and the development of axiomatic systems.

MAT 453. Differential Equations. Three hours. I, II.
Prerequisite: MAT 213.
Differential equations of the first order; applications; singular solutions; linear equations with constant coefficients; miscellaneous methods for solving equations for higher order than the first; integration in series; total differential equations.

MAT 480. Seminar. One hour. II.
Prerequisite: Senior standing.
Individual investigation of selected topics; presentation and discussion of results; introduction to use of journals and other sources of material. Meets two hours weekly.

MAT 495. Independent Work. Three hours. I, II.
Prerequisite: Consent of Department.
Individual study and/or research on a problem or area of mathematics chosen by the student and the instructor. Regular consultation and final paper required. May be repeated once.

MAT 505. Foundations of Mathematics. Three hours. I.
Prerequisite: MAT 308 or consent of instructor.
Nature of mathematical thought; logical systems, postulational concepts and methods; consideration of the work of Hilbert, Peano, Whitehead, Russell, and others.
MAT 506. Number Theory. Three hours. II.
Prerequisite: MAT 308 or consent of Instructor.
Fundamental properties of integers; linear Diophantine equations; linear and quadratic congruences; famous problems of number theory.

MAT 508. Modern Algebra I. Three hours. I.
Prerequisite: MAT 213 and 308, or consent of Instructor.
Some fundamental concepts, sets, mapping, equivalence relations, operations; rings and integral domains; isomorphisms; some properties of the integers; fields with emphasis on construction of the various number systems; groups.

MAT 515. (Formerly MAT 415.) Introduction to Analysis II. Three hours. II.
Prerequisite: MAT 414.
Infinite sequences and series, power series, series of functions, convergence, uniform convergence; introduction to vector analysis; line integration; multivariable integration; Fourier series; introduction to the Lebesgue integral; allied topics.

MAT 533. Non-Euclidean Geometry and Related Topics. Three hours. II.
Prerequisite: MAT 213 or consent of instructor.
The classical problem of parallelism and the developments which led to its solution. Synthetic and analytic treatment of hyperbolic geometry; its relation to space-time. The Cayley-Klein model and its generalizations. The Poincare model.

MAT 540. Introductory Applied Mathematics. Three hours. A.
Prerequisite: MAT 453.
A course emphasizing techniques and applications of matrices and determinants, partial differential equations, Fourier series, Laplace transformation, calculus of variation, special functions, vectors and tensors, complex integration, linear transformations and inner product space.

MAT 550. Complex Analysis. Three hours. A.
Prerequisite: MAT 414 or consent of Instructor.

MAT 556. Vector Analysis. Three hours. II.
Prerequisite: MAT 213 and PHY 202 or equivalent.
Algebra, geometry and calculus of vectors and applications.

MAT 571. Introduction to Numerical Analysis. Three hours. II.
Prerequisite: MAT 213 and 372 or equivalent.
Computer-oriented numerical methods course. Basic operations, computation, approximation, interpolation, numerical solution of equations, numerical integration, matrices and systems of equations, numerical solution of ordinary differential equations. Exhibits techniques available; attempts to derive the relevant formulas and consider the mathematical analysis. Out-of-class laboratory work required.

GRADUATE COURSES

Designed for secondary school teachers of mathematics working toward the Master of Arts in Education Degree. Topics include: number and numeration; fundamental number theory; sets, relations, and functions; algebraic systems; consideration of these topics as they are likely to affect the modern high school mathematics program.

Continuation of MAT 607. Topics include: history and development of geometry; logic and nature of proof; foundations of synthetic and analytic Euclidean geometry; discovery of non-Euclidean geometries; vector approaches to the study of geometry; consideration of these topics as they are likely to affect the mathematics program in the modern high school.
MAT 609. Modern Algebra II. Three hours. II.
Prerequisite: MAT 508.
Matrix algebra; vector spaces; systems of linear equations; linear transformations.

MAT 610. General Topology. Three hours. A.
Prerequisite: MAT 308 or consent of instructor.

MAT 611. Topics in Topology. Three hours. A.
Prerequisite: MAT 610.

MAT 634. Higher Geometries. Three hours. A.
Prerequisite: MAT 334 or consent of instructor.
Topics will be selected from: projective geometry, affine geometry, non-euclidean geometry and differential geometry. Mappings of a geometric nature and their properties will be considered where appropriate in the development of the topics.

MAT 650. Measure and Integration. Three hours. A.
Prerequisite: MAT 515.

MAT 660. Topics in Algebra. Three hours. A.
Prerequisite: MAT 509 or consent of instructor.
Topics in groups, rings and fields. Introduction to homological and multilinear algebra.

MAT 672. Numerical Analysis. Three hours. A.
Prerequisite: MAT 571.
A continuation of MAT 571 with increasing emphasis on theory. Polynominal approximations; Gaussian quadrature and related topics; differential equations; linear programming.

MAT 680. Mathematics Seminar. One hour. A.
Prerequisite: Consent of Department.
Individual investigation of selected topics; presentation and discussion of results; introduction to research literature. May be repeated to a maximum of two hours.

MAT 690. Independent Study. Three hours. A.
Prerequisite: Graduate Standing with a minimum of nine semester hours in 600 level mathematics courses.
Independent study on a problem in mathematics chosen by the student and the instructor. A final paper is required. This course may be repeated one time.

MAT 699. Thesis. One to six hours. A.

MUSIC (MUS)

George Muns, Chairman; E. Baker, L. Baker, Beeler, Bennet, Bonne mann, Cook, Cooper, Craig, Hartwell, Henrickson, Hensel, Hoagland, Lawson, Main, Peterson, Staples, Stephenson, Surplus, Thomas, Vamos, Wehr, Wolfrom, Zolas.

The student may choose from the following curricula:
The Bachelor of Music Education (teaching), with performance emphasis in voice, keyboard, string or wind instruments. A provisional high school certificate with endorsement for elementary teaching in both vocal and instrumental music is provided on completion of requirements in music as follows:

Theory, History, Literature and Techniques
MUS 181, 182, 281, 282, 366, 371, 372, 383 or 384, 480

Music Education
ESH 378, ESH 379, ESH 457, ESH 458

Applied Major Instrument or Voice
A minimum of seven hours is required with instruction to continue every semester of residence except the practice-teaching semester. The student will present the equivalent of a half-recital before graduation with the recital pre-approved before presentation. The recital requirement will normally be fulfilled by taking six hours of applied music for the first six semesters and MUS 499, Recital, during the seventh semester. Students may meet the recital requirement by taking seven hours of applied music. During the final semester of applied music study such students will appear as soloists in four student recitals, performing selections of scope and difficulty comparable to a senior recital and will be graded by the applied teacher on the basis of these performances.

Admission to upper division applied music study will be by general proficiency examination.

Applied Classes
MUS 130, 131, 251, 252, 320, 351, 352, 354

Instrumental students may be excused from taking MUS 252 and 352 by proficiency examination. Voice or keyboard emphasis will omit MUS 354 with MUS 320 not required of voice students.

Secondary Piano
MUS 110, 111 and 113

Admission to the teacher education program will not be recommended until after this requirement is completed. All students will be examined to ascertain piano proficiency. Those who do not meet the prescribed standard will take MUS 110, 111 and 113. MUS 110 may be taken a maximum of two times. If the student has not qualified in secondary piano following this, MUS 111 or MUS 113 will be taken and repeated until the piano requirement is met.

Ensembles
Each student must be enrolled in a major ensemble which reflects his major applied area during each semester of residence. Part-time students taking more than the usual number of semesters to complete the degree will not be required to complete more semesters of ensemble participation than a full-time student.

Total semester hours in the Bachelor of Music Education degree, Keyboard, Wind, or String emphases, 133½; Vocal or Percussion emphases, 132½.
The Bachelor of Music (non-teaching), with majors in voice, piano, organ, wind-instruments and church music. At the close of the sophomore year students electing this program will be required to pass proficiency examinations in the major and secondary performance areas, and in keyboard, before final admission is granted. During the junior year a one-half recital is required; during the senior year, a full recital is required. Church music major requires a one-half recital only. All candidates for the Bachelor of Music degree will take MUS 499, Recital for two hours credit during the final semester of residence. Music requirements as follows:

Theory
MUS 181, 182, 281, 282, 383, 480, 581

History and Literature
MUS 171, 371, 372; 2-3 hours of electives from upper division courses. Church music major required minimum of 3 hours of MUS 415, 416, 417 or 418.

Applied Major Instrument or Voice*
Two hours credit per semester in first and second years
Four hours credit per semester in third and fourth years
Two hours credit for graduation recital (MUS 499)
The church music major will elect applied music for two hours per semester for four years.

*Applied music instruction in the Bachelor of Music degree program should be continuous through the four years of the prescribed curriculum and should be taken in the sequence described above. In instances of students transferring from other institutions or from other curricula who have not had the requisite number of credit hours, permission may be granted, with approval of the Chairman, to exceed the number of credit hours listed above in any semester or semesters to enable the student to remedy the deficiency provided that the need for such a dispensation is clearly indicated.

Applied Secondary Instrument
Secondary instrument selected to relate to major applied field and elected for one hour credit each semester for two years.

Related Courses
All Majors: MUS 366, 550, 551

Ensembles
Each student must be enrolled in an ensemble which reflects his major applied area during each semester of residence with the approval of his major applied teacher and the Chairman. Additional hours in chamber music, accompanying or opera workshop may be required at the recommendation of the Department of Music. Pianists may fulfill the requirement through accompanying.

Total semester hours in the Bachelor of Music degree, Piano, Organ, Wind or String Instruments majors, 129-130; Voice major, 135-136; Church Music major, 128-129.
The Bachelor of Art (non-teaching), with a major in music (concentration in theory, and concentration in applied), or minor in music. Music requirement as follows:

MUSIC MAJOR (CONCENTRATION IN THEORY)
Theory, History and Literature
MUS 171, 181, 182, 281, 282, 371, 372, 383, 480, 555 or 556 and 557, 581, 583 (4 hrs.)

Applied Music
Piano 8 hours.

MUSIC MAJOR (CONCENTRATION IN APPLIED)
Theory, History and Literature
MUS 171, 181, 182, 281, 282, 371, 372, 480

Applied Instrument or Voice
Study every semester of residence, 16 credit hours minimum.

Recitals and Ensembles
Candidates for the Bachelor of Arts with a Major in Music, Concentration in Applied, will present one-half senior recital and will meet the same ensemble participation requirements as listed for the Bachelor of Music curriculum. Candidates for the Bachelor of Arts with a Major in Music, Concentration in Music Theory, will be exempted from the recital and ensemble participation requirements.

Total semester hours in the Bachelor of Arts with a Major in Music degree, Concentration in Theory and Concentration in Applied, 128.

MINOR IN MUSIC (non-teaching)

Theory
MUS 181, 182

History and Literature
MUS 371, 372
Minimum of 4 hours of electives in music.

BACHELOR OF MUSIC EDUCATION
Voice, Keyboard, Wind or String emphases

The first two years may be found in the Central University College section.

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32 34½
BACHELOR OF MUSIC

with Majors in Voice, Piano, Organ and Wind or String Instruments and Church Music

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<td>MUS 499, 550, 551, Elect</td>
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BACHELOR OF ARTS WITH A MAJOR IN MUSIC

Concentration in Music Theory
Concentration in Applied

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<td>MUS 583</td>
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<td>MUS Piano and Ensembles</td>
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GRADUATE STUDY IN MUSIC

Graduate study in music can lead to the Master of Music Education or the Master of Arts in Education degrees. These graduate degrees prepare students for leadership roles in music education at all levels; build a sound foundation for further graduate study leading to a doctorate; provide further insight into the structure of music; increase their knowledge of musical culture through intensive study of music literature; provide them with a core of knowledge from the field of learning theory, philosophy of education and curriculum development enabling them to use educational principles in guiding the musical growth of others.

The program of study includes required subjects in music education, teaching techniques, music history and literature, structure and organization in music, applied music, and related fields. Flexibility is provided for students to pursue particular interests in the field of music.

Qualifications for admission and procedures for entrance may be found in the Graduate Bulletin. More detailed information may be obtained by writing the Department of Music or the Dean of the Graduate School.
APPLIED MUSIC

Instruction is given in individual lessons of one or two one-half hour periods each week. Practice facilities are provided, the fees for which are included in the music fee. At the end of each semester applied music jury examinations are held. No student taking applied music for credit will receive a grade for the semester's work without taking the jury examination unless excused by the Chairman. Applied classes meet two one hour periods per week.

Recital Attendance. Attendance at the weekly departmental recitals and master classes is a regularly scheduled part of applied music instruction for majors. Absences will be treated in the same manner as absences in any other course. Students should attend all approved university concerts and recitals.

MUS 110. Class Piano. One hour. I, II.
Introductory course for vocal and instrumental students to meet piano requirements for secondary piano as follows: play simple piano accompaniments at sight; play easier choral 4-part folk songs and hymns; harmonize, at sight, simple tunes; exhibit reasonable competency in transposition. May be repeated for a maximum of two times.

MUS 111. Class Piano. One hour. I, II.
Prerequisite: MUS 110.
Continuation of MUS 110. May be repeated for a maximum of two times.

MUS 112. Piano I. One or two hours. I, II.
One or two lessons per week. May be repeated for a maximum of four hours.

MUS 113. Secondary Piano. One or two hours. I, II.
Prerequisite: MUS 111 or equivalent.
One or two lessons per week with emphasis upon accompaniments.
May be repeated for a maximum of two times.

MUS 122. Voice I. One or two hours. I, II. One or two lessons per week.
May be repeated for a maximum of four hours.

MUS 130. String Instruments Class I. One hour. I.
Practical instruction in methods of fingering, care of instruments, tone production and tuning. Group instruction to prepare for teaching strings in class and for training string section of a school orchestra.

MUS 131. String Instruments Class II. One hour. II.
Continuation of MUS 130. Prerequisite MUS 130.

MUS 132. String Instruments I. One or two hours. I, II.
One or two lessons per week. May be repeated for a maximum of four hours.

MUS 142. Organ I. One or two hours. I, II. One or two lessons per week. May be repeated for a maximum of four hours.

MUS 145. Brass Instruments I. One or two hours. I, II. One or two lessons per week. May be repeated for a maximum of four hours.

MUS 146. Woodwind Instruments I. One or two hours. I, II. One or two lessons per week. May be repeated for a maximum of four hours.

MUS 147. Percussion I. One or two hours. I, II. One or two lessons per week. May be repeated for a maximum of four hours.

MUS 212. Piano II. One or two hours. I, II. One or two lessons per week. May be repeated for a maximum of four hours.
MUS 222. Voice II. One or two hours. I, II. One or two lessons per week. May be repeated for a maximum of four hours.

MUS 232. String Instruments II. One or two hours. I, II. One or two lessons per week. May be repeated for a maximum of four hours.

MUS 242. Organ II. One or two hours. I, II. One or two lessons per week. May be repeated for a maximum of four hours.

MUS 245. Brass Instruments II. One or two hours. I, II. One or two hours per week. May be repeated for a maximum of four hours.

MUS 246. Woodwind Instruments II. One or two hours. I, II. One or two lessons per week. May be repeated for a maximum of four hours.

MUS 247. Percussion II. One or two hours. I, II. One or two lessons per week. May be repeated for a maximum of four hours.

MUS 251. Brass Instruments Class I. One hour. I.
Practical instruction in methods of fingering, care of instruments, tone production and tuning. Group instruction to prepare for teaching brass instruments in band or orchestra. Examination of materials suitable for beginning instrumental programs.

MUS 252. Brass Instruments Class II. One hour. II. Continuation of MUS 251.
Prerequisite MUS 251.

MUS 312. Piano III. One, two or four hours. I, II. One or two lessons per week. May be repeated for a maximum of eight hours.

MUS 322. Voice III. One, two or four hours. I, II. One or two lessons per week. May be repeated for a maximum of eight hours.

MUS 322. String Instruments III. One, two or four hours. I, II. One or two lessons per week. May be repeated for a maximum of eight hours.

MUS 342. Organ III. One, two or four hours. I, II. One or two lessons per week. May be repeated for a maximum of eight hours.

MUS 345. Brass Instruments III. One, two or four hours. I, II. One or two lessons per week. May be repeated for a maximum of eight hours.

MUS 346. Woodwind Instruments III. One, two or four hours. I, II. One or two lessons per week. May be repeated for a maximum of eight hours.

MUS 347. Percussion III. One, two or four hours. I, II. One or two lessons per week. May be repeated for a maximum of eight hours.

MUS 351. Woodwind Instruments Class I. One hour. I.
Practical instruction in methods of fingering, care of instruments, tone production and tuning. Group instruction to prepare for teaching woodwind instruments in band or orchestra. Examination of materials suitable for beginning instrumental programs.

MUS 352. Woodwind Instruments Class II. One hour. II. Continuation of MUS 351.
Prerequisite MUS 351.

MUS 354. Percussion Class. One hour. I, II.
Emphasis on snare drumming, rudiments, teaching techniques. Experience on all related percussion instruments: bass drum, tympani, and others. Some experience with mallet instruments: marimba, xylophone, bells, and others.

MUS 412. Piano IV. One, two or four hours. I, II. One or two lessons per week. May be repeated for a maximum of eight hours.

MUS 422. Voice IV. One, two or four hours. I, II. One or two lessons per week. May be repeated for a maximum of eight hours.
MUS 432. String Instruments IV. One, two or four hours. I, II. One or two lessons per week. May be repeated for a maximum of eight hours.

MUS 442. Organ IV. One, two or four hours. I, II. One or two lessons per week. May be repeated for a maximum of eight hours.

MUS 445. Brass Instruments IV. One, two or four hours. I, II. One or two lessons per week. May be repeated for a maximum of eight hours.

MUS 446. Woodwind Instruments IV. One, two or four hours. I, II. One or two lessons per week. May be repeated for a maximum of eight hours.

MUS 447. Percussion IV. One, two or four hours. I, II. One or two lessons per week. May be repeated for a maximum of eight hours.

MUSIC ENSEMBLES

Ensembles are open to all students enrolled in the University and to qualified persons not enrolled. Interested persons and students are invited to participate and should contact the director of each activity to arrange for an audition.

MUS 127, 327. Opera Workshop. One-half hour. I, II. Preparation and presentation of opera scenes and complete works. All phases of performance and technical procedures of staging, costumes, and management.

MUS 205. Chamber Music. One-half hour. I, II. Study and performance of standard chamber music literature, quartets, quintets, etc. Open to pianists, vocalists, string and wind instrument players upon recommendation of instructor. Course may be repeated.

MUS 225. Choir. One-half hour. I, II. Rehearsal and performance of choral literature of the highest standard. Sections include Concert Choir, Oratorio Chorus, Men's Glee Club and Women's Glee Club. Three or more rehearsals per week.

MUS 226. Chamber Choir. One-half hour. I, II. Rehearsal and performance of the finest music written for the small vocal ensemble. Concerts given both on and off campus. Three or more rehearsals per week.

MUS 235. Orchestra. One-half hour. I, II. Rehearsal and performance of the finest orchestra literature from the Baroque to the Contemporary eras. Concerts given both on and off campus. Three or more rehearsals per week.

MUS 250. Small Ensembles. One-half hour. I, II. Rehearsal and preparation of literature for the following ensembles: (a) Chamber Orchestra; (b) Brass Choir; (c) Percussion Ensemble; (d) Stage Band; (e) Clarinet Choir.

MUS 255. Band. One-half hour. I, II. Rehearsal and performance of standard band literature. Band includes both symphonic and concert units. Concerts given both on and off campus. Three or more rehearsals per week.

MUS 256. Marching Band. One-half hour. I. Preparation and performance of marching band shows during the football season. Three or more rehearsals per week.
MUSIC (MUS)

MUS 171. Music Literature. Three hours. I, II.
Critical listening and score-reading of the standard repertory of music in Western Civilization from Gregorian plainsong to the contemporary era. May be waived upon demonstration of proficiency.

MUS 181. Beginning Theory I. Four hours. I.
Teaches the perception and understanding of music through an integrated development of hearing, analytical, composition, singing, and keyboard skills. Achieved through the study of relatively simple, short structures of music from the Late Baroque to the Early Romantic periods.

MUS 182. Beginning Theory II. Four hours. II.
Prerequisite: MUS 181.
Continuation of MUS 181.

MUS 271. The Enjoyment of Music. Three hours. I, II.
Not open to music majors.
Designed to provide the general college student with a cultural background in music. Masterpieces of music, composers, and musical techniques are presented through listening materials and through concert attendance.

MUS 281. Intermediate Theory III. Four hours. I.
Prerequisite: MUS 182.
Continuation of MUS 182. Integrated skills further developed through the study of more difficult, longer structures of music from the Early Baroque to the Early Modern periods.

MUS 282. Intermediate Theory IV. Four hours. II.
Prerequisite: MUS 281.
Continuation of MUS 281.

MUS 320. Class Voice. One hour. I, II.
Basic vocal techniques with emphasis on developing the voice for solo and/or choral performance.

Open only to Elementary Education Majors who have been admitted to the Teacher Education Program.
Materials and methods designed to provide the Grade Teacher with sufficient knowledge and skills to teach music in the classroom. Attention given to notation, rhythmic participation, rhythm and melody instruments, creative activities, and listen-experiences.

MUS 366. Conducting. Two hours. I, II.
Prerequisite: Junior standing in music.
Basic techniques of instrumental and choral conducting.

MUS 371. Music History I. Three hours. I.
Prerequisite: MUS 271, or permission of instructor.
Survey of music history from beginnings through the Baroque era.

MUS 372. Music History II. Three hours. II.
Prerequisite: MUS 271, or permission of instructor.
Survey of music history from Classic era to present.

MUS 383. Orchestration. Two hours. I.
Survey of ranges, timbre, and characteristics of orchestral instruments. Scoring for choirs and full orchestra.

MUS 384. Scoring for Band. Two hours. II.
Primary course in instrumentation and arranging for the band medium, including scoring for small ensembles, marching band, concert band, and other combinations of wind and percussion instruments.
MUS 415. Liturgics. Three hours. A.
Historical survey of the development of liturgies as background for the work of the church musician.

MUS 416. Hymnology. Three hours. A.
Development of the hymn; types of hymns and their uses; evaluation and effective use of materials in hymnals being used today.

MUS 417. Techniques and Materials for Church Choirs. Three hours. A.
Examination of sacred choral repertoire; study of conductor's skills and techniques; church choir administration.

MUS 418. Church Service Playing Techniques & Materials. Three hours. A.
Study and practical application of skills in accompanying anthems and oratorios, hymn playing, improvisation. Examination of repertoire for service playing.

MUS 450. Form and Analysis. Three hours. II.
Prerequisite: Junior standing in music.
Emphasis on materials of form; study of small part-forms with attention to motives, phrases, periods, cadences; compound forms; large instrumental forms; large and small vocal forms.

MUS 499. Recital. One or two hours. A.

MUS 550. Teaching Techniques. One or two hours. A.
Analysis of current teaching methods and materials with the intention of developing sound teaching procedures. May include observation and performance. Topics announced in woodwinds, brass, percussion, strings, voice, piano and organ. May be repeated for credit a maximum of two hours.

MUS 551. Performance Literature. One or two hours. A.
Study and analysis of literature for various performing media relative to performance practices and problems. Topics announced in woodwinds, brass, percussion, strings, voice, piano and organ. May be repeated for credit a maximum of two hours.

MUS 555. Symphonic Music Literature. Three hours. I.
Prerequisite: MUS 371 and 372.
Evolution of the symphony from its beginning to the 20th century, with emphasis on score reading and listening.

MUS 556. Choral Music Literature I. Two hours. A.
Prerequisite: MUS 371 and 372.
Survey of choral music literature of the Renaissance and Baroque periods with particular emphasis on style and historical implications.

MUS 557. Choral Music Literature II. Two hours. A.
Prerequisite: MUS 371 and 372.
Choral music of the Classical, Romantic and Contemporary periods with particular emphasis on style and historical Implications.

MUS 560. Introduction to Musicology. Three hours. A.
Systematic and historical musicology surveyed from the points-of-view of musical acoustics, musical psychophysiology, musical aesthetics, comparatology, theory-of-theory, musical historiography, music pedagogy and research in musicology.

MUS 563. Teaching Piano in Classes. Two hours. A.
Prerequisite: Three years of piano study at the college level, or the equivalent.
Methods and materials used in teaching of piano classes.

MUS 564. Advanced Instrumental Conducting. Two hours. A.
Prerequisite: MUS 365, or equivalent.
Designed to increase skills in score reading, preparation, interpretation and conducting of major orchestral or band works.
MUS 565. Advanced Choral Conducting. Two hours. A.
Prerequisite: MUS 366, or equivalent.
Conducting techniques and their application in choral rehearsal and performance.

MUS 571. Band Administration and Procedures. Two hours. A.
Problems in band administration, marching band techniques, band literature and conducting.

MUS 581. (Formerly MUS 581-582.) Counterpoint. Three hours. A.
Analysis of modal and tonal contrapuntal styles. Writing in two, three and four parts first in the vocal idioms of the late Renaissance, culminating in the Instrumental polyphony of the Baroque era.

MUS 583. Composition. Two hours. A. May be repeated.

MUS 586. Workshop in Instrumental Music. Two or three hours. A.
Topics in band or orchestral procedures.

MUS 587. Advanced Theory Survey. Three hours. A.
Prerequisite: Permission of the Instructor.
Primarily intended for students in need of a thorough review in basic music theory. Intensive work in four-part writing, sight-singing, ear-training, keyboard harmony and analytical techniques.

MUS 588. Pedagogy of Theory. Two hours. A.
Comparative study of theory systems with emphasis on presentation and illustrative exercises dealing with related theoretical problems.

GRADUATE COURSES

MUS 612. Piano. One or two hours. I, II.
Prerequisite: MUS 412. Four years or equivalent, as demonstrated by the student's proficiency on the instrument.

MUS 622. Voice. One or two hours. I, II.
Prerequisite: MUS 422.

MUS 632. String Instruments. One or two hours. I, II.
Prerequisite: MUS 432.
Graduate applied instruction in violin, viola, violoncello, or string bass.

MUS 633. Special Problems in String Teaching. One to three hours. A.
Specialized study of problems in studio or class teaching. Exposure to special techniques for successful teaching of skills at all levels.

MUS 642. Organ. One or two hours. I, II.
Prerequisite: MUS 442.

MUS 645. Brass Instruments. One or two hours. I, II.
Prerequisite: MUS 445.
Graduate applied instruction in trumpet-cornet, French horn, baritone horn, trombone, or tuba.

MUS 646. Woodwind Instruments. One or two hours. I, II.
Prerequisite: MUS 446.
Graduate applied instruction in flute, oboe, clarinet, bassoon, or saxophone.

MUS 647. Percussion. One or two hours. I, II.
Prerequisite: MUS 447.

MUS 672. Seminar in Music History. One to three hours. A.
Intensive study of a specific historical era, genre or composer. Topics to be announced. May be repeated for credit a maximum of three hours.
MUS 674. Supervision & Administration in Music Education. Three hours. A.
Functions, techniques and problems of supervision and administration in music
education; development of effective programs in city and county school systems; in-
service education and workshop techniques; professional and community relationships.

MUS 675. (Formerly MUS 675 and 677.) Current Trends in Secondary Music.
Two hours. A.
Overview of the music curriculum in the junior and senior high school; relation-
ship of the general and specialized aspects of music in secondary schools; character-
istics of adolescents and their implications for musical growth.

MUS 676. Current Trends in Elementary Music. Two hours. A.
Current thought and practices in elementary music; knowledge of the learner
and the learning process, structure of music, and methods of developing skills related
to a practical program of experiences designed to promote children's musical growth.

MUS 678. Principles of Music Education. Three hours. I.
Presentation and discussion of basic educational principles and their implications
for music education, with reference to all types of school situations.

MUS 679. Foundations of Music Education. Three hours. II.
Historical, philosophical and psychological foundations of music education and
their relationship to curriculum development.

MUS 680. Problems in Music Education. One to three hours. I, II.
Problems in the various areas of music education. Emphasis on curriculum im-
provement through exposure to current research and literature in the field. May be
repeated for a maximum of three hours.

MUS 681. Workshop in Music Education. One to four hours. Summer Only.
Philosophy, objectives, literature, materials, and techniques pertinent to a par-
ticular area, or areas, of music instruction. Topics to be announced. May be repeated
for credit a maximum of four hours.

MUS 683. Seminar in Choral Procedures. Two hours. A.
Study of techniques and methods involved in preparation and performance of
choral music, including emphasis on choral arranging for the various voice classifica-
tions. Includes a survey of junior and senior high school literature.

MUS 684. Organization & Administration of Instrumental Music. Two hours. A.
History and roles of instrumental music; methods of program initiation, student
recruitment and testing; organizational and administrative aspects of various instru-
mental groups; administrative procedures for property and library materials.

MUS 687. Analytical Techniques I. Three hours. A.
An intensive study of the structure of Renaissance, Baroque and Early Classic
music.

MUS 688. Analytical Techniques II. Three hours. A.
Prerequisite: MUS 687 or permission of instructor.
An intensive study of the structure of Late Classic, Romantic and Modern music.

MUS 698. Research & Writing in Music. Two hours. A.
Overview of important research in music; sources and procedures for investigating
problems in the field; development of bibliographies.

MUS 699. Thesis. Three hours. I, II.
PHILOSOPHY (PHI)

R. B. Harris, Acting Chairman; Cherrington, Edwards, Miller.

A student may major in Philosophy (non-teaching) by taking a minimum of 30 semester hours. The student must take PHI 110, 130, 211, 300, 301, and 480, plus three hours selected from PHI 240, 310, 340, or 440, six hours from PHI 350, 360, 370, and three hours selected from PHI 410, 430, 450, 490, 510, 520 or 530. Philosophy majors must take at least six hours of a foreign language at the intermediate level or above. It is recommended that the major elect courses from a wide range of disciplines with as much concentration as possible on the theoretical foundations of these areas. Courses in sociology, political science, history, literature, drama, and mathematics are highly recommended.

A student majoring in Philosophy wishing to minor in an area outside the College of Arts and Sciences must secure the permission of the Chairman of the Department of Philosophy and the Dean of the College of Arts and Sciences.

A minor consists of 18 hours in Philosophy, including PHI 110, 130, 211, 300, and 301, plus 3 hours selected from upper division courses approved by the Chairman of the Department of Philosophy.

The curriculum for a major in Philosophy (non-teaching), the first two years may be found in the Central University College section.

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<th>Junior</th>
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<tr>
<td>PHI 110, 130, or 211</td>
<td>3</td>
<td>Three courses upper division</td>
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<tr>
<td>Three courses from PHI 350, 360, 370, and 240, 310, 340, 440</td>
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<td>Electives</td>
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PHI 110. (Formerly PHI 200.) Introduction to Philosophical Thought. Three hours. I, II.

The basic, introductory course in philosophy for lower division students. Examination of the question, "What is a philosophical problem?", and the analysis of philosophical terminology. A problem-oriented approach rather than a historical approach is followed.

PHI 130. (Formerly PHI 210.) Introduction to Moral Philosophy. Three hours. I, II.

An examination of the meaning of a moral problem within the wider area of value theory. Particular attention is given to several representative positions including the ethical theories of Plato, Aristotle, Hume, Kant, and modern theorists.

PHI 211. (CL MAT 211) Introductory Logic. Three hours. I, II.

Principles of modern logic through the propositional calculus and elementary quantification. Attention paid to historical development and philosophical foundations of logic.

PHI 240. (Formerly PHI 330.) Introduction to the Philosophy of Religion. Three hours. I, II.

A study of the problems of belief and knowledge: the existence and nature of God and the character and meaning of religious commitment. Includes a philosophic analysis of religious language.
PHI 300. Survey of Philosophy I. Three hours. I, II.
The history of philosophical thought as seen through an examination of selected philosophers from Ancient Greece to Augustine.

PHI 301. Survey of Philosophy II. Three hours. I, II.
The history of philosophical thought as seen through an examination of selected philosophers from Aquinas to Kant.

PHI 310. Ethical Theory. Three hours. I.
Prerequisite: PHI 130 or consent of the Instructor.
A concentrated treatment of the meaning of a moral problem within the wider area of value theory and the concept of the person in continuation of PHI 130. Care is also given to expand the students' knowledge of ethical writers.

PHI 340. Philosophies of India. Three hours. II.
A survey of the historical development of religion and philosophy in India as it emerged in the Sacred Writings including the Mantras, the Brahmanas, the Upanishads and the Bhagavadgita.

PHI 350. Contemporary Philosophy I. (Formerly PHI 358 and PHI 458.) Three hours. I.
Prerequisite: PHI 130 or consent of instructor.
An analysis of some of the main problems which have exercised British Philosophers in the Twentieth Century, e.g., Russell, Moore, Austin, Wittgenstein and Ryle.

PHI 360. Contemporary Philosophy II. (Formerly PHI 459). Three hours. II.
Prerequisite: PHI 130 or consent of instructor.

PHI 370. 19th Century Philosophy. (Formerly PHI 457.) Three hours. I, II.
Prerequisite: PHI 110 or PHI 300.
The main stream of philosophical thought in Britain and the continent after Kant to the beginning of the 20th Century. Includes a study of Fichte, Hegel, Schelling, and J. S. Mill.

PHI 380. The Philosophy of Buddhism. 3 hours credit. A.
A consideration of Buddhism as a philosophical force in the development of certain Asian cultures and as a living contemporary intellectual option.

PHI 398. (CL HIS 398) (Formerly PHI 498.) The Ideological Foundations of Western Civilization. Three hours. I, II.

PHI 399. (CL HIS 399) (Formerly PHI 499.) The Ideological Foundations of Western Civilization. Three hours. I, II.

PHI 410. Readings in American Philosophy. Three hours. I.
Prerequisite: PHI 301.
An analysis of representative writings of the major classical American philosophers, including Peirce, Royce, James, Dewey, Hooking, Whitehead, and Santayana. Attention will be given to the influence of Dewey and Whitehead on the American Educational Process.

PHI 430. Symbolic Logic. (CL MAT 430) Three hours. II.
Prerequisite: PHI 211 (CL MAT 211).
An advanced course in logic which examines in depth the meaning of statement connectives, the structure of the propositional calculus, quantification and set theory and the development of axiomatic systems.

PHI 440. Philosophical Foundations of Religious Thought. Three hours. II.
Prerequisite: PHI 240.
A concentrated treatment of philosophical problems of religious belief and knowledge, in continuation of PHI 240.
PHI 450. Philosophy of Science. Three hours. I.
Prerequisite: Consent of the Instructor.
A inquiry into the nature of science and its philosophical presuppositions. Particular emphasis will be placed on the nature of scientific revolutions, the justification of scientific theories and the role of science and technology in man's effort to understand himself and the world in which he lives.

PHI 480. Special Problems in Philosophy. Three hours. II.
Prerequisite: Consent of the Instructor.
A detailed examination of the thought of one outstanding philosopher in the history of philosophy, whether ancient, medieval, modern or contemporary. The philosopher will be chosen by the instructor in accordance with his interests and professional competence and with the approval of the Department.

PHI 490. Independent Work in Philosophy. Three hours. A.
Prerequisite: Consent of the Instructor.
Individual research and reading on a specific philosophical problem chosen by the student and instructor. Regular consultation and final paper required.

PHI 510. Aesthetics. Three hours. II.
Examination of the major philosophical theories of art and beauty and of the place of aesthetic language in the general area of value judgments. Plato, Aristotle, Hume, Kant, Hegel, and several lesser figures will be critically considered. (PHI 130 recommended preparation.)

PHI 520. Political Philosophy. Three hours. I II.
An inquiry into the major forms of social control through political institutions and the use and meaning of key terms in the vocabulary of politics. Particular attention is given to the relationship of law and morality and the reconciliation of political obligation and personal freedom.

PHI 530. Seminar in Philosophy. Three hours. I.
Prerequisite: Consent of the Department.
An intensive and thorough examination of a subject selected by the instructor with the approval of the Department. Such subjects as Metaphysics and Epistemology as well as areas such as modern Process Thought would be offered.

RELIGION (REL)

REL 101. Introduction to the Old Testament. Three hours. I, II.
An introduction to the Old Testament, with special emphasis on the religious values of its various books.

An introduction to the Synoptic Gospels, the Fourth Gospel, the Epistles of Paul and Peter, and the Book of Revelation. Emphasis given to the historical setting of the development of Christianity by study of Mark and the Book of Acts. Attention given to the religious and moral values of the New Testament by lectures and discussion.

REL 301. Comparative Religions. Three hours. I, II.
A survey of the leading philosophical and doctrinal ideas of the world's great religions, Hinduism, Confucianism, Shintoism, Islam, Judaism and Christianity. Attention is given to the historical context of the development of these religions and to the rituals and literature produced by them through lecture and discussion and the use of audio-visual aids.
PHYSICS (PHY)

T. M. George, Chairman; Faughn, Kuhn, Laird, Little, Mahr, Teague.

Requirements for a major (non-teaching) are PHY 201, 202 and a minimum of 24 hours in Physics numbered 300 and above for a total of 34 hours. In addition, CHE 111, 112 (9 hours) are required and mathematics courses necessary to meet prerequisites for Physics courses. At the discretion of the Chairman, PHY 131 may be substituted for PHY 201.

Requirements for a major (teaching) are PHY 201, 202 and a minimum of 20 hours in Physics numbered 300 and above for a total of 30 hours. In addition, CHE 111, 112 (9 hours) are required and mathematics courses necessary to meet prerequisites for Physics courses. At the discretion of the Chairman, PHY 131 may be substituted for PHY 201.

Requirements for a minor (non-teaching) are PHY 201, 202 and a minimum of eight additional hours of Physics numbered 300 and above for a total of 18 hours. Courses should be selected in consultation with the Chairman. At the discretion of the Chairman, PHY 131 may be substituted for PHY 201. In addition, nine hours of chemistry are recommended.

Requirements for a minor (teaching) are PHY 201, 202 and a minimum of 11 hours of Physics numbered 300 or above for a total of 21 hours. Courses should be selected in consultation with the Chairman. At the discretion of the Chairman, PHY 131 may be substituted for PHY 201. In addition, nine hours of chemistry are recommended.

The curriculum for a major in Physics (teaching and non-teaching) for the first two years may be found in Central University College section.

Courses for the last two years (teaching) are as follows:

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<th>Junior</th>
<th>Hours</th>
<th>Senior</th>
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<tr>
<td>Biology Elective</td>
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<td>ESH 408</td>
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<td>CHE 111, 112</td>
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<td>PHY Elective</td>
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<tr>
<td>MAT 453</td>
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<td>ESH 451</td>
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<tr>
<td>PHY 300</td>
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<td>PHY 306</td>
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<td>PHY Elective</td>
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Courses for the last two years (non-teaching) are as follows:

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<th>Junior</th>
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<td>ENG 209 or 211, 210 or 212</td>
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<td>Biology Elective</td>
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<td>Social Science Electives</td>
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<td>33</td>
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PHYSICS (PHY)

PHY 100. Introduction to Modern Physics. One hour. I.
Broad introductory survey of aspects of modern physics.

PHY 101. (Formerly PHY 176, formerly GSC 176). Physical Science (Physics). Three hours. I, II. (Not open to students who have completed college laboratory courses in physics.
A course designed to give the students whose primary interests are in other fields an understanding of some basic scientific problems and their importance in the scientific age. Topics on force, energy, heat, sound, light, electricity, magnetism, electrons, and nuclear phenomena give the student a broad view of the universe. Two lecture hours and two laboratory hours.

PHY 107. Slide Rule Theory and Practice. One hour. I, II.
Designed to aid students in making mathematical computations easily and rapidly. Slide rule must be approved by instructor.

PHY 131. Elementary Physics. Five hours. I, II.
Prerequisite: One unit each of high school algebra and plane geometry.
Fundamental ideas of mechanics, heat and sound. Four lecture hours; three laboratory hours.

PHY 132. Elementary Physics. Five hours. I, II.
Prerequisite: PHY 131.
Fundamental ideas of electricity, magnetism and optics. Four lecture hours; three laboratory hours.

PHY 201. Mechanics, Heat and Sound. Five hours. I, II.
Corequisite: MAT 111.
Composition and resolution of forces, laws of equilibrium, Newton's laws of motion, work and energy, momentum, simple harmonic motion, hydrodynamics, heat phenomena, sound and wave motion. Four lecture hours; three laboratory hours.

PHY 202. Electricity, Magnetism and Optics. Five hours. I, II.
Prerequisite: PHY 201.
Electrostatics, nature of electricity, magnetism, Ohm's law, measurement of electrical quantities, sources of electrical energy, Lenz's law, inductance and capacitance, alternating currents, electromagnetic waves, optics. Four lecture hours; three laboratory hours.

PHY 220. Introduction to Mechanics of Solids. Four hours. A.
Prerequisite: PHY 201.
Corequisite: MAT 112.
Fundamental principles of mechanics, mechanics of deformable bodies, forces and movements transmitted by slender members stress and strain, tension, stresses due to bending. (Does not count toward a physics major.)

PHY 230. (Formerly MAT 321.) General Astronomy. Three hours. A.
Development of astronomy as a science; development of the solar system; astronomical instruments; better known facts of astronomy. (Not available for credit toward a physics major.)

PHY 300. Modern Physics. Three hours. I.
Prerequisite: PHY 202 or consent of instructor.
Corequisite: MAT 112.
Introduction to some important theories and experiments of modern physics. Topics covered include: theory of special relativity, quantum effects, particle aspects of electromagnetic radiation, wave aspects of material particles, Rutherford scattering and the nuclear atom; structure of the hydrogen atom, many-electron atoms and electron spin, and X-ray spectra.
PHY 301. (Formerly PHY 515.) Modern Physics II. Three hours. II.
Prerequisite: PHY 300.
Instruments and accelerating machines used in nuclear physics, nuclear structure, radioactivity, nuclear reactions, elementary particles, introduction to molecular and solid state particles.

PHY 306. Classical Physics Laboratory. Two hours. I.
Prerequisite: PHY 202.
Laboratory experiments will be done in the classical fields of physics such as: mechanics, optics, electricity, and magnetism. Four laboratory hours per week.

PHY 307. Electronics. Four hours. A.
Prerequisite: PHY 202 or PHY 132.
Theory of thermionic tubes and solid state devices, rectifiers, amplifier circuit principles, modern pulse circuitry, the oscilloscope. Three lecture hours. Three laboratory hours.

PHY 308. Atomic and Nuclear Laboratory. Two hours. II.
Corequisite: PHY 301.
Performance of various experiments in Nuclear Physics, such as, radiation instruments, range and energy of particles, absorption, half-life, neutron moderators and neutron flux measurements, coincidence techniques. Four lab hours per week.

PHY 310. Methods of Mathematical Physics. Three hours. A.
Corequisite: MAT 213.
A study of physical applications of infinite series, complex numbers, determinants, matrices, partial differentiation, multiple integrals, vector analysis, ordinary differential equations.

PHY 502. Physical Optics. Three hours. A.
Prerequisite: PHY 202 or consent of instructor.
Corequisite: MAT 112.
Wave motion, reflection and refraction, further study of lenses, the telescope, dispersion, facts concerning the spectrum, interference, diffraction, plane polarized light, the electromagnetic theory of light, the quantum theory, origin of spectra.

PHY 503. Thermodynamics. Three hours. A.
Prerequisite: PHY 202.
Corequisite: MAT 213.
Study of temperature, thermodynamic systems, ideal gases, First and Second law of Thermodynamics, Carnot cycle, Kelvin temperature scale, entropy.

PHY 506. Physics for High School Teachers I. Three hours. A.
Prerequisite: One year of college physics and consent of instructor.
Topics from general physics to prepare teachers to teach high school physics with ease and confidence. Topics from advanced and modern physics to impart extra knowledge and a greater understanding. Two lecture hours; three hours laboratory and discussion.

PHY 507. Physics for High School Teachers II. Four hours. A.
Prerequisite: PHY 506 or consent of instructor.
Continuation of PHY 506. Two hours lecture; three hours laboratory and discussion.

PHY 508. Topics in Physics for Teachers. Four hours. A.
Topics from general physics selected to aid the high school teacher to teach with greater confidence. Three lecture hours; three hours laboratory and discussion.

PHY 510. Special Problems in Physics. One to three hours. A.
Prerequisite: PHY 202 and PHY 308.
Working out of special laboratory experiments, development of new equipment, or solution of special mathematical problems related to physics.
PHY 511. Special Problems in Physics. One to three hours. A.
Prerequisite: PHY 202 and PHY 306.
Continuation of PHY 510.

PHY 516. Electricity and Magnetism I. Three hours. A.
Prerequisite: PHY 202.
Corequisite: MAT 453.
Introduction by means of calculus and vectors to formulation and use of principles of classical electricity and magnetism. Covers electric fields and potentials, capacitance, inductance, resistance and A. C. and D. C. networks.

PHY 517. Electricity and Magnetism II. Three hours. A.
Prerequisite: PHY 516.
Continuation of PHY 516. Covers electrostatic problems, dielectrics, magnetic field, magnetic properties of matter and Maxwell's equations.

PHY 558. Classical Mechanics I. Three hours. A.
Prerequisite: PHY 202.
Corequisite: MAT 453.

PHY 559. Classical Mechanics II. Three hours. A.
Prerequisite: PHY 558.
Continuation of PHY 558. Covers central forces, generalized coordinates, Lagrange's equations, Hamilton's equations, vibrating systems and normal coordinates.

PHY 570. Quantum Mechanics. Three hours. A.
Prerequisite: PHY 558.
Basic principles of wave mechanics, solutions of Schrödinger wave equation for simple systems. Interpretation of solutions and application to atomic and molecular problems.

GRADUATE COURSES

PHY 601. Advanced Mathematical Physics. Three hours. A.
Prerequisite: MAT 453.
Physical applications of Fourier series; calculus of variations; gamma, beta, and error functions; coordinate transformations; tensor analysis; function of a complex variable; series solutions to differential equations; integral transforms, partial differential equations; probability.

PHY 605. Solid State Physics. Three hours. A.
Prerequisite: PHY 559.
Space lattices and crystal types; x-ray crystal analysis; dynamics of crystal lattices; thermal properties of crystals; free electron theory of metals; quantum theory of electrons in periodic lattices, semiconduction.

PHY 606. Selected Topics in Physics for Teachers. I. Three hours. A.
Prerequisite: Consent of instructor.
Intensive study of topics in physics selected from the following fields: Mechanics, Thermodynamics, Sound, Electricity, Magnetism, Optics, and Modern Physics. Selection will depend upon the needs of the student's enrolled in the course. Two lecture hours; three hours laboratory and discussion.
PHY 607. Selected Topics in Physics for Teachers. II. Three hours. A. 
Prerequisite: Consent of instructor.
Intensive study of topics in physics selected from the following fields: Mechanics, Thermodynamics, Sound, Electricity, Magnetism, Optics, and Modern Physics. Selection will depend upon the needs of the students enrolled in the course. Two lecture will be taken not to duplicate subjects in PHY 606. Two hours lecture; three hours laboratory and discussion.

PHY 608. Problems in Teaching of Secondary Physical Science. One to three hours. A.
Study of problems in science relevant to the teaching of high school physical science. May be repeated for a maximum of three hours credit.

PHY 615. Advanced Nuclear Physics. Three hours. A.
Prerequisite: PHY 570.
General properties of the nucleus; two body scattering problems; nuclear forces; nuclear models; theory of nuclear reactions; theory of beta decay.

PHY 630. Electromagnetic Theory I. Three hours. A.
Prerequisite: PHY 517.
Detailed treatment of electrostatics; potential theory. Dielectric, magnetostatics and steady state current problems. Maxwell's equations; their solutions in dielectric and conducting media. The wave equation and plane waves.

PHY 631. Electromagnetic Theory II. Three hours. A.
Prerequisite: PHY 630.
The inhomogeneous wave equation; special relativity; covariant formulation of electrodynamics; retarded potentials and gauge transformations; radiation from a Hertz oscillator; multipole radiation; Hamilton's formulation of Maxwell's equations.

PHY 640. Electronics II. Four hours. A.
Prerequisite: MAT 453, PHY 307.
Theory of solid state devices; rectifiers; amplifiers; oscillators; pulse and digital circuits. Three lecture hours and three laboratory hours.

PHY 660. Advanced Classical Mechanics I. Three hours. A.
Prerequisite: PHY 559.
LaGrange's equations; variational principles; the two body problem; rigid body mechanics; special relativity.

PHY 661. Advanced Classical Mechanics II. Three hours. A.
Prerequisite: PHY 660.
Hamilton's equations; canonical transformations; Hamilton-Jacobi theory; normal coordinates; small oscillations; LaGrange's and Hamilton's formulation for continuous systems and fields.

PHY 662. Statistical Mechanics. Three hours. A.
Prerequisite: PHY 559, PHY 503.
Systematic derivation of thermodynamic formulas; Maxwell-Boltzmann, Bose-Einstein, and Fermi-Dirac statistics; Ensemble theory; distribution functions and partition functions; fluctuations; applications to gases and solids.

PHY 671. Intermediate Quantum Mechanics. Three hours. A.
Prerequisite: PHY 570.
Schroedinger wave equations; eigenfunctions and eigenvalues; energy levels; collision theory.

PHY 680. Special Topics in Physics. One to three hours. A.
Specially-assigned theoretical or experimental work on problems not covered in other courses.
PHY 681. Selected Topics. One to three hours. A.
Prerequisite: Approval of instructor.
Certain topics not normally presented that may be of interest to groups of
certain students will be presented. Topics may include: nuclear physics; relativity;
semi-conductors; angular momentum; atomic physics; electricity; acoustics. May be
repeated for a maximum of three hours credit.

PHY 690. Thesis Research. One to six hours.
Prerequisite: Approval of thesis-research advisor.
Research in physical followed by the preparation of a thesis under the guidance
of the research advisor. This course may be repeated but a maximum of six hours
may be applied toward a degree.

POLITICAL SCIENCE (POL)
J. Malcolm Moore, Chairman; Blanchard, Pretty, Gunn, Gorganus, Kline,
Kwak, Ogden, Ringwall, Vance

A student may major in Political Science (teaching or non-teaching) by taking a minimum of 30 semester hours. The student must take
POL 100, 101; six hours from Pol 201, 202, or 203 and three hours from
Pol 555, 556, or 557. POL 201 is strongly recommended and the remaining
coursework for the major should normally be distributed among 300,
400, and 500 level courses. The student should take twelve hours in a
foreign language if he begins the language in college, or six hours if
he continues the language at the intermediate level.

It is recommended that a Political Science major take a minor in
another social science or in English. Students who plan to pursue work
toward an advanced degree are advised to acquire competence in statistics.

A student may minor in Political Science by taking a minimum of
18 semester hours. He must take POL 100 and 101. Nine hours must
be in upper division courses. A total of 21 semester hours in Political
Science is required for a teaching minor.

MASTER OF ARTS DEGREE IN POLITICAL SCIENCE:

The Master of Arts degree is offered as preparation for junior col-
lege teaching, as an intermediate degree for those who wish to continue
their graduate careers, or, as preparation for advanced positions in gov-
ernment, industry and other areas of employment. The Department of-
fers a Master of Arts degree in Political Science as a 30 hour program.
Students may emphasize international relations, comparative govern-
ment, public law, American political process, public administration, or
political theory, but POL 600 and 645 are required. All students must
pass a reading examination in a modern foreign language or substitute
a requirement in statistics as determined by advisors.

For further information concerning the objectives and areas of
course work, admission requirements, the Graduate Record Examina-
tion, comprehensive and oral examinations, as well as other pertinent
matters, see the Graduate Catalog.
MASTER OF PUBLIC ADMINISTRATION:

The Department offers the degree of Master of Public Administration primarily for persons interested in government service. The minimum requirements for completion of the degree consist of 36 hours, competence in statistics, and completion of a supervised internship. The Institute of Government, an administrative unit of the Department, serves as the focus for many activities connected with the public administration offerings. For further information, see the Graduate Catalog.

MASTER OF ARTS DEGREE IN EDUCATION:

The regulations for the above degree may be found in the appropriate section of the Graduate Catalog.

Curricula for a major in Political Science (teaching and non-teaching). The first two years may be found in the Central University College section.

Courses for the last two years (teaching) are as follows:

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Courses for the last two years (non-teaching) are as follows:

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POLITICAL SCIENCE (POL)

POL 100. Introduction to Political Science. Three hours. I, II.
Survey of the political characteristics of modern democracies and dictatorships and their relation to governmental institutions and practices, with emphasis on the government of the United States.

POL 101. Introduction to American Government. Three hours. I, II.
Principles, functions, and basic political institutions of the American system of government at the national level.

POL 201. Comparative Government. Three hours. I, II.
Survey of the political characteristics of Great Britain, France, Germany, and the Soviet Union to introduce the student to the diversity of institutional forms and political forces.
POL 202. International Politics. Three hours. I, II.
Introductory survey of basic principles and forces of international politics. Emphasis placed on the modern state system, nationalism, national power, balance of power, international economics, diplomacy, and world organization.

POL 203. (Formerly Pol. 103.) American State and Local Government. Three hours. I, II.
POL 101 or permission of instructor.
Study of the institutions and processes of government of the fifty states and of cities and counties.

POL 301. Research and Writing in Political Science. Three hours. I, II.
Prerequisite: Nine hours of political science or permission of instructor.
Practical application of techniques and methods used in collection, analysis and written presentation of political data.

POL 305. Local Government and Administration. Three hours. A.
Survey of history, legal basis, organization and the political and administrative functions and problems of counties, towns, special districts, municipalities and metropolitan areas.

Prerequisite: POL 101.
Informal political institutions of American government: functions, organization, financing of political parties, public opinion and pressure groups. Their relationship to democracy.

POL 311. American Politics: President and Congress. Three hours. II.
Prerequisite: POL 101.
The legislative process and executive-legislative relations.

POL 320. Introduction to Public Administration. Three hours. I.
Prerequisite: Pol 101 or 203.
A survey of organization, authority, decision-making, intra-organization communications and application of principles to the American bureaucracy by case studies.

POL 325. Soviet Foreign Policy. Three hours. II.
Prerequisites: POL 201 or permission of instructor.
Theoretical and practical consideration in the development, methods, and goals of Soviet foreign policy; Soviet relations with the Communist nations, the Western world, and the emerging nations.

Prerequisite: POL 100 or permission of Instructor.
A survey of domestic politics in the U.S.S.R. including the background and development of the Soviet system, the party-state structure, the policy-making process and power struggle, and relation of the system to Soviet society.

POL 355. The Political Systems of South America. Three hours. I.
Prerequisite: Six hours of political science or permission of instructor.
A survey of governmental institutions and political processes in South America. Attention focused on sociological, political, and economic factors. Emphasis placed on the political systems of Argentina, Brazil, and Chile.

POL 360. (Formerly Pol 550.) The Judicial Process. Three hours. A.
Prerequisite: Nine hours of political science or permission of Instructor.
A study of legal and judical systems in the United States, and their role in the American political process.

POL 362. Government of Kentucky. Three hours. I, II.
Political setting, popular control of government, constitution, legislature, governor, courts, local government, finance, functions of government and relation to national government.
POL 375. International Organization. Three hours. A.
Prerequisite: POL 202 or permission of instructor.
Review of historical movements toward world order building, including evaluation
of the League of Nations and study of United Nations. Modern movements toward
regionalism and world federation.

POL 400. Frankfort Administrative Internship. 15-18 hours. A.
The courses include:
400-A. Internship in State Government, 3 hours.
400-B. Kentucky State Government and Constitution, 3 hours.
400-C. Problems of State Government, 3 hours.
400-D. Administration of State Agencies, 3 hours.
400-E. Research for State Government, 3-6 hours.
The Internship is for upper-division students who have a definite interest in
employment in public service. Enrollment is limited and by invitation only.

POL 423. (Formerly Pol 421 and 422.) The American Constitution. Three hours. II.
Prerequisite: POL 360 or permission of instructor.
A study of major provisions of the United States Constitution, their interpretation
by the Supreme Court and political and civil rights.

POL 440. Political behavior. Three hours. A.
Prerequisite: Nine hours of political science including POL 310 or 311.
Introduction to research in political participation and other forms of behavior.
Emphasis will be on the empirical method, especially as related to research design
and analysis of data.

POL 445. The Politics of Totalitarianism. Three hours. A.
Prerequisite: Six hours of political science or permission of instructor.
A study of the theory, background, and practice of totalitarian systems and
consideration of the usefulness of the totalitarian model in the study of comparative
politics.

POL 450. The Politics of European Democracy. Three hours. A.
Prerequisite: POL 201 or permission of instructor.
Survey of politics and governments of France, Germany, and Italy. Examination
of political systems of nations that share the Roman or Germanic political heritage,
in contrast to politics that have evolved from the Anglo-Saxon heritage of the eastern
or Slavic environment. Students encouraged to engage in research on other continental
polities.

POL 490. Independent Work in Political Science. One-Three hours. A.
Prerequisite: Consent of Department.
Individual research and/or reading on a problem or area within the field of
political science chosen by the student after consultation with instructor. Regular
reports and final research paper required.

POL 500. Practicum in Political Science. 1-3 hours. A.
Prerequisite: 12 hours of political science.
A supervised field study program available only for political science majors.
Assignments may be made to the General Assembly of Kentucky or to officials of local
government in accordance with the requirements of special projects. May be repeated
for maximum of six hours undergraduate credit.

Prerequisite: POL 201 and either six additional hours of political science or six
hours of English history, or graduate standing.
Study of the constitutional system and political institutions of Great Britain. Attention
to historical geographical, social, and economic factors which influence the political
system. Nature and development of the Commonwealth and significance of the Com-
monwealth for Great Britain are examined.
POL 506. (Formerly covered in part in Pol 505.) Government and Politics of China. Three hours. A.
Prerequisite: Nine hours of political science or graduate standing.
An analysis of political development, organizational structure and operation of Chinese political systems with particular emphasis on Chinese Communism, foreign policies and contemporary problems in China.

POL 507. (Formerly covered in part in Pol 505.) Government and Politics of Japan and Korea. Three hours. A.
Prerequisite: Nine hours of political science or graduate standing.
A comparative analysis of political development, organizational structure and operation of political systems of Japan, and Korea with particular emphasis on interaction of the two countries with the United States.

POL 510. American Foreign Policy. Three hours. II.
Prerequisite: Nine hours of political science or graduate standing.
Study of the processes and contents of United States foreign policy.

POL 515. Workshop in International Affairs. Three hours. A.
Explores major problems in international affairs. Covers various areas of the world with reference to significant background factors and international problems of the people. Designed for secondary teachers in the social science field although open to other qualified students. Offered only during summer session.

POL 520. Workshop in Local Government and Politics. Three hours. A.
Focuses attention on major problem areas of Kentucky local government. A different area of concern will be explored each time the course is offered.

POL 530. Municipal Government and Administration. Three hours. II.
Prerequisite: Nine hours of political science.
Study of the powers, organization and current problems of municipalities and urban areas.

POL 535. The Political Systems of Mexico and the Caribbean. Three hours. A.
Prerequisite: Nine hours of political science or graduate standing.
An intensive analysis of governmental and political processes of Mexico, Cuba, and Central America. Attention focused on sociological, political, and economic factors.

POL 540. International Law. Three hours. A.
Prerequisite: POL 202 or permission of instructor.
A study of the nature and function of international law with regard to judicial solution of disputes among nations. Examination of the processes of growth and change in international law through cases in national and international courts, as well as strength and limitation of such laws.

POL 545. Theory of Public Administration. Three hours. A.
Prerequisite: POL 320 or permission of instructor.
This course identifies executive systems as expressed through individuals, small groups, and formal organizations; analyzes the functions, conditions and problems of executive value systems, activity and sentiment patterns. Action relationships in administration, administrative processes, and changes in executive systems from both historical and operational points of view are considered.

POL 555. History of Political Theory I. Three hours. II.
Prerequisite: Six hours in political science or graduate standing.
Survey of political thought from the time of Plato to the Reformation.

POL 556. History of Political Theory II. Three Hours. II.
Prerequisite: Six hours in political science or graduate standing.
Survey of political thought from the sixteenth century to the present.
POL 557. American Political Thought. Three hours. I.
Prerequisite: Six hours in political science or graduate standing.
Intensive explorations of major currents in political thought which justified and
guided the growth of the American republic. Largely organized on a chronological basis,
but delves into main schools of thought that both reflected and energized the develop-
ment of the American political process.

POL 565. Administrative Law. Three hours. A.
Prerequisite: Permission of instructor.
Nature of the powers vested in administrative agencies; the problems of adminis-
trative procedure; and the methods and extent of judicial control over administrative
action.

GRADUATE COURSES

POL 600. Research Methods in Political Science. Three hours. A.
Prerequisite: Graduate standing in political science.
Bibliography and development of political science.

POL 625. Seminar in Civil Liberties. Three hours. A.
Prerequisite: Permission of instructor.
The nature and scope of political and civil rights and liberties in the United States.
Selected topics will be studied in depth.

POL 630. Seminar in the Political Process. Three hours. A.
Prerequisite: Permission of instructor.
Examination of theories of community power structure; analysis of political
activity by pressure groups; legislative process; survey and evaluation of sources
for political information. Conducted through discussion of problems arising in relation-
ship between educational Institutions and political affairs.

POL 635. Seminar on Intergovernmental Relations. Three hours. A.
Prerequisite: Permission of instructor.
Study of adoption, maintenance, and operation of the American federal system.
Attention focused on different interlevel and inter-jurisdiction relationships within
the system to analyze its development and ability to deal with current problems.

POL 640. Problems of Metropolitan Areas. Three hours. A.
Prerequisite: Permission of instructor.
Study of issues—economic, social and especially political—confronting our rapidly
expanding metropolitan areas and regions. Proposed plans for possible amelioration of
conditions examined.

POL 645. Seminar in Modern Political Theory. Three hours. A.
Prerequisite: Permission of instructor.
Principles of political theory and the present theory of relationships between
authority and individualism.

POL 650. Public Administration Internship. 3-12 hours. A. May be repeated for
a total of 12 hours.
Prerequisite: Graduate standing in public administration.
Students will work under Department supervision in an office or with an official
of a public agency or local government. A written report must be submitted to earn
credit.

POL 655. Seminar in International Relations. Three hours. A.
Prerequisite: Permission of instructor.
An inquiry into contemporary problems of international affairs; the nation-state
system and concepts of national interest in modern politics; the forms and distribution
of power by which states seek to implement national interests; the making of foreign
policy and methods of adjusting international conflict.
POL 660. The Politics of Developing Nations. Three hours. A.
Prerequisite: Permission of instructor.
Comparative analysis of political institutions, processes, and behavior in selected
countries of South Asia, Africa, and the Near East. Special attention is given to the
role of political ideologies and social forces in political modernization, and the involve-
ment of these nations in world politics.

POL 665. Public Personnel Administration. Three hours. A.
Prerequisite: Permission of instructor.
Principles and problems of recruitment, examination procedures, rating, classifica-
tion and assignment to the job, with the philosophies of pay, promotion, employee
motivation and discipline analyzed. The process of formulating and administering
public personnel policies; concepts and principles utilized in selecting governmental
personnel systems. Focus upon American national, state and local personnel systems.

POL 675. Public Finance Administration. Three hours. A.
Prerequisite: Permission of instructor.
Interactions among the administrative, legal, and legislative aspects of the fiscal
decision-making process at federal, state, and local levels.

POL 680. Public Management. Three hours. A.
Prerequisite: Permission of instructor.
A survey of the tools of analysis available to overhead functions of public manage-
ment in key areas of decision; emphasis on personnel administration and manpower
utilization, budgetary processes and fiscal controls, and several methods of administra-
tive analysis—organizational studies, procedures engineering, information processing,
and operations research.

POL 685. Seminar in Theory of Public Administration. Three hours. A.
Prerequisite: Permission of instructor.

POL 695. Special Problems. Three hours. A.

POL 689. Thesis I. Three hours. A.

POL 699. Thesis II. Three hours. A.

PSYCHOLOGY (PSY)

James A. Lee, Chairman; Aagard, Burks, Carney, Hindman, W. Knapp,
Parkhurst, Peoples, Riggs, Rottersman, Watkins.

The fundamental involvement of psychological factors in all areas of
human endeavor requires that Departmental curricula serve several pur-
poses. Uppermost among these are:

A. Acquainting the student with the content and methods of sys-
tematic psychology.

B. Preparing the prospective graduate student for advanced work
in professional and scientific psychology and/or related areas.

C. Offering areas of selective emphasis of content as service courses
for minors and supporting preparation in other curricula.

Prospective graduate students should take at least one year of foreign
language; Russian, German or French is strongly recommended. Addi-
tional course work in biology, physics, chemistry, and mathematics is
recommended.
The Department offers several different areas of selective emphasis for students in terms of their plans for work or continued study and/or professional application. These include general and systematic psychology, personality-social psychology, abnormal-clinical psychology and development psychology. Building a selective emphasis in cognate areas and upon the core requirements should be begun with the help of the student's advisor during the freshman year.

Curriculum for a major in psychology (non-teaching). The first two years of this curriculum may be found in the Central University College section.

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Recommendations for prerequisite options and departmental requirements* include the following:

1. Six hours from GSC 162, BIO 141, 301
2. MAT 107* and 3 hours from GSC 176, CHE 111
3. Six hours from ANT 202, SOC 231, ANT 110, GSS 142, GSS 248
4. Six hours of RUS, GER, or FRE
5. PSY 211*, 213*, 301*, 302*, 313*, 499*, plus eleven hours of upper division courses in psychology for a total of 30 hours.

Curriculum for a second major in psychology (teaching). Non-science majors pursuing a certification program should include ANT 110, SOC 131, and at least six hours from animal science, zoology, physics and/or physiology in their preparation. Non-teaching second majors fulfill the same general requirements as first majors.

Curriculum for a minor in psychology: Students will take PSY 211, 213, 301, and 498, plus six upper division hours for a total of 18 hours. A total of 21 hours is required for a teaching minor.

GRADUATE PROGRAMS

The Department offers major work for the Master of Science Degree with emphasis in Clinical Psychology or School Psychology and the Master of Arts Degree with emphasis in General Psychology. Students pursuing the MS Degree and carrying a full program can expect to complete requirements in four semesters and one summer term, including the full-time one semester internship. Students pursuing the MA Degree and carrying a full program can complete course requirements in two semesters, including six hours of thesis research. However, most students may find that an added summer term will be needed to complete their research. Students majoring in other departments may elect selected graduate courses in psychology.
PSYCHOLOGY (PSY)

PSY 211. General Psychology. Three hours. I, II.
Prerequisite: Sophomore standing.
Introduction to foundation concepts in the various areas of psychology.

PSY 212. Applied Psychology. Two hours. I, II.
Human factors in social, personal and political decision. Manifestation of sensory, perceptual and motivational factors in medicine, law, industry, and government.

PSY 213. Statistical Applications in Psychology. Three hours. I, II.
Prerequisite: PSY 211.
Introduction to descriptive and inferential statistics used in ordering and interpreting data in psychology and other behavioral sciences.

PSY 301. (Formerly a part of 213.) Experimental General Psychology. Three hours. I, II.
Prerequisite: PSY 213.
Introduction to techniques and problems of the experimental method in psychology. Representative experiments and methodologies in psychology are considered to acquaint the student with research in contemporary psychology. Two lecture and two laboratory hours.

PSY 302. Tests and measurements. Three hours. I, II.
Prerequisite: PSY 211.
The principles of measurements with application to informal and standardized tests used in education, business, industry, and government. Problems of administration, scoring, and appraisal are considered.

PSY 305. (Formerly PSY 401.) Psychology of Personality. Three hours. I, II.
Prerequisite: PSY 211.
Basic approaches to the study of personality. Theory and fact upon which these approaches are related to various kinds of behavior patterns.

PSY 308. Abnormal Psychology. Three hours. I, II.
Prerequisite: PSY 211.
A descriptive study of the nature, course classification and prevalence of abnormal behavior, with attention to intellectual, personality, cognitive, sensory and motor functions.

PSY 311. Physiological Psychology. Three hours. I, II.
Prerequisite: PSY 301.
Facts, concepts and principles regarding physiological events that underlie behavior. Attention to contemporary research methods and problems undergoing study.

PSY 312. Child Psychology. Three hours. I, II.
Prerequisite: PSY 211.
developmental study of physical, mental, personality and social structure and functions from conception to adolescence, including reference to the importance of parents, home, school and community to this development.

PSY 313. (Formerly PSY 300.) Learning. Four hours. I, II.
Prerequisite: PSY 301.
Experimental study of learning, transfer, and retention processes with an analysis of various kinds of learning. Three lecture and two laboratory hours.

PSY 314. Adolescent Psychology. Three hours. I, II.
Prerequisite: PSY 211.
The nature, sources and development of emotional, social, intellectual and personality patterns of behavior in adolescents.

PSY 315. Sensation and Perception. Four hours. I, II.
Prerequisite: PSY 301.
Experimental study of sensation and perception, the sensory and cognitive processes by which man knows his world. Three lecture and two laboratory hours.
**PSY 400.** Theories of Learning. Three hours. I.
Prerequisite: PSY 301 or consent of instructor.
In depth study of learning theories. Emphasis on contemporary developments and current research.

**PSY 402.** Industrial Psychology. Three hours. I, II.
Prerequisite: PSY 211.
Methods and principles of psychology as applied to business and industry. Emphasis is on employee selection, classification, training and evaluation.

**PSY 404.** Motivation and Emotion. Three hours. II.
Prerequisite: PSY 301 or consent of instructor.
Study of biological and learned variables in motivated behavior including reflexes, instincts, imprinting, emotion, cognitive and other neuro-physiological phenomena.

**PSY 408.** Seminar in Psychology I. Three hours. I, II.
Prerequisite: Fifteen hours in psychology and consent of instructor.
Advanced study of the basic areas of psychological facts and theories; library research into the expression of these principles in selected areas of the student's major areas of study. Recommended for psychology minors only.

**PSY 409.** Seminar in Psychology II. Three hours. I, II.
Prerequisite: Nineteen hours in psychology and consent of instructor.
Intensive treatment of fundamental phenomena in psychology, toward a synthesis of contemporary theoretical approaches to these problem areas. Recommended for psychology majors only.

**PSY 500.** Social Psychology. Three hours. I, II.
Prerequisite: PSY 211.
The behavior of individuals in relation to personality, social, and cultural systems.

**PSY 504.** Psychology of Individual Differences. Three hours. I, II.
Prerequisite: PSY 211 and 302.
Study and application of the facts of human variability, including differences in such areas as age, sex, class, intelligence and achievement.

**PSY 507.** Problems in Psychology. One-Three hours. A.
Prerequisite: PSY 211, 213, and consent of instructor.
Qualified students may outline and study a definite problem in some areas of psychology for one, two or three hours of credit. Amount of credit depends on nature and extent of the problem studied. Results must be presented in a formal paper.

**GRADUATE COURSES**

**PSY 620.** Statistics. Three hours. I.
Prerequisite: PSY 213.
Theory and practice in the analysis and interpretation of psychological measurements.

**PSY 621.** Proseminar I. Two hours. I.
Prerequisite: Consent of instructor.
Basic concepts, methods and current developments in selected areas of psychology.

**PSY 622.** Theories of Personality. Three hours. I, II.
Prerequisite: Consent of instructor.
Theories relating to structure, function and development of the individual to his dynamic behavior.

**PSY 624.** Individual Intelligence Testing. Three hours. I, II.
Prerequisite: Consent of instructor.
Theory, supporting evidence, and practice of individual measurement of intelligence, and communication skills.
PSY 625. Personality Assessment. Two hours. I.
Prerequisite: Consent of instructor.
History, theory, administration and interpretation of selected projective and non-projective personality tests.

PSY 626. Professional Concerns. One hour. I.
Prerequisite: Consent of instructor.
Consideration of ethical and related problems of psychologists.

PSY 640. Proseminar II. Two hours. II.
Prerequisite: PSY 621.
Continuation of Psychology 621.

PSY 641. Psychopathology and Abnormal Psychology. Three hours. II.
Prerequisite: PSY 622.
Description of symptoms and dynamics of psychological disorders with consideration of cause, development, modification and prevention.

PSY 642. Projective Techniques I. Three hours. II.
Prerequisite: PSY 624.
History, theory, and rationale of projective techniques; administration and interpretation of the Thematic Apperception Test; and some familiarity with the Rorschach Inkblot Test.

PSY 643. Practicum I. General. Three hours. II.
Prerequisite: PSY 624 and 642.
Supervised practice in individual intelligence testing and personality assessment.

PSY 644. Counseling and Psychotherapy. Three hours. I.
Prerequisite: PSY 641 or consent of instructor.
Theories, principles and techniques, for individual and group therapy. Two hours lecture, two hours supervised laboratory practice in therapeutic intervention. Approaches will include behavior modification, non-directive counseling and/or re-constructive psychotherapy, in campus facilities and/or community agencies.

PSY 650. Practicum II. Clinical Psychology. Two hours. A.
Prerequisite: PSY 643, 644, 661.
Supervised practice in counseling/psychotherapy and advanced testing to include Rorschach Inkblot Test.

PSY 661. Projective Techniques II. Clinical Psychology. Three hours. I.
Prerequisite: PSY 641, 642.
A continuation of Rorschach theory, method, practice and interpretation.

PSY 662. Research I. Two hours. A.
A laboratory course devoted to instrumentation, formulation of problems and orientation to research methods.

PSY 663. Practicum II. School Psychology. Two hours. I.
Prerequisite: PSY 643, 644.
Supervised practice in counseling/psychotherapy and advanced testing.

PSY 670. Seminar in Sensation and Perception. Three hours. A.
Prerequisite: PSY 311 or 301, and consent of instructor.
Selected areas of contemporary theory and research. Attention, alertness and other recent and classic problems of central nervous system involvement in perception. Representative models of the perceptual processes as advanced by leading theorists.

PSY 671. Animal Learning. Two hours. A.
Prerequisite: PSY 313 or equivalent.
Critical areas of theory and research in animal learning. Selected emphasis on reward, punishment, discrimination learning, conceptual mastery, in terms of experimental findings and laboratory replication. One lecture hour, two laboratory hours.
PSY 673. Seminar in Physiological Psychology. Three hours. A.
Prerequisite: PSY 311 or equivalent and consent of instructor.
Selected areas of contemporary theory and research. Special reference to circulatory, endocrine and neurophysical systems.

PSY 677. Experimental Social Psychology. Two hours. A.
Prerequisite: PSY 620, and 500 or equivalent.
Methodological and basic content problems and procedures in personal social-interaction. Special reference to contemporary theory and research.

PSY 680. Advanced Child and Exceptional Child. Two hours. I.
Prerequisite: PSY 622, 640.
Theoretical issues and practical problems in intellectual, social, perceptual, physical and personality development with implications for education and adjustment.

PSY 681. Principles of Learning and Motivation. Three hours. I.
Prerequisite: PSY 640.
Principles and supporting evidence in each area with emphasis on human application.

PSY 682. Social, Cultural and Family Dynamics. Three hours. A.
Prerequisite: PSY 622, 640.
Interaction of the individual with groups to include the effects of family structure and minority status.

PSY 683. Advanced Tests and Measurements. Two hours. I.
Prerequisite: PSY 620 or 621.
Selected survey and application of group and individual tests used in both school and clinical settings.

PSY 684. Practicum III. Clinical Psychology. Five hours. II.
Prerequisite: PSY 660.
Supervised clinical practice toward assuming full responsibility for psychological evaluations and psychotherapeutic procedures.

PSY 685. Practicum III. School Psychology. Three hours. I.
Prerequisite: PSY 663.
Supervised experience toward assuming full responsibility for case evaluations, presentations and therapeutic procedures.

PSY 686. Research II. Two hours. I.
Prerequisite: PSY 662.
The investigation of independent problems under staff supervision.

PSY 687. Independent Work in Psychology. One-three hours. A.
Prerequisite: Consent of instructor.
Student responsibility for conceptualization and investigation of research problem and drawing formal conclusions.

PSY 690. Thesis Research. One to six hours. A.
Prerequisite: Consent of department.
Experimental investigation of a selected topic in psychology, including preparation of a formal report. May be repeated for a maximum of six credit hours.

PSY 699. Internship. Ten hours. A.
Prerequisite: Consent of student's committee.
Intensive supervised practice in approved setting.
PSY 625. Personality Assessment. Two hours. I.
Prerequisite: Consent of instructor.
History, theory, administration and interpretation of selected projective and non-projective personality tests.

PSY 626. Professional Concerns. One hour. I.
Prerequisite: Consent of instructor.
Consideration of ethical and related problems of psychologists.

PSY 640. Proseminar II. Two hours. II.
Prerequisite: PSY 621.
Continuation of Psychology 621.

PSY 641. Psychopathology and Abnormal Psychology. Three hours. II.
Prerequisite: PSY 622.
Description of symptoms and dynamics of psychological disorders with consideration of cause, development, modification and prevention.

PSY 642. Projective Techniques I. Three hours. II.
Prerequisite: PSY 624.
History, theory, and rationale of projective techniques; administration and interpretation of the Thematic Apperception Test; and some familiarity with the Rorschach Inkblot Test.

PSY 643. Practicum I. General. Three hours. II.
Prerequisite: PSY 624 and 642.
Supervised practice in individual intelligence testing and personality assessment.

PSY 644. Counseling and Psychotherapy. Three hours. I.
Prerequisite: PSY 641 or consent of instructor.
Theories, principles and techniques, for individual and group therapy. Two hours lecture, two hours supervised laboratory practice in therapeutic intervention. Approaches will include behavior modification, non-directive counseling and/or reconstructive psychotherapy, in campus facilities and/or community agencies.

PSY 660. Practicum II. Clinical Psychology. Two hours. A.
Prerequisite: PSY 643, 644, 661.
Supervised practice in counseling/psychotherapy and advanced testing to include Rorschach Inkblot Test.

PSY 661. Projective Techniques II. Clinical Psychology. Three hours. I.
Prerequisite: PSY 641, 642.
A continuation of Rorschach theory, method, practice and interpretation.

PSY 662. Research I. Two hours. A.
A laboratory course devoted to instrumentation, formulation of problems and orientation to research methods.

PSY 663. Practicum II. School Psychology. Two hours. I.
Prerequisite: PSY 643, 644.
Supervised practice in counseling/psychotherapy and advanced testing.

PSY 670. Seminar in Sensation and Perception. Three hours. A.
Prerequisite: PSY 311 or 301, and consent of instructor.
Selected areas of contemporary theory and research. Attention, alertness and other recent and classic problems of central nervous system involvement in perception. Representative models of the perceptual processes as advanced by leading theorists.

PSY 671. Animal Learning. Two hours. A.
Prerequisite: PSY 313 or equivalent.
Critical areas of theory and research in animal learning. Selected emphasis on reward, punishment, discrimination learning, conceptual mastery, in terms of experimental findings and laboratory replication. One lecture hour, two laboratory hours.
PSY 673. Seminar in Physiological Psychology. Three hours. A.
Prerequisite: PSY 311 or equivalent and consent of instructor.
Selected areas of contemporary theory and research. Special reference to circulatory, endocrine and neurophysical systems.

PSY 677. Experimental Social Psychology. Two hours. A.
Prerequisite: PSY 620, and 500 or equivalent.
Methodological and basic content problems and procedures in personal social-interaction. Special reference to contemporary theory and research.

PSY 680. Advanced Child and Exceptional Child. Two hours. I.
Prerequisite: PSY 622, 640.
Theoretical issues and practical problems in intellectual, social, perceptual, physical and personality development with implications for education and adjustment.

PSY 681. Principles of Learning and Motivation. Three hours. I.
Prerequisite: PSY 610.
Principles and supporting evidence in each area with emphasis on human application.

PSY 682. Social, Cultural and Family Dynamics. Three hours. A.
Prerequisite: PSY 622, 640.
Interaction of the individual with groups to include the effects of family structure and minority status.

PSY 683. Advanced Tests and Measurements. Two hours. I.
Prerequisite: PSY 620 or 621.
Selected survey and application of group and individual tests used in both school and clinical settings.

PSY 684. Practicum III. Clinical Psychology. Five hours. II.
Prerequisite: PSY 660.
Supervised clinical practice toward assuming full responsibility for psychological evaluations and psychotherapeutic procedures.

PSY 685. Practicum III. School Psychology. Three hours. I.
Prerequisite: PSY 663.
Supervised experience toward assuming full responsibility for case evaluations, presentations and therapeutic procedures.

PSY 686. Research II. Two hours. I.
Prerequisite: PSY 662.
The investigation of independent problems under staff supervision.

PSY 687. Independent Work in Psychology. One-three hours. A.
Prerequisite: Consent of instructor.
Student responsibility for conceptualization and investigation of research problem and drawing formal conclusions.

PSY 690. Thesis Research. One to six hours. A.
Prerequisite: Consent of department.
Experimental investigation of a selected topic in psychology, including preparation of a formal report. May be repeated for a maximum of six credit hours.

PSY 699. Internship. Ten hours. A.
Prerequisite: Consent of student's committee.
Intensive supervised practice in approved setting.
College of Business

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The College of Business, in cooperation with the Graduate School, offers the degree of Master of Business Administration and, in cooperation with the Central University College, offers four-year programs leading to the degree of Bachelor of Business Administration.

The Department of Business Education and Office Administration, in cooperation with the College of Education, offers the Master of Arts in Education degree for teachers of business, a four-year program for secondary business teachers leading to the Bachelor of Science degree, and a two-year executive secretarial program leading to the Associate of Arts degree.

The programs in the College of Business are designed to provide professional education for careers in business and to develop an intellectual understanding of the role of the citizen in a rapidly changing technological society. Through the liberal arts requirements for the degree, the College attempts to provide for the student a well-rounded education.

The College offers courses in accounting, business education, business law, economics, data processing, finance, management and marketing. The specific programs are outlined in the departmental sections of the catalog. Each student upon transferring into the College of Business is assigned a faculty advisor especially trained in the requirements of the program he intends to pursue. Students changing programs should consult with the Dean for reassignment to an appropriate faculty advisor.

Students in the College of Business are eligible for financial aid and grants, as are all other students in the institution, and should contact the Financial Aids Office to inquire about them.

Pre-legal Study

Many students planning to attend law school find undergraduate programs in business particularly good background for their legal study. Special advisors are available in the College of Business for pre-legal students.

Admission to the College of Business

Freshmen enter the Central University College and remain there through their sophomore year. As they approach the completion of their sophomore year, they should apply for admission to the College of Business. The following are the requirements for admission:

1. Completion of a minimum of 64 credit hours with a grade point average of 1.8 or higher.
2. Completion of the following:

GSE 101 and 102
ENG 209 or 211 and 210 or 212
GSP 180, 181 and 281
GSS 142, 246, and 247
Science or Math, 6 hours (see page 49 for options)
Military Science (for men), or options, 8 hours.

Requirements for Graduation

In order to be graduated with a Bachelor of Business Administration degree, students must apply to the Office of the Dean of the College of Business. December graduates should apply the preceding April, and May and August graduates should apply the preceding October. The requirements for the degree are as follows:

1. A minimum of 128 hours and a quality point average of 2.0. Candidates for degrees must earn 30 of the last 36 hours in residence at Eastern Kentucky University. Hours earned by correspondence study are accepted upon written approval of the Dean. However, not more than 25 per cent of the total hours offered for the degree may be in correspondence and/or extension work. A degree may not be awarded if less than 32 hours have been earned in residence at Eastern Kentucky University. Of the 128 hours for the degree, 43 must be earned in upper division courses (courses at the 300, 400, and 500 level).

2. Not more than 50 per cent of the work toward the degree may be taken in the College of Business.

3. Completion of the business core.

4. Completion of sufficient course work in a major.

5. The two main objectives of the BBA degree are (1) professional development for business careers, and (2) broad liberal arts and science education. Electives which do not contribute to either of these objectives will not count toward the degree.

Major Requirements

Each student in the College of Business must choose a major field. Students should make this choice at the time they are admitted to the College of Business and the student must be approved by the department offering the major. The student's schedule for each semester must be approved by his faculty advisor. Any student not making satisfactory progress in his major may be required to change his major or to transfer from the College of Business. A grade of "C" or higher is required in each course for credit toward the major.

At least 12 of the hours in the major must be earned at Eastern Kentucky University. In addition, a 2.0 quality point average must be maintained in all work taken in the College of Business. A student may not take more than 64 hours in the College of Business without permis-
tion of a thesis for which six hours of credit will be earned. A committee to approve the thesis shall be appointed by the Chairman of the Graduate Committee of the College of Business.

No more than twelve semester hours of work from any functional area of study (exclusive of thesis credit) may be counted toward the degree. At least twenty-four semester hours of work must be completed in courses open only to graduate students.

All work for the Master of Business Administration degree must be completed within one eight-year period.

More detailed description of this program is presented in the Graduate Catalogue.

DEPARTMENT OF ACCOUNTING (ACC)

Claude K. Smith, Chairman; Brown, Dyer, French, Griffith, Jackson, Jones, Latham, McIlvaine, Messmer, Moore, Wilson.

The Department of Accounting provides courses in principles of accounting required of all students obtaining a degree in Business. In addition, it has two programs for majors in accounting. The professional accounting program is designed to prepare graduates to enter an accounting firm with the anticipation of working toward the CPA certificate. The industrial accounting major is designed for students who want careers in government or industry but who do not intend to seek the CPA designation.

The professional accounting program requires 21 hours of accounting above 109 and must include ACC 225, 226, 327, and 441. The industrial accounting major requires 21 hours of accounting above 109 and must include ACC 225, 226, and 327. It is recommended that the industrial accounting major carefully select his course in consultation with the faculty advisor to improve his career effectiveness. Courses submitted toward the major must be completed with a grade of "C" or higher. No minors or second majors are available in the Department of Accounting.

The Department of Accounting, in cooperation with the Graduate School and the College of Business, participates in the Master of Business Administration Program. A student may take a concentration in accounting consisting of 12 hours of graduate level accounting courses. However, ACC 500 and 600 cannot be taken by students who have an undergraduate major in accounting. A detailed description of this program is presented in the Graduate Catalogue.

Award

Each spring the outstanding junior in the professional accounting program is awarded the Lybrand, Ross Bros. & Montgomery Accounting Award. The award consists of a certificate of accomplishment and $100 provided by Lybrand, Ross Bros. & Montgomery, Certified Public Accountants.
ACCOUNTING (ACC)

ACC 108. (Formerly 124.) Principles of Accounting. Three hours. I, II.
Fundamental accounting relationships; completion of the accounting cycle; accounting process for merchandising enterprises; receivables, payables and inventories; deferrals, accruals and intangible assets.

ACC 109. (Formerly 125 and 126.) Principles of Accounting. Three hours. I, II.
Prerequisite: ACC 108 or satisfactory completion of departmental examination.
Accounting systems, concepts, and principles; formation, organization, and operations of partnerships and corporations; departments and branches; and statement analysis, cost and manufacturing accounting.

Prerequisite: ACC 109.
Accounting statements; the recording process; the periodic summary; cash and temporary investments; receivables; inventories; current liabilities; investments in stocks, bonds, funds, and miscellaneous items.

Prerequisite: ACC 225.
The acquisition, use, and retirement of plant and equipment; depreciation, depletion, and revaluations of plant and equipment; intangible assets and deferred charges; long-term liabilities; capital stock; surplus; statements from incomplete data; errors and their correction; statement analysis; statement of application of funds.

ACC 300. Managerial Accounting. Three hours. I, II.
Prerequisite: ACC 109.
Accounting structure and systems; the uses and interpretation of financial statements; accounting and management control; and the uses of accounting in the decision-making process.

ACC 320. Principles of Accounting-Advanced. Three hours, I, II.
Prerequisite: ACC 226.
Partnerships—formation and operation; special partnership problems; joint ventures; statement of affairs; receivership; statement of realization; estates and trusts; and actuarial science.

ACC 321. Principles of Accounting-Advanced. Three hours. II.
Prerequisite: ACC 320.
Installment sales consignments; home office and branch relationships; corporate combinations; consolidated balance sheet; special problems with consolidated balance sheets; consolidated income and retained earnings statement; foreign branches and subsidiaries.

ACC 322. Income Tax Accounting. Three hours. I, II.
Prerequisite: ACC 126.
Income tax legislation—Federal and State; returns for individuals; gross income; basis and determination of gain or loss; capital gains and losses; dividends; deductions; withholding. Also includes a survey of income tax laws relating to partnerships, corporations, trust, estate, and gift taxes.

ACC 323. Advanced Tax Accounting. Three hours. I, II.
Prerequisite: ACC 322.
Federal income tax report preparation with emphasis on partnership and corporate returns, estate and trusts; gift and estate taxes; special problems in preparation of tax returns.

ACC 327. Cost Accounting. (Formerly ACC 227.) Three hours, I, II.
Prerequisite: ACC 109.
Cost flows and cost systems; the cost accounting cycle factory overhead; departmentalized manufacturing expenses; job order cost, process cost, and standard cost accounting, budgeting; and direct costing.
ACC 441. Auditing and Public Accounting Practice. Three hours. I, II.
Prerequisite: ACC 226.
Professional ethics; accountant's legal responsibility; internal control; preliminary arrangements for an audit; general procedure of an audit; the original records; the asset accounts; the liability accounts; operating accounts; the audit report.

ACC 500. Public School and Governmental Accounting. Three hours.
Prerequisite: Senior standing. Taught by announcement.

ACC 521. (Formerly ACC 421.) Fund Accounting. Three hours.
Prerequisite: ACC 109.
Advanced study in accounting and fiscal procedures for institutions and federal, state, county, and municipal governments.

ACC 525. (Formerly ACC 425.) Accounting Problems. Three hours.
Prerequisite: ACC 226.
This is an advanced course in accounting and the contents will be determined by the needs of the students registering for it. Taught by announcement.

ACC 527. Advanced Cost Accounting. Three hours.
Prerequisite: ACC 327.
Advanced problems in costs, budgets, distribution costs, measurements of departmental efficiency, and analysis of cost information for managerial decisions.

GRADUATE COURSES

ACC 600. Managerial Accounting. Three hours.
Prerequisite: ACC 109.
A study of accounting procedures and systems to provide data for managerial decision making. Subjects include planning, analysis of relevant cost, impact of taxes and limitations of data.

ACC 620. Controllership. Three hours.
Prerequisite: Graduate standing and 24 hours of accounting.
The place of the controller in management. Includes such subjects as quantitative techniques, systems, internal auditing, planning, taxes, insurance, and departmental relationships.

ACC 625. Advanced Auditing. Three hours.
Prerequisite: ACC 441.
Rules of professional conduct; auditing standards and case studies of American Institute of Certified Public Accountants; auditing rules and regulations of Securities and Exchange Commission; analysis of problem areas in reporting.

ACC 627. Research in Taxes. Three hours.
Prerequisite: ACC 332.
An intensive analysis of the Internal Revenue Code. Research and discussion of tax problems affecting business and of tax planning and saving opportunities from the point of view of the professional accountant.

ACC 628. Accounting Theory. Three hours.
Prerequisite: Strong accounting background.
History and theory of accounting as discussed in accounting literature, periodicals, research bulletins, and publications of professional organizations.

ACC 640. Seminar in Accounting. Three hours.
Prerequisite: Strong accounting background.
This course involves directed readings and intensive investigation into controversial and specific areas of accounting. Oral and written reports required.

Individual direction of research and thesis writing.
The Department of Business Administration offers courses in finance, management, marketing, business law, general business, and electronic data processing leading to the Bachelor of Business Administration degree.

The Department of Business Administration also offers a concentration of work leading to the Master of Business Administration degree which is briefly summarized on the preceding pages. Refer to the Graduate Catalog for a more detailed explanation of the concentration of work in finance, management, or marketing.

There is a minor in Business Administration for students in colleges other than the College of Business. This minor consists of ACC 108, 109, ECO 230, 231, and six elective hours in Business Administration. This minor is provided primarily for students of the College of Applied Arts and Technology. Students in the College of Arts and Sciences require special permission from the Dean of the College of Arts and Sciences before such a minor is approved.

The electronic data processing major consists of 18 hours of EDP courses above the business core. All work for the major must be completed with a grade of “C” or higher. At least 12 of the hours in the major must be earned at Eastern Kentucky University.

The finance major consists of 18 hours above the business core. Economics 492 may be counted toward the finance major. All courses submitted toward the major must be completed with a grade of “C” or higher. At least 12 of the hours in the major must be earned at Eastern Kentucky University.

The general business major consists of 18 hours above the business core. The 18 hours consists of six credit hours in each of the fields of management, finance, and marketing above courses required in the business core. All courses submitted toward the major must be completed with a grade of “C” or higher. At least 12 of the hours in the major must be earned at Eastern Kentucky University.

A management major consists of 18 hours above the business core and must include Management 504. In addition to the management courses listed in this section, Economics 333, 597, 593 and OAD 560 may be counted toward the management major. All courses submitted for completion of the major must be completed with a grade of “C” or higher. At least 12 of the hours in the major must be earned at Eastern Kentucky University.

The marketing major consists of 18 hours above the business core and must include either Marketing 500 or 504, Economics 394 and Finance 320 may be counted toward the marketing major. All courses submitted for the major must be completed with a grade of “C” or higher. At least 12 of the hours in the major must be earned at Eastern Kentucky University.
ELECTRONIC DATA PROCESSING (EDP)

EDP 312. Introduction to Data Processing Systems. Three hours. I.
Prerequisite: Junior standing or by permission of Instructor.
Introduction to the history and development of electro-mechanical and electronic
computer systems, including machine functions, computer organization, conceptual
programming, systems, and uses of computer systems in management. Three hours
lecture and limited laboratory time for demonstrations.

EDP 320. (Formerly 410.) Assembly Languages. Three hours. II.
Prerequisite: Senior standing.
Study of instruction codes, input-output, macros, machine representation of charac-
ters, control, arithmetic and logic operation, subroutines, indexing and indirect ad-
dressing, assembly systems, and current advances in computer organization. Three
lecture and two hours laboratory.

EDP 330. (Formerly 420.) Business Systems. Three hours. II
Prerequisite: Senior standing.
Study of business systems; management organization of systems analysis, systems
functions, concepts and programs, analysis and design, application feasibility studies,
information retrieval, and systems planning and control. Three hours lecture.

EDP 440. FORTRAN Programming. Three hours. II
Prerequisite: EDP 320 and Economics 391.
Introduction to FORTRAN; and history, structure, formula expressions, uses in
business and format instructions, Advanced problems on the H-200 computer systems.
Three lecture and two hours laboratory.

EDP 450. COBOL Programming. Three hours. I.
Prerequisite: EDP 330.
Introduction to COBOL; and history, structure, formula expressions, uses in business
and format of instruction. Advanced problems on the H-200 computer system. Three
lecture and two hours laboratory.

EDP 460. Input-Output Techniques. Three hours. II
Prerequisite: EDP 320.
Theory of data handling; keytapes, optical readers, bar-code readers, paper tape,
disc storage; remote terminals; and teleprocessing.

EDP 470. EDP Applications. Three hours. II.
Prerequisite: EDP 450.
Complex systems analysis and programming problems.

Prerequisite: Senior or graduate standing.
Functional applications of business problems with specific utilization of electro-
mechanical equipment. Three hours lecture and two hours laboratory.

EDP 506. Computer Programming. Three hours. I.
Prerequisite: Senior or graduate standing.
Application of computer technology to selected business problems utilizing a com-
puter system. Three hours lecture and two hours laboratory. May not be taken for
credit if credit has previously been received in 320, 330, 440, or 450.

EDP 508. Computer Information and Retrieval Systems—Cases and Problems. Three
hours. II.
Prerequisite: Senior or graduate standing.
Readings, cases, and problems in programming conceptual business situations for
records analysis and management decision-making with emphasis on systems logic
and management control.
FINANCE (FIN)

FIN 300. Business Finance. Three hours. I, II.
Prerequisite: Junior standing.
Acquisition of funds; sources of permanent types of capital, sources of temporary types of capital, practices of short-term credit institutions. Management of corporate net income. Alteration of financial structure.

FIN 304. Financial Institutions. Three hours. I.
Prerequisite: Junior standing.
Sources and uses of funds; savings and loan institutions, insurance companies, pension funds, trusts, and other financial intermediaries. Analysis of the impact of this area of financial operations on the economy.

FIN 308. Commercial Banking. Three hours. I.
Prerequisite: Junior standing.
Problems of commercial banking discussed from the point of view of bank management; size of asset reserves, credit analysis, investment policies. Problems of equity reserves and capital account.

FIN 320. Principles of Risk and Insurance. Three hours. I, II.
Prerequisite: Junior standing.
Principles and coverages of insurance. Methods of risk assumption; fire insurance, transportation insurance, casualty Insurance, life insurance, fidelity and surety bonds.

FIN 324. Investments. Three hours. I.
Prerequisite: Junior standing.
Characteristics of bonds, stocks, securities market, investment banking. Sources of investment information; interpreting financial news; taxation of securities; investors of limited means; analysis of securities.

FIN 420. Investment Analysis. Three hours. II.
Prerequisite: FIN 324.
Securities analysis; grading and selection of securities, management of individual and institutional portfolios. Case studies; oral and written reports by the student.

FIN 460. Public Finance and Taxation. Three hours. II.
Prerequisite: Senior standing.
Distribution of government burdens; property tax, shifting and incidence of taxation, income tax, death and gift taxes, taxes upon business, consumption taxes, motor vehicle taxes, poll tax, social security taxes, taxes on natural resources, and non-tax revenue.

GENERAL BUSINESS (GBU)

GBU 300. Business Law. Three hours. I, II.
Prerequisite: Junior standing.
Law in general; kinds of law persons, torts, contracts, personal property, real property, and forms of business organization.

GBU 302. Business Law. Three hours. II.
Prerequisite: Junior standing.
Bailments; sales of personal property; market practices, negotiable contracts, secured creditors, and labor relations.

MANAGEMENT (MGT)

Prerequisite: Sophomore standing.
Concepts of management in business organization and operation; universality of management functions; search for a practical philosophy of management; fundamental concepts in decision-making, planning, organizing, directing and controlling.
MGT 306. (Formerly MGT 304) Managerial Systems Analysis. Three hours. I, II.
Prerequisite: MGT 200 and junior standing.
Introduction to concepts of selection, installation, operation, maintenance, and control of management systems.

MGT 320. Personnel Management and Industrial Relations. Three hours. II.
Prerequisite: MGT 306 and junior standing.
Personnel management in factory, store, and office; job analysis, description, and classification; personnel selection, maintenance, and training; promotion; labor turnover; wage policies; health and safety.

MGT 324. Collective Bargaining. Three hours. I.
Prerequisite: MGT 320.
Analysis of bargaining procedures; study of basic institutional issues in bargaining, economically related administrative clauses, strike and lockout tactics, and contract administration. Preparation, negotiation, and interpretation of labor contracts.

MGT 340. Production Management. Three hours. II.
Prerequisite: MGT 306 and junior standing.
Procedures and techniques employed in operations management. Managerial decision-making; statistical, linear programming, and general quantitative analysis applied in case problems.

MGT 410. Organization and Operation of the Small Business. Three hours. I, II.
Prerequisite: Junior standing.
Small business; organization, location, financial planning, records, unit costs, merchandising, credits, and personal policies.

MGT 412. Small Business Problems. Three hours. II.
Prerequisite: Junior standing.
Personnel management, business organization, policy and planning, wage payment, financial records and statements, purchases and sales, production control, and related problems.

MGT 440. Production Control. Three hours. I, II.
Prerequisite: MGT 340.
Control of time, quantity, and quality of operations. Routing, scheduling, dispatching, and control problems. Systems relationships in manufacturing, sales, and technical staff departments.

MGT 500. Human Relations in Business. Three hours. I.
Prerequisite: MGT 200 and senior or graduate standing.
Selected concepts from the behavioral sciences brought into a framework relevant to business decision-making. Examines social science research in decision-making by individuals and groups.

MGT 504. Administrative Policy. Three hours. I, II.
Prerequisite: MGT 200 and senior or graduate standing.
Issues in organization and structure of the business, employment policies, pricing policies, relations with governmental agencies, research and development policies, marketing strategy, and employer and stockholder relations.

MARKETING (MKT)

MKT 300. Marketing. Three hours. I, II.
Prerequisite: Junior standing.
Consumer buying. Marketing functions and institutions; direct selling, department stores, mail-order houses, chain stores, agricultural wholesaler, raw materials, cooperative marketing, speculation, price policies, brand policies, and ethical aspects of marketing.
MKT 304. Retailing. Three hours, I, II.
Prerequisite: Junior standing.
Location and arrangement of stores; organizational principles; personnel procedures; time procedures; merchandising principles; sales promotion.

MKT 308. Wholesaling. Three hours. II.
Prerequisite: Junior standing.
Distribution of goods from manufacturers to retailers; comparison of alternative methods; purchasing, transportation, and warehousing of goods; sales promotion of goods to the retailer.

MKT 310. Salesmanship. Three hours. I.
Prerequisite: Junior standing.
The art of selling; motive behind buying, attitudes of buyer and salesman, the interview, arousing interest, creating desire, answering objections, meeting excuses, diplomacy of the close, and types of customers.

MKT 320. Advertising. Three hours, I, II.
Prerequisite: Marketing 300.
Concepts of advertising; slogans, trademarks, layouts, and engraving. Scheduling of advertising; direct mail, outdoor and dealer display. Economic and legal aspects of advertising.

MKT 324. Advertising Copy and Layout. Three hours. II.
Prerequisite: MKT 320.
Advertising copy for various media. Art principles used in designing graphic and written advertising material.

MKT 420. Advertising Management and Cases. Three hours. I.
Prerequisite: MKT 320.
Advertising campaigns; research, planning, and coordination between advertising and selling efforts, budgets, trade area and media analysis campaigns.

MKT 450. Marketing Environments. Three hours, II.
Prerequisite: Senior standing.
Analysis of the firm environments, the forces of change, and their influence on marketing strategies and tactics. Emphasis on consumer behavior and on current contributions from the behavioral sciences.

MKT 500. Marketing Research and Analysis. Three hours. I.
Prerequisite: MKT 300 and senior or graduate standing.
Use of secondary research resources, building of bibliographies; preparation of reports for executives and clients.

MKT 504. Marketing Management. Three hours. II.
Prerequisite: MKT 300 and senior or graduate standing.
Policies and procedures in merchandising; selecting distribution channels; defining, locating, and reaching the market; determining marketing budgets; integrating advertising, personal selling, and sales promotion; using and evaluating market research.

GRADUATE COURSES

FINANCE (FIN)

FIN 600. Administrative Analysis in Finance. Three hours. S.
Prerequisite: Graduate standing.
Readings, problems, and study of current controversial issues with emphasis on decision-making in the financial administration of the firm.

Individual direction of research and thesis writing.
MANAGEMENT (MGT)

MGT 600. Administrative Analysis in Management. Three hours. I.
Prerequisite: Graduate standing.
Examines the evolution of management concepts and philosophies. An analysis of
the contributions of various philosophies in the synthesis of an eclectic philosophy of
management.

MGT 620. Administrative Analysis of Complex Organizations. Three hours. II.
Prerequisite: Graduate standing.
Parallel analyses of administrative practices in business and government with
emphasis on administrative theory. Stress placed on administrative practices observed
in the functions of planning, organizing, directing, and controlling.

Individual direction of research and thesis writing.

MARKETING (MKT)

MKT 600. Marketing Problems. Three hours. S.
Prerequisite: Graduating standing.
A survey, analysis and evaluation of current trends, controversial issues and ad-
vanced technology in the field of marketing. The course is oriented toward decision
making from the standpoint of marketing administration in the firm.

Individual direction of research and thesis writing.

DEPARTMENT OF BUSINESS EDUCATION AND
OFFICE ADMINISTRATION

Alfred Patrick, Chairman; Burkett, Hogg, Jennings, Jones, Moberly, Mountz, Wagner.

The purposes of the Department of Business Education and Office
Administration at the undergraduate level are to prepare:

1. Qualified teachers of business certified to teach in secondary
   schools.

2. Qualified secretaries in two-year or four-year programs.

BUSINESS EDUCATION (BED)

The Department of Business Education and Office Administration,
in cooperation with the College of Education, provides programs leading
to a Bachelor of Science degree and certificates qualifying graduates to
teach business education at the secondary level. Teaching certificates
may be in one of three forms. The Department offers an Area in Busi-
ness Education (which requires a minimum of 48 hours in Business) and
single majors (without minor fields of study) for students who plan to
教 business subjects exclusively. Graduates with an Area in Business
Education are certified to teach in all subject areas of Business Educa-
tion at the secondary level; students taking single majors (which require
from 35 to 39 hours in Business) are not required to have minors and may elect one of three content areas in business teaching in which to concentrate their study. Majors in Business Education which require a minimum of 31 to 34 hours in Business and a minor in some other field are offered for those students who wish to combine teaching Business Education with other subjects. Majors may be completed with emphasis in any one of three fields: accounting, general business, or secretarial.

Students who desire to qualify as teachers for federally reimbursed vocational business education programs follow the same area or major programs outlined above; however, during their sophomore year, they should notify their faculty advisor that this type of certification is desired.

In order to be admitted to the teacher education programs, a student must have a 2.0 grade-point average on his entire record and also in his teaching field or fields. However, to be eligible for student teaching and graduation, a grade-point average of 2.25 is required for the student's entire record and in his teaching field or fields.

Area in Business Teacher Education

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<thead>
<tr>
<th>Third Year</th>
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<tbody>
<tr>
<td>First Semester</td>
<td>Hours</td>
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<td>Second Semester</td>
<td>Hours</td>
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<td>ART 390</td>
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<td>EDF 317</td>
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<tr>
<td>ENG 209 or 211</td>
<td>3</td>
<td></td>
<td>OAD 303</td>
<td>3</td>
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<tr>
<td>OAD 202</td>
<td>3</td>
<td></td>
<td>OAD 301</td>
<td>3</td>
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<tr>
<td>OAD 253</td>
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<td>SCI or MAT</td>
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<tr>
<td>SCI or MAT</td>
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<th>Fourth Year</th>
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<tbody>
<tr>
<td>First Semester</td>
<td>Hours</td>
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<td>Second Semester</td>
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<tr>
<td>ESH 454</td>
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<td>ECO 324</td>
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<tr>
<td>ESH 499</td>
<td>10</td>
<td></td>
<td>upper division</td>
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<td></td>
<td>17</td>
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</table>

Majors in Business Teacher Education—Minors Required

With emphasis in Accounting the following courses are required: ACC—18 hrs; ECO 230; ESH 455; GBU 300; OAD 151, 152, 253.

With emphasis in General Business the following courses are required: ACC 108, 109, 3 hrs. ACC elective; ECO 230, 231, 324; ESH 455; GBU 300; OAD 151, 152, 253; three hours elective in Business.

With the Secretarial emphasis the following courses are required: ACC 108, 109, 3 hrs. ACC elective; ECO 230; ESH 454, 455; OAD 115, 116, 152, 202, 253, 301, 303, 354.
Single Majors in Business Teacher Education—No Minors Required

With emphasis in Accounting the following courses are required: ACC—18 hrs.; ECO 230, 231; ESH 455; GBU 300; OAD 151, 152, 253, 301; plus three hours of approved business electives.

With emphasis in General Business the following courses are required: ACC 108, 109, 3 hrs.; ACC elective; ECO 230, 231, 324, 391; ESH 455; GBU 300; OAD 151, 152, 253, 301; plus six hours from approved business electives.

With the Secretarial emphasis the following courses are required: ACC 108, 109, 3 hrs.; ACC elective; ECO 230, 231, 454, 455; GBU 300; OAD 115, 116, 152, 202, 253, 301, 303, 354; plus three hours from approved business electives.

Master of Arts in Education—Business Education

The Department of Business Education and Office Administration offers a graduate program in cooperation with the College of Education and the Graduate School. Students may earn the Master of Arts in Education degree with specialization in Business Education. The Education Core (9 hours) and BED 570 and 600 must be completed; four of the following Business Education courses must be completed: 550, 560, 610, 620, 630, 640, 650, 660. The remaining hours necessary to complete the 30-hour program will be chosen in consultation with the student's graduate advisor. Courses to correct undergraduate deficiencies in some areas of business may also be required.

DISTRIBUTIVE EDUCATION (DED)

The Department offers an Area in Distributive Education, which requires 49 hours in Business; the Area provides students who want to teach Distributive Education with a broad program in business administration emphasizing marketing and distribution. The Department also offers a single major in Distributive Education, which requires 37 hours in Business.

Area in Distributive Teacher Education

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<th>Third Year</th>
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<tbody>
<tr>
<td></td>
<td>First Semester</td>
<td>Hours</td>
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<tr>
<td></td>
<td>General education SCI or MAT</td>
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<tr>
<td></td>
<td>MGT 200</td>
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<td>MKT 300</td>
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<td></td>
<td>GBU 300</td>
<td>3</td>
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<tr>
<td></td>
<td>ECO 324</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Business elective, upper division</td>
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<td>18</td>
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<td>EDF 317</td>
<td>4</td>
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<tr>
<td></td>
<td>OAD 301 or 400</td>
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<tr>
<td></td>
<td>ECO 391</td>
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<tr>
<td></td>
<td>MKT elective</td>
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<tr>
<td></td>
<td>Business elective, upper division</td>
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<td>16</td>
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</table>
Fourth Year

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Hours</th>
<th>Second Semester</th>
<th>Hours</th>
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<tbody>
<tr>
<td>DED 460</td>
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<td>ESH 461</td>
<td>3</td>
</tr>
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<td>DED 470</td>
<td>1</td>
<td>ESH 498</td>
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<tr>
<td>EDP</td>
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<tr>
<td>MKT elective</td>
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<td></td>
<td></td>
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<tr>
<td>MGT 410</td>
<td>3</td>
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<tr>
<td>Business elective, upper division</td>
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</tbody>
</table>

16 16

Students will be accepted into this program for graduation as of June, 1972, or later.

Single Major in Distributive Teacher Education—No Minor Required

For the major in Distributive Teacher Education the following courses are required: ACC 108, 109; DED 460, 470; ECO 391; ESH 461; 3 hrs. EDP; GBU 300; MGT 200 or 410; MKT 300 and six hrs. from MKT 304, 310, 320, 450; OAD 301 or 400 and three hours approved business elective.

Students will be accepted into this program for graduation as of June, 1972, or later.

The Department of Business Education and Office Administration sponsors Pi Omega Pi, a national honorary fraternity for outstanding students who are interested in teaching in the field of business. Pi Omega Pi is a member of the Association of College Honor Societies. The aims of Pi Omega Pi are to:

1. Create, encourage, and promote scholarship in Business Education.
2. Aid in civic betterment in colleges and universities.
3. Encourage and foster high ethical standards in business and professional life.

Pi Omega Pi makes an annual award to its outstanding member. The Department also presents annually the National Business Education Association Professional Award to the outstanding senior in business teacher education.

OFFICE ADMINISTRATION (OAD)

As part of its undergraduate program, the Department of Business Education and Office Administration also offers programs for the preparation of secretaries.

Bachelor of Business Administration Degree in Office Administration

The Bachelor of Business Administration degree is offered for students who want to complete a four-year secretarial program without teaching certification. To complete the four-year secretarial program, the following courses in the College of Business are required: the business core (33 hours) and OAD 116, 152, 202, 253, 303, 354, and 560.
All work toward a major in Office Administration must be completed with a grade of "C" or higher.

Two-Year Secretarial Program

The requirements for the two-year secretarial program are shown below:

EXECUTIVE SECRETARIAL PROGRAM
(A two-year program for women students)
Associate of Arts Degree

First Year

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC 108, Principles of Accounting</td>
<td>3</td>
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<tr>
<td>GSE 101, English Composition I</td>
<td>3</td>
</tr>
<tr>
<td>GSP 180, Fundamental Physical Education Activities</td>
<td>1</td>
</tr>
<tr>
<td>GSS 142, Culture and Society</td>
<td>3</td>
</tr>
<tr>
<td>OAD 101, Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>OAD 151, Beginning Typewriting</td>
<td>2</td>
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<tr>
<td></td>
<td>15</td>
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</tbody>
</table>

Second Semester

| ACC 109, Principles of Accounting      | 3     |
| GSE 102, English Composition II        | 3     |
| GSP 181, Fundamental Physical Education Activities | 1     |
| OAD 115, Beginning Shorthand           | 3     |
| OAD 152, Intermediate Typewriting      | 2     |
| GSS 246, History of Western Civilization | 3     |
|                                        | 15    |

Second Year

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>ECO 230, Principles of Economics I</td>
<td>3</td>
</tr>
<tr>
<td>GSS 247, History of Western Civilization</td>
<td>3</td>
</tr>
<tr>
<td>HEA 202 Safety and First Aid, or GSP 281, Personal and Community Health</td>
<td>2-3</td>
</tr>
<tr>
<td>OAD 116, Intermediate Shorthand</td>
<td>3</td>
</tr>
<tr>
<td>OAD 253, Advanced Typewriting</td>
<td>2</td>
</tr>
<tr>
<td>OAD 354, Office Machines</td>
<td>3</td>
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<td></td>
<td>16-17</td>
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<table>
<thead>
<tr>
<th>Second Semester</th>
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</thead>
<tbody>
<tr>
<td>ECO 231, Principles of Economics II</td>
<td>3</td>
</tr>
<tr>
<td>GSS 248, The Human Problem in the 20th Century</td>
<td>3</td>
</tr>
<tr>
<td>OAD 202, Dictation and Transcription</td>
<td>3</td>
</tr>
<tr>
<td>OAD 303, Secretarial Practice</td>
<td>3</td>
</tr>
<tr>
<td>OAD 301, Business Communications</td>
<td>3</td>
</tr>
<tr>
<td>Approved elective</td>
<td>3</td>
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</tbody>
</table>

This program (a minimum of 64 hours) must be completed with a "C" average or better.
BUSINESS EDUCATION AND
OFFICE ADMINISTRATION

Business Education (BED)
BED 550. Workshop in Business Education. Three hours. A.
Offered during summer sessions only; enrollment will be limited to business
teachers or seniors in business teacher education. A master's degree candidate may
not count for graduate credit more than two of these workshops.

BED 560. Cooperative Business Education Programs. Three hours. A.
Background, aims, coordination techniques, and administrative policies for or-
ganizing and operating cooperative part-time programs in business occupations.

BED 570. Tests and Measurement in Business Education. Three hours. I.
Basic qualities of good tests; emphasis placed on construction, analysis, and revision
of tests in business education subjects; attention also given to standardized tests and
uses of test results.

Distributive Education (DED)
DED 460. Organization and Administration of Vocational Distributive Education.
Three hours. I.
Prerequisite: Senior in distributive education.
DUTIES and responsibilities of distributive education teacher-coordinators; facil-
ities, organization, and procedures for establishing distributive education programs.

DED 470. Supervised Work Experience in Distributive Occupations. One hour. A.
Prerequisite: Junior or senior in distributive education.
Work experience in distributive occupations; work stations selected and students
supervised by University faculty-coordinator.

Office Administration (OAD)
OAD 101. Introduction to Business. Three hours. I, II.
Functional areas of business administration; forms of business organization; factors
in the location of an enterprise; risk bearing; and control systems used in business.
For the student who has no background in business.

OAD 115. Beginning Shorthand. Three hours. I, II.
Prerequisite: OAD 151 or its equivalent.
Principles of Gregg shorthand; dictation and transcription. Four hours in class
each week.

OAD 116. Intermediate Shorthand. Three hours. I, II.
Prerequisites: OAD 115 and 152, or their equivalents.
A continuation of OAD 115 with increased emphasis on dictation and transcription,
including the production of mailable business correspondence. Four hours in class
each week.

OAD 151. Beginning Typewriting. Two hours. I, II.
Techniques in keyboard control; skill building practices; knowledge and care of
the machine; personal and business letters; use of carbon paper; tabulating; term
papers and note books. Four hours in class each week.

OAD 152. Intermediate Typewriting. Two hours. I, II.
Prerequisite: OAD 151 or its equivalent.
Continued emphasis on speed and accuracy building; increased emphasis on busi-
ness papers, manuscripts, reports, and tabulation. Four hours in class each week.

OAD 202. Dictation and Transcription. Three hours. I, II.
Prerequisite: OAD 116 and 152.
Continuation of shorthand vocabulary development; improvement of ability to
take dictation and transcribe mailable copy; emphasis on development of skill necessary
to meet occupational standards.
OAD 253. Advanced Typewriting. Two hours. I, II.
Prerequisite: OAD 152, or its equivalent.
Increased emphasis upon advanced typewriting problems. Production typewriting is stressed. Five hours in class each two weeks.

OAD 301. Business Communications. Three hours. I, II.
Prerequisite: Junior standing.
Principles and practices of modern written business communication; various types of business letters and reports are studied; emphasis is on writing letters and reports.

OAD 303. (Formerly 203) Secretarial Practice. Three hours. I, II.
Prerequisite: OAD 116
The course is designed to develop skills for secretarial competency and efficiency. The student is given experience in a variety of specialized secretarial duties typical of those of a professional secretary.

OAD 354. (Formerly 254) Office Machines. Three hours. I, II.
Principles of operation and applications of a variety of office machines.

OAD 400. Business Report Writing. Three hours. I, II.
Basic instruction in formal research reports; principles and practices of report writing; planning and outlining the report; methods of securing data; organizing, analyzing, and interpreting data.

OAD 460. Records Management. Three hours. A.
Creation classification, retention, protection, and disposal of records; filing procedures and equipment; effects of automation on records management; layout of facilities; records personnel administration; emphasis on administrative control of records.

OAD 500. Office Management. Three hours. I, II.
Prerequisites: Senior standing; graduate enrollment on the basis of permission of instructor.
Function and organization of the office; office layout and equipment; office personnel—selection, training, supervision, and compensation; work simplification and control; automation in the office; planning, organizing, and controlling office services; systems and jobs analysis.

OAD 570. Advanced Administrative Office Management. Three hours. A.
Prerequisite: OAD 560 or equivalent or experience in office management.
Investigation of problems in such areas as office systems, systems analysis, work simplification, development of performance standards, forms design, mechanization and automation, work measurement, training programs.

*Any student who has received at least one full unit of high school credit in typewriting will not be permitted to take OAD 151 for credit.

GRADUATE COURSES

BED 600. (Formerly 663.) Principles of Business Education. Two hours. I.
Objectives, principles, curricula, trends, and major problems of business on the secondary level.

BED 610. Improvement of Instruction in Shorthand and Transcription. Two hours. A.

BED 620. Improvement of Instruction in Typewriting and Office Practice. Two hours. I.

BED 630. Improvement of Instruction in Basic Business Subjects. Two hours. A.

BED 640. Improvement of Instruction in Bookkeeping and Accounting. Two hours. II.
BED 650. (Formerly 655.) Administration and Supervision in Business Education. Two hours. A.
Problems in budgeting, layout, equipment, curriculum planning, supervision in business education.

BED 660. (Formerly 664.) Seminar in Business Education. Two hours. II.
Reading and discussion relating to the major current problems in business education.

OAD 600. Business Research and Report Writing. Three hours. II.
Prerequisite: Economics 391 or equivalent.
Nature, scope, and importance of business research; research methodology; principles and mechanics of formal report writing; collection of data and completion of a formal report by each class member. Enrollment is limited to students in the Master of Business Administration Degree program.

DEPARTMENT OF ECONOMICS (ECO)
Donald Shadoan, Chairman; Chrisman, Brizendine, Engle, Hilton, Kemp, Morrow, Sharp, Wuilleumier

The curriculum in Economics is designed to increase the student's understanding of economic principles and to prepare the student for employment in the field of business and economics with privately owned firms and governmental agencies. Also, the program is designed to give the student an adequate background for graduate study.

A major in Economics may be taken by both the student working toward a degree in the College of Business and by the student pursuing a degree in the College of Arts and Sciences. A minor in Economics (non-teaching) is available only for the student pursuing a degree other than in the College of Business. A minor in Economics (teaching) is available to all students pursuing a teaching major.

A student enrolled in the College of Business, majoring in Economics, will take the business core courses and 18 additional hours in Economics which must include the following courses: ECO 597, 593, 550. A student enrolled in the College of Arts and Sciences, majoring in Economics, is required to take 30 hours in Economics which must include the following courses: ECO 230, 231, 324, 593, 597, 550.

A student taking work toward a minor in Economics (non-teaching) is required to take 18 hours in Economics including the following courses: ECO 230, 231, 324, 593, 550.

Students minoring in Economics (teaching) must take a minimum of 18 hours in Economics. Students with majors which require Economics must take at least 18 hours of economics in addition to the Principles of Economics course or courses (ECO 230, 231) required for that major. The following courses are required: ECO 230, 231 and 324. The remaining hours may be selected from the following courses: ECO 260, 333, 432, 492, 550, 597 and 593. Other additional upper division courses may be approved by advisor.

College of Business students must make a grade of "C" or higher in all courses counting toward the major in Economics.
The Department of Economics, in cooperation with the Graduate School and the College of Business, participates in the Master of Business Administration program. A student enrolled in this program may take a concentration in Economics consisting of 12 hours of graduate level Economics courses. In addition, the student is required to take ECO 604. All Economics courses counting toward a concentration in Economics must be selected in consultation with the student’s advisor. A detailed description of this program is presented in the Graduate Catalog.

**ECONOMICS (ECO)**

**ECO 110. American Economic History. Three hours. A.**
This is a general course in American Economic History, which stresses a historical description of trends and events from the European background of Colonial America to the present time. Special emphasis is placed upon modern interpretation regarding economic growth and upon governmental action in the field of economics.
This course will not count toward a major in business or economics.

**ECO 111. European Economic History. Three hours. A.**
A general survey of the economic conditions and activities of Europe from the Middle Ages to the present. Among the topics which will be treated are: the rise and breakdown of feudalism, the industrial revolution, the development of agriculture, industry, finance, and transportation.
This course will not count toward a major in business or economics.

**ECO 230. Principles of Economics I. Three hours. I, II.**
A course in microeconomics: A survey and study of the basic economic principles and their application to the firm operating in a modern economy. A study of the concepts of demand, supply, pricing, resource allocation under various competitive conditions, marginal analysis, government and business, and income distribution.

**ECO 231. Principles of Economics II. Three hours. I, II.**
Prerequisite: ECO 230.
A macroeconomics course: A survey and study of the economic principles as they apply to the American economy. A study of national income, production, employment, the money and banking system, the modern theory of national income, economic growth, inflation and deflation, and the problems of economic stabilization.

**ECO 260. Consumer Economics. Three hours. A.**
The role of consumers in economic life, consumers choice; who guides consumers; freedom of choice; custom-made wants; the profitable practice of fraud; price appeal; making it easy to buy; consumer education; planning expenditures; intelligent buying; cooperative buying; buying protection; buying shelter; buying investments; producer aids to consumers; standards of consumers; governmental aids to consumers.
May not be included toward a BBA degree.

**ECO 324. Money and Banking. Three hours. I, II.**
Prerequisite: ECO 231.
Nature and functions of money; kinds of money; monetary systems; history of banking; functions of the commercial bank; the national banking system; deposits and depositors; bank assets and reserves; loans and discounts; bank supervision; the federal reserve system; central banking policies and practices; monetary and fiscal policies both nationally and internationally.

**ECO 333. Economics of Labor. Three hours. II.**
Prerequisite: ECO 231.
This is a course in the economics of labor relations. Emphasis is placed upon the history of the labor movement, union structure and government, collective bargaining, the economics of the labor market, and governmental regulation and control of labor. Special attention is paid to current problems and issues in the field of labor relations.
ECO 391. Statistical Methods. Three hours. I, II.
Prerequisite: Junior standing.
The course will consider such as the following: frequency distributions; measures of location; measures of variation; probability; theoretical distributions; sampling distribution; problems of estimation; tests of hypotheses; problems of sampling; linear regression; correlation; index numbers; time series analysis.

ECO 394. International Economics. Three hours. I.
Prerequisite: ECO 324.
An introduction to international trade theory, balance of payments, commercial policies and selected international financial institutions. Surveying the problems of the international economy includes: (1) the challenge of the European Common Market; (2) international monetary reform; (3) disruptive effects of the Cold War; and (4) the special problem of the underdeveloped countries. The role of the U. S. is emphasized throughout.

Prerequisite: ECO 231.
A somewhat detailed treatment of such topics as the following: capitalism; utopian forerunners; the Marxian theory of socialism and communism; modern socialism and communism; British socialism; the economy of the Soviet Union; Fascism as existed in Italy and Germany; the Consumers' Cooperative Movement.

ECO 492. Business Cycles. Three hours. II.
Prerequisite: ECO 231.
This course will deal with the following topics: growth, instability, inflation, and change; long-run growth; short-run fluctuations; personal spending and saving decisions; saving and spending in the business sector; government expenditure and tax patterns; the total flow of spending; prices, output, and employment; historical cyclical patterns; business cycle theories; and economic forecasting.

ECO 495. The Economics of Growth and Development. Three hours. II.
Prerequisite: ECO 231.
The measurement of underdevelopment; the international distribution of income; the causes of economic growth; public policy for the promotion of economic growth; theories and development.

ECO 510. History of Economic Thought. Three hours. I.
Prerequisite: ECO 231.
A study of the history of economic ideas from the ancient period to the end of the classical period. Stress is placed on the need for a critical analysis of the meaning, validity, and relevance of economic theories with respect to the social and economic environment of the theorists.

ECO 511. History of Economic Thought Since the Austrian School. Three hours. II.
Prerequisite: ECO 231.
A critical study of economic thought since 1870; forerunners of neoclassical economics; neoclassical thought; American Institutionalists; the Historians; economic aggregates and econometrics; theories of business activities from Mises to the depression of the 1930's; Keynesian and post Keynesian theories; association and planning.

Prerequisite: ECO 231.
A study of the fundamentals of macroeconomic analysis: the classical background; Keynes' objections to classical theory; basic national income concepts; consumption demand and the consumption functions; investment and income determination; interest and money; money wages and prices; employment theory; the development of Keynesian thought and the social philosophy toward which it leads.
ECO 593. (Formerly ECO 493.) Intermediate Economic Theory and Analysis. Three hours. I, II.
Prerequisite: ECO 231.
A development of the leading theories and analyses of value and distribution. Problems and policies of price determination of both the firm and the industry and factor pricing are considered at the intermediate level of analysis.

ECO 597. (Formerly ECO 497.) Private Enterprise and Public Policy. Three hours. I.
Prerequisite: ECO 231.
A study of the principal statutes pertaining to business behavior and their application by agencies and the courts. Specific policies are analyzed from the standpoint of legal and economic concepts and principles underlying them.

**GRADUATE COURSES**

ECO 600. Managerial Economics. Three hours. II.
Prerequisite: ECO 231 or equivalent.
This course deals with the phases of micro and macro economics that are directly relevant to managerial decision-making. The concepts to be considered are: demand, costs, profits, competition, pricing, national income analysis, and economic stabilization. A considerable amount of emphasis will be placed upon the imperfect market conditions facing the decision-maker.

ECO 604. Statistical Methods. Three hours. I.
Prerequisite: ECO 391 or equivalent.
An Intermediate course in statistical methods that deals with the following topics: sampling theory, elementary probability theory, multiple and linear correlation analysis, hypothesis testing, chi-square distribution, analysis of variance, economic forecasting, and non-parametric statistics.

ECO 620. Contemporary Economic Problems. Three hours. A.
Prerequisite: ECO 231 and approval of instructor.
This course deals with the application of economic principles to certain contemporary economic problems such as economic growth, economic stability, taxation, employment, poverty, national debt, gold outflow, monetary and fiscal problems.

Individual direction of research and thesis writing.
College of Education

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Educational Psychology and Guidance ______________321
Elementary Education ________________324
Laboratory School _________________329
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COLLEGE OF EDUCATION

Dixon A. Barr, Dean
Charles H. Gibson, Associate Dean

Eastern Kentucky University has maintained a strong interest in and commitment to the preparation of teachers since its founding in 1906. While teacher education at Eastern is viewed as an all-university function, the College of Education assumes major responsibility for students majoring in elementary education, library science, physical education, public health, recreation, rehabilitation education, school health, and speech pathology and audiology. Freshmen and sophomore students in these academic areas are advised in cooperation with Central University College; upper classmen entering these programs will be assigned an advisor by their department chairman upon admission to the College of Education.

Admission to the College of Education

Admission to the College of Education is based on the following requirements:

1. Completion of a minimum of 60 semester hours of prescribed coursework in the appropriate program in Central University College.

2. Attainment of a cumulative grade point average of 1.8 (on a 4.0 scale) or higher.

TEACHER EDUCATION CURRICULA

The curricula offered by the University have been planned and developed to meet the needs of students who desire to become teachers, principals, supervisors, superintendents, attendance officers in the public schools, guidance counselors, and school librarians. Curricula are offered for the preparation of elementary teachers (options are available for library science, special education and kindergarten teaching); for teachers of the special subjects of art, business, health and physical education, home economics, industrial arts, music, and special education; for teachers of technical and industrial subjects in vocational schools; and for the preparation of secondary school teachers in fields of biology, chemistry, earth science, English, French, geography and geology, German, history, Latin, mathematics, physics, political science, psychology, Russian, social science, sociology, Spanish, speech, and speech and drama. These curricula lead to the Baccalaureate degree and the Master of Arts degree with right of certification.

ADMISSION TO THE TEACHER EDUCATION PROGRAM

Those who plan to work toward a teaching certificate must enroll in Educational Foundations 202, Professional Orientation. This enrollment should be in the Sophomore year. During this course the applica-
tion for the teacher education program will be accomplished. Transfer students who have had a similar course prior to entrance to Eastern should enroll in Educational Foundations 300, Orientation to Teacher Education. This must be done during the first semester of residence. The requirements for admission to the teacher education program are: (a) one semester of residence at Eastern, (b) 2.0 grade-point average in all college work at Eastern, (c) satisfactory recommendations from four faculty members, one of which must be the instructor in Educational Foundations 202 or 300.

When a student has been admitted to the teacher education program, and not until then, he may enroll in the professional education sequence. No student will be enrolled in Educational Foundations 317, Human Development, or subsequent education courses, without an admission card. If, after admission to the teacher education program, a student is placed on either academic or social probation, his application will be reviewed.

CURRICULUM REQUIREMENTS

Each curriculum shall require:
1. an area of concentration, or
2. two majors, or
3. one major and two minors, or
4. one major and one minor when credit in both is 48 semester hours (54 when English is included as a major.)
5. single major of 30 hrs. in approved teaching fields

Note: Effective September 1, 1972, all teaching majors must contain a minimum of 30 semester hours in the subject field and all teaching minors must contain a minimum of 21 semester hours.

SUPERVISED STUDENT TEACHING

Student teaching is done in the campus laboratory school or in affiliated public schools. Students wanting to do student teaching must file an application during the first four weeks of the semester prior to the term in which student teaching is desired.

ADMISSION TO STUDENT TEACHING

A student of senior standing may enroll in student teaching if he has satisfied the following requirements:
1. one semester of residence at Eastern and admission to the teacher education program;
2. completion of all prerequisites in professional education and major teaching field;
3. the recommendation of his major professor;
4. a standing of at least 2.25 grade-point average based on hours attempted at Eastern in his major/minor(s) and in his total program and a grade of not less than a "C" in EDF 202/300 and in EDF 317.

5. meets the generally accepted standards of a professional person relative to health, art of communication, personality, and other characteristics of a good teacher;

6. files an application for student teaching during the first four weeks of the semester prior to the term in which student teaching is desired;

7. has on file a physical examination report.

No student who is pregnant may begin ELE 499, ESH 499, or SED 499, Supervised Student Teaching.

Graduation Requirements

Students completing programs in the College of Education are eligible for the Bachelor of Science degree, except library science majors who are eligible to receive the Bachelor of Arts degree upon satisfactory completion of program requirements. General graduation requirements from the College of Education are as follows:

1. Completion of a minimum of 128 semester hours, 43 of which must be in upper division courses (300, 400 and 500 levels). Thirty of the last 36 hours must be earned in residence at Eastern Kentucky University. Not more than twenty-five per cent of the total credits offered for a degree may be in correspondence and/or extension work. Credits earned by correspondence may be accepted only if approved by the student’s major professor and the Dean of the College of Education.

2. Completion of all coursework on the student’s Planned Curriculum.

3. Attainment of a minimum cumulative grade point average of 2.0 or higher. (Students in teaching curricula are reminded that a 2.25 in overall coursework, in academic major/minors, and a grade of "C" or above in EDF 202/300 and 317 is required for admission to student teaching.)

Secondary education majors (other than those in library science, physical education, school health, and speech pathology and audiology) will follow the prescribed curriculum and requirements of another academic college, as well as the policies for Teacher Education stated elsewhere in this catalog. These students take certain professional education coursework in the College of Education, as well as in their academic college. The College of Education cooperates closely with the other colleges in matters pertaining to the secondary major’s admission to Teacher Education, as well as approval for, assignment to, and supervision of student teaching. The Dean of the College of Education and the appropriate academic dean jointly approve the graduation application for secondary education majors.
Graduate Programs

The College of Education in cooperation with the Graduate School has developed and implemented Master of Arts in Education degree programs for elementary school teachers, guidance counselors, school librarians, special educators, and secondary school teachers of health and physical education. Other graduate programs include a fifth year program for certificate renewal, a sixth year program leading to Rank I certification, the Master of Arts degree in guidance and counseling for non-school personnel, the Specialist in Education degree in educational administration and supervision, elementary education, physical education, school counseling and guidance, student personnel services in higher education, and a joint doctoral program in education (Ed.D. and Ph.D.) with the University of Kentucky. Work leading toward ultimate certification in school administration and/or supervision may be elected, subject to institutional approval, while pursuing the master's degree in a teaching field. Graduate programs leading to the Master of Arts in Education degree have been developed in many secondary teaching fields in cooperation with the College of Applied Arts and Technology, the College of Arts and Sciences, and the College of Business. Specific information regarding these graduate programs is found elsewhere in this publication and in the separate Graduate Catalog.

EDUCATIONAL ADMINISTRATION (EAD)

Henry G. Martin, Chairman; Marcum, Ross, Rush, Stewart

The Department of Educational Administration offers a graduate program of specialization for those students who plan to become school superintendents, supervisors, elementary principals, secondary principals, and school business administrators. In cooperation with the Graduate School, the department offers the following graduate degrees and/or programs:

- Rank I certification (Sixth Year Non-degree Program)
- Certification in 15-semester hour programs
- Specialist in Education Degree
  Educational Administration and Supervision

For additional information regarding these programs, contact the office of the department chairman or consult the Graduate Catalog.

GRADUATE COURSES

EAD 507. (Formerly EDU 507.) Problems in Educational Administration. One to three hours. A.
Prerequisite: Approval of advisor and the chairman of the department.
Independent work, special workshop, special topic, or seminar.

EAD 600. (Formerly Edu 600.) Introduction to Educational Administration. Three hours. I, II.
Study of theories of administration and practices of these theories at the district and community level. Studies of administrative functions and types of school organizations are examined. Research studies which have been completed by state and regional administrative groups make up a large part of the material for the course.

EAD 601. (Formerly EDU 601.) School Personnel Administration. Two hours. A. Principles of personnel administration and their application in obtaining, utilizing, compensating, developing, and separating school personnel.

EAD 602. (Formerly EDU 602.) School Buildings and Grounds. Two hours. A. Emphasis on the cooperative planning of school buildings that will fit the school program as identified by educational specifications. Equipping, furnishing and maintaining the buildings are studied.

EAD 603. (Formerly EDU 603.) School Finance. Two hours. A. Study of the structure of financing schools with specific emphasis placed on the public schools of Kentucky. Stress is given to the role and importance of the administrator’s understanding of the problems, issues, trends and innovations of school finance at all levels of government. New concepts, such as systems analysis, program budgeting, and accountability are emphasized.

EAD 605. (Formerly EDU 605.) School Law. Two hours. A. Principles of school law, constitutional provisions relating to the development and operations of the public and private schools, and the interpretation of statutory law as it pertains to the functions of public schools at the local, state, and federal levels. Interpretation of constitutional and statutory laws pertaining to State Department of Education, retirement, tenure, vocational education, and rehabilitation is particularly stressed and related to the public schools of Kentucky.

EAD 606. (Formerly EDU 606.) The Elementary School Principal. Three hours. II. Prerequisite: EAD 600. Organization and management of the elementary school. Study of the various duties, demands, and responsibilities of the elementary school principal in providing professional and educational leadership.

EAD 607. (Formerly EDU 607.) The Secondary School Principal. Three hours. II. Prerequisite: EAD 600. Organization and management of the secondary school. Study of the various duties, demands, and responsibilities of the secondary school principal in providing professional and educational leadership.

EAD 611. (Formerly EDU 611.) Supervision of Instruction. Three hours. I. Objectives and problems of school supervision; techniques and functions of supervision; current practices in supervision; problems of organizing instruction to meet increasing responsibilities of public schools; analyzing teachers’ difficulties, planning supervisory programs, selecting and organizing instructional materials; techniques for developing desirable professional relations, problems of in-service education for teachers.

EAD 640. The Superintendent. Three hours. A. Exploration of basic issues and trends in the fields of educational administration and supervision. Development and critical analysis of substantive positions on issues and of movements implementing those positions. Designed for graduate students in the Specialist in Education degree programs in educational administration and supervision. (Should be taken during the student’s first nine hours in the Ed.S. program.)

EAD 691. Issues and Trends in Educational Administration and Supervision. Three hours. A.

EAD 697. Independent Study. One to three hours. A. Designed for advanced graduate students who desire to investigate special problems relating to educational administration and/or supervision.

EAD 698. Research Design in Educational Administration and Supervision. Two hours. A. Study of research and investigation in the areas of educational administration and supervision; identification of significant findings and areas of needed study. Includes emphasis on selecting and designing a study leading to the Specialist Project.
EAD 699. Specialist Project. Four hours. A.
Prerequisite: Limited to candidates for the Ed.S. degree.
Designed to guide the Ed.S. candidate in the development of a scholarly project in educational administration or supervision. The project may be one of several types: a field project, a creative study, or more formal types of research and inquiry.

EDUCATIONAL FOUNDATIONS (EDF)
William A. McKenney, Jr., Chairman; Brewer, Collins, Doak, Flesher, R. Grise, Hume, D. Mills, Stull, Woolum.

The Department of Educational Foundations provides instruction in those professional subjects deemed basic to the teacher education student's preparation regardless of his teaching specialty or intended level of school practice. The department offers instruction in a number of related foundational disciplines including human development, educational sociology, educational philosophy, history of education and comparative education.

Graduate instruction in the foundations is provided as a service to all degree programs in Education. Foundations courses contribute to that core of common learnings required of all master's degree programs in Education and in other related fields.

EDF 200. The American Educational System. Two hours. I, II.
Scope, nature, and purposes of education in the United States and how our schools are organized, financed, and conducted. Deals with basic questions which relate to pertinent educational issues. May not be taken for credit by students who have had EDF 202 or 300.

EDF 202. Professional Orientation. Three hours. I, II.
Prerequisite: Sophomore standing.
Acquaints the students with the role of public education and the nature of the teaching profession. He will be guided in analyzing his personal fitness for teaching and in choosing a field. Application is made for admission to the Teacher Education Program.

EDF 300. Orientation to Teacher Education. One hour. I, II.
Required of transfer students who have an introductory education course prior to coming to Eastern. Student will be guided in analyzing his personal fitness for teaching and in choosing a teaching field. Application is made for admission to the Teacher Education Program.

EDF 317. Human Development. Four hours. I, II.
Prerequisite: PSY 211, Biological or Physical Science, admission to the Teacher Education Program.
Physiological, affectional, peer, cultural, and self processes which influence development and learning at all stages from conception to adulthood. Emphasis upon principles of development and learning for children and adolescents with related implications for teacher behavior. Provides laboratory experience of studying one child through time to reveal the impact of these forces upon both groups and individuals.

EDF 507. Problems in Educational Foundations. One to three hours. A.
Prerequisite: Approval of advisor and the chairman of the department.
For independent work, special workshops, a special topic, or seminar.

EDF 516. Child Development Laboratory I. Three hours. A.
Each participant selects a child for study, writes a description of the child and gathers significant data about the child from all available sources of information.
Emphasis is placed upon skills in observation, objectivity in recording, and realism in analysis of causes of behavior. The course, for in-service teachers, continues for the entire school year, and each participant must complete his analysis in a structured summary.

EDF 517. Child Development Laboratory II. Three hours. A.
Continuation of EDF 516, but with added emphasis on procedures for analysis of the dynamics of behavior. A structured framework of six broad areas of factors and processes in child development is employed. The record must be summarized in terms of developmental tasks within these areas.

EDF 518. Child Development Laboratory III. Three hours. A.
A continuation of EDF 517.

EDF 526. Applying Research to Classroom Problems. Two hours. I.
Study and interpretation of recent research for the help it can give in dealing with classroom situations and problems. Class members will be encouraged to focus on situations and problems directly related to their own teaching.

GRADUATE COURSES

EDF 615. Human Development. Three hours. I, II.
Study of the forces which influence personality development and learning, implications for classroom procedures, and the role of the teacher in using these forces to promote optimum development and learning. Each student is expected to choose and conduct intensive research on some problem of interest in the area of human behavior.

EDF 632. History of Education in the United States. Three hours. I, II.
Rise and development of public education in the United States with special emphasis upon the work of Horace Mann; sociological, psychological, and scientific movements in education; desirable education reorganization; the influence of John Dewey; brief study of the development of public education in Kentucky.

EDF 636. Philosophy of Education. Three hours. I, II.
Meaning and scope of philosophy and education; contrasting philosophies and conceptions of education; the nature and meaning of education in relation to the individual and the social order; education and democracy; social progress and social control; the nature of thinking; educational aims and values; subject matter and methodology in relation to the educative process; character education; evaluation and interpretation of present-day issues and problems in education.

EDF 637. Comparative Education. Three hours. I.
Study of the development of educational thought and practice in selected nations of Europe, the Orient, and South America. Emphasis will be placed on intellectual, historical and sociological factors responsible for similarities and differences among the selected systems. Special emphasis will be given to a comparison of American and Communist educational techniques.

EDF 650. Educational Sociology. Three hours. I, II.
Designed to assist the student in becoming aware of the intimate relationship between the culture and the American School. An investigation and analysis of the major social forces and institutions influencing the educational enterprise provide the basic core of the course. More specifically, such factors as cultural change, social control, social stratification, ethnic patterns, and religion are investigated relative to their influence upon the school.

EDF 669. Research in Education. Three hours. I, II.
Fundamental principles of educational research; types of research and the technique of each type; discovering educational problems for study; organization and interpretation of data; preparing and evaluating research reports; class discussions and reading reports.
Required of all candidates for the Master of Arts in Education degree who do not prepare a thesis. This course should be taken as early as possible in the graduate program.

EDF 670. Thesis. One to three hours. A.
Designed for students who are preparing a thesis in partial fulfillment of the requirements for the degree of Master of Arts in Education. If the thesis requirement is waived, EDF 669, Research in Education, is required.

EDF 685. Advanced Research Methodology. Three hours. I.
Prerequisite: EDF 669 or its equivalent.
Theories and models of various research designs in the study of human behavior and the educative process. Appropriate statistical analyses of population and data. Individual proposals may be developed.
Required of all students in Specialist in Education degree programs.

EDUCATIONAL PSYCHOLOGY AND GUIDANCE (EPY & EPG)
Robert Hayes, Chairman; Beardsley, Doane, Snowden, Southwood

The Department of Educational Psychology and Guidance offers graduate programs of specialization for those students who plan to become school counselors, non-school counselors, and student personnel workers in higher education. A program with emphasis in school social work is offered in cooperation with the Department of Anthropology and Sociology. In cooperation with the Graduate School, the department offers the following graduate degrees and/or programs:

Master of Arts in Education Degree
School Guidance and Counseling (Elem. and Sec.)
School Social Work

Master of Arts Degree
Non-School Guidance and Counseling
Student Personnel Services in Higher Education

Rank I Certification (Sixth Year Non-degree Program)

Specialist in Education Degree
School Guidance and Counseling
Student Personnel Services in Higher Education

For additional information regarding these programs, contact the office of the department chairman or consult the Graduate Catalog.

EDUCATIONAL PSYCHOLOGY (EPY)

EPY 320. Educational Psychology. Three hours. II.
Prerequisite: One course in psychology.
Theories and processes of learning, maturation, individual differences, personality, and statistical procedures.

EPY 507. Problems in Educational Psychology and Guidance. One to three hours. A.
Prerequisite: Approval of the advisor and chairman of the department.
Independent study, workshops, special topics, or seminars.
GRADUATE COURSES

EPY 616. (Formerly EPG 616.) Educational Measurement. Three hours. I, II.
Problems of measurement with special emphasis on standardized tests. The construction, uses, and limitations of traditional examinations, marking systems, etc., are also included.

EPY 623. (Formerly EPY 523.) Educational Implications of Learning Theories. Three hours. A.
Prerequisite: One course in psychology.
Examination of contemporary learning theories and their implications for the teaching-learning process.

EPY 624. Individual Appraisal of Intelligence. Three hours. I, II.
Prerequisite: EPY 616 or EPY 642.
Administration and interpretation of individual intelligence tests from preschool through adult levels.

EPY 642. Applied Statistical Methods. Three hours. I, II.
Application of statistical and graphic methods to educational and psychological data.

EPY 652. Advanced Educational Psychology. Three hours. I, II.
Prerequisite: Consent of instructor.
Psychological theories and research applicable to the teaching-learning process.

EPY 654. Mental Health and Personal Adjustment. Three hours. II.
Prerequisite: Consent of instructor.
Introduction to the subject of mental health and its historical evolution; the individual and cultural determinants of behavior are included.

EPY 698. Research Design in Counseling. Two hours. II.
Prerequisite: Approval of chairman of the department.
Research methodologies in counseling. Emphasis is on the design of research and analysis of accumulated data.

EPY 699. Specialist Project. Four hours. A.
Prerequisite: EPY 642, EDF 650 and approval of the chairman of the department.
For graduate students who are engaged in specifically approved research projects in the field of counseling or student personnel services.

GUIDANCE (EPG)

EPG 602. Counseling Psychology. Three hours. II.
Prerequisite: One course in psychology.
An examination of counseling methods and concepts with emphasis on current systems of counseling.

EPG 608. Administration of Pupil Personnel Services. Three hours. A.
Prerequisite: Consent of instructor.
Designed to prepare pupil personnel workers for service in an educational setting.

EPG 613. Introduction to Pupil Personnel Services and Guidance. Three hours. I, II.
Sociological, psychological, and educational foundations of pupil personnel services; history and growth of the guidance movement; function, scope and organization of guidance.

Prerequisite: EPG 613.
Administrative procedures and policies needed in establishing and administering guidance services.

EPG 620. Group Processes. Three hours. I, II.
Psychology of groups, including social influence, leadership, intra-and inter-group behavior.
EPG 622. Occupational and Educational Information. Three hours. I.
Occupational information in educational and vocational planning; theories of vocational choice; sociology of occupations, and interpretation and utilization of current data pertaining to career fields.

EPG 625. Elementary School Guidance. Three hours. II.
Guidance practices for the elementary counselor, teacher, and other personnel, as derived from principles of child development.

EPG 630. Counseling Practicum in the Secondary Schools. Three hours. I.
Prerequisite: Minimum of 20 hours including EPG 613, 640, and approval of instructor.
Practicum student will be assigned, under supervision, to counseling experiences with secondary school students in a secondary school setting.

Prerequisite: Minimum of 20 hours including EPG 613, 640, and approval of instructor.
Practicum student will be assigned, under supervision, to counseling experiences with elementary school students in an elementary school setting.

EPG 634. Counseling Practicum in Higher Education. Three hours. II.
Prerequisite: EPG 640, 644, and approval of instructor.
Practicum student will assist with testing programs, record keeping, and counseling college students; may also be assigned as resident counselor or as Student Activities Counselor.

EPG 636. Counseling Practicum in Community Settings. Three hours. II.
Prerequisite: EPG 640.
Practicum student will be assigned, under supervision, to counseling experiences in a community center, public agency, social welfare center, or other institutional settings.

EPG 640. Counseling Theory and Practice. Three hours. I.
Major theories of counseling. Attention is given to personality structure and individual behavior from which these are derived.

EPG 644. Student Personnel Services in Higher Education. Three hours. I.
A study of student personnel services; emphasis upon relationship of these services to the total college program, research and organization.

EPG 645. Internship in Student Personnel Services. Three hours. II.
Prerequisite: EPG 644.
Supervised experience for student personnel trainees. Opportunity provided to share responsibilities for all phases of student personnel services.

EPG 646. Innovations in Counseling Techniques. Three hours. A.
Includes a consideration of different schools of thought in current counseling practice; how the counselor works; and effective procedures for counseling.

EPG 647. Advanced Counseling Practicum in Elementary Schools. Three hours. I.
Prerequisite: EPG 632.
Supervised practice in counseling with emphasis upon evaluation of counseling with elementary school students.

EPG 648. Internship: Counseling. Three hours. A.
Prerequisite: Six hours in counseling.
On-the-job supervised experience for counselors. Joint supervision by local school directors of guidance and the counselor education staff.

Prerequisite: EPG 630.
Supervised practice in counseling with emphasis upon evaluation of counseling interviews with secondary school students.
EPG 651. Advanced Counseling Practicum in Higher Education. Three hours. II. Prerequisite: EPG 634. Supervised practice in counseling with emphasis upon evaluation of counseling with college students.


ELEMENTARY EDUCATION (ELE)
William A. Morris, Chairman; Barker, Byrne, Chisholm, R. Deane, A. Francis, E. Francis, Gatwood, Hendricks, J. Howard, E. Jeffries, M. Jennings, R. Miller, Peel, Ramsey, Sams, Simmons, A. Stark, Survant, Waldrop.

The Department of Elementary Education has advisory and curricular responsibility for students majoring in elementary education and offers elective courses for other interested students. In cooperation with the Graduate School, the department offers the following graduate degrees and/or programs.

Master of Arts in Education Degree
Elementary Education
Elementary Education-Reading

Rank II certification (Fifth Year Non-degree Program)
Rank I certification (Sixth Year Non-degree Program)
Specialist in Education Degree
Elementary Education

For additional information regarding these programs, contact the office of the department chairman or consult the Graduate Catalog.

Curriculum for a major in Elementary Education. (Teaching.)
The first two years of the curriculum may be found in the Central University College section of this catalog.

Third Year

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Hours</th>
<th>Second Semester</th>
<th>Hours</th>
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<tbody>
<tr>
<td>ART 360</td>
<td>3</td>
<td>ELE 361</td>
<td>3</td>
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<tr>
<td>EDF 317</td>
<td>4</td>
<td>HIS 202 or 203</td>
<td>3</td>
</tr>
<tr>
<td>ENG 350 or 351</td>
<td>3</td>
<td>LIB 301</td>
<td>3</td>
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<tr>
<td>MAT 202 or 204</td>
<td>3</td>
<td>ELE 362</td>
<td>3</td>
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<tr>
<td>MUS 360</td>
<td>3</td>
<td>PHE 322</td>
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<tr>
<td>Geography or Hum., or elective</td>
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<td>16</td>
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<td>17</td>
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</table>
Elementary education majors have available to them dual certification options in kindergarten education, special education, and library science. For curriculum information regarding special education and library science consult the appropriate section of this catalog.

**KINDERGARTEN EDUCATION CURRICULUM**

Endorsement for teaching in kindergarten is available to interested persons who are majoring in elementary education. Completion of the following ten hours—in addition to the regular program for elementary education—is required:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>ELE 517</td>
<td>The Child in Early Education</td>
<td>3</td>
</tr>
<tr>
<td>ELE 519</td>
<td>Teaching in the Kindergarten</td>
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</tr>
<tr>
<td>ELE 520</td>
<td>Practicum in Kindergarten Education</td>
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<tr>
<td>TOTAL</td>
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<td>10</td>
</tr>
</tbody>
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**ELEMENTARY EDUCATION (ELE)**

**ELE 011.** Rapid Reading and Study Skills (Non-credit). I, II.

Designed for improvement in vocabulary development, comprehension and critical reading skills, course includes: how to study effectively (SQR-4 technique), how to budget time, how to listen and take notes, how to build vocabulary, how to prepare for and take examinations, how to become a flexible reader, and how to improve concentration.

**ELE 356.** Social Studies in the Elementary School. Three hours. I, II.

Designed for prospective and in-service elementary school teachers. Attention given to methods and materials in social studies.

**ELE 358.** Language Arts in the Elementary School. Three hours. I, II.

The role of the language arts in the elementary school curriculum. Content will focus upon listening, speaking, spelling, handwriting, and written expression. Attention is not given to the teaching of reading.

**ELE 360.** Teaching of Elementary School Mathematics. Three hours. I, II.

Prerequisites: EDF 317, MAT 201 and 202 or MAT 203 and 204, and admission to Teacher Education Program.

Methods and materials of teaching elementary mathematics; emphasis on discovering and developing fundamental concepts as a foundation for problem-solving; use of modern instructional media in planning and demonstrating lesson plans. Opportunities to observe classes on primary and intermediate levels.

**ELE 361.** Art Education in the Elementary School. Three hours. I, II.

An inquiry into art education as an integral part of the total school experience. Implications for fostering creative growth and development within the child.
ELE 362. Music Education for the Elementary Teacher. Three hours. I, II.
Prerequisite: MUS 360.
Study and appraisal of teaching techniques, music literature, learning activities, curricular plans, and materials essential to the sequential development of musical learning in the elementary school.

ELE 475. Teaching of Elementary School Science. Three hours. I, II.
Prerequisite: 12 hours in general studies science.
Modern materials and methods for elementary science teaching from kindergarten through grade eight. Five discussion-laboratory hours per week.

ELE 498. (Formerly EDU 460.) Fundamentals of Elementary Education. Six hours. I, II.
Prerequisite: EDF 202 or 300, 317, ELE 360, 475, and 550. (SEE SUPERVISED STUDENT TEACHING IN CATALOG.) Taken for the first six weeks of the same semester as ELE 499.
Functional and graduated approach to responsible teaching in the elementary school through study and discussion, directed observation and laboratory experiences involving preparation of teaching materials, and other experiences prior to student teaching.

ELE 499. (Formerly EDU 463.) Supervised Student Teaching. Five to ten hours. I, II.
Prerequisite: ELE 498 (SEE ADMISSION TO STUDENT TEACHING IN CATALOG.)
Observation, participation and responsible classroom teaching along with related professional activities.

ELE 499s. (Formerly EDU 463b.) Laboratory Experiences in Elementary Education. Eight hours. (Offered only in Summer Session.)
Prerequisite: ELE 498.
Designed to meet needs of experienced teachers who have taught on full-time basis for a period of three years on legal certificate and who are qualified under regulations of the State Board of Education to use this course as substitute for any part or all of Student Teaching.

ELE 501. Geography in Education. Three hours. I, II.
Prerequisite: Twelve hours of Social Science or six hours of geography.
Geography in present day school systems from elementary school to university. Special emphasis directed toward course objectives, outlines, problems, evaluation of departments, geographic literature and equipment, and other materials.

ELE 507. Problems in Elementary Education. One to three hours. A.
Prerequisite: Approval of advisor and the chairman of the department.
For independent work, special workshops, special topic, or seminar.

ELE 517. (Formerly ELE 527.) The Child in Early Education. Three hours. I, II.
Focuses specifically on physical, social, psychological, and intellectual development of the child under six and role of the kindergarten teacher in working with young children.

ELE 519. Teaching in the Kindergarten. Three hours. I, II.
Prerequisite: ELE 517.
Content focuses upon the kindergarten movement; organization, equipment, curriculum, and procedures used with children of kindergarten age; leaders and literature of kindergarten education. Opportunity provided for observing and participating in kindergarten.

ELE 520. (Formerly ELE 528) Practicum in Kindergarten Education. Four to eight hours. I, II.
Prerequisite: ELE 519.
Observation and teaching under professional supervision.
ELE 522. (Formerly ELE 520.) Creative Experiences in Childhood Education. Three hours. A.
Designed for prospective and in-service teachers with focus upon the nature of creativity, development of skills used in creative expression; activities which promote creativeness in children and teachers.

ELE 530. The Disadvantaged Child and Urban Elementary Education. Three hours. A.
Exploration of ethnic and family backgrounds, class structure, patterns of living, language characteristics, and teacher-pupil attitudes as they relate to the school experience.

ELE 541. Survey of Elementary Curricular Programs. Three hours. I, II.
Designed for students in physical education, art, or music seeking certification for grades 1-12. Explores elementary curriculum as it meets the need of the child for which the school is responsible. Interrelationship of role of special teachers, problems of individual learners, and function of the entire school-community are examined. Not open to elementary education majors.

ELE 550. (Formerly ELE 554.) Reading in the Elementary School. Three hours. I, II.
Prerequisite: EDF 317, admission to Teacher Education Program.
Methods and materials for teaching reading in the elementary school.

ELE 551. Linguistics in Elementary Education. Three hours. A.
Prerequisites: ELE 550 or 671 or 673.
Investigation of elements in the science of linguistics and their application to communication skills of elementary children.

GRADUATE COURSES

ELE 610. Elementary School Curriculum. Three hours. I, II.
Study in depth of principles, practices, materials, and procedures in current curriculum development and revision in the elementary school.

ELE 663. Social Sciences in Elementary Education. Three hours. A.
Emphasis on social science disciplines in the elementary school programs. New developments in social studies curricula are explored.

ELE 664. Investigations in Language Arts. One to three hours. A.
For students who desire to make a critical study of the investigative and theoretical literature dealing with the teaching of language arts (listening, spelling, handwriting, oral and written expression) in the elementary school. Research in the teaching of reading is not included.

ELE 665. Investigations in Reading. One to three hours. II.
Prerequisite: Permission of the instructor.
Individual research and study of investigative and theoretical literature dealing with teaching of reading in the elementary school.

ELE 666. Investigations in Elementary School Mathematics. One to three hours. II.
For students who desire to make critical study of investigative and theoretical literature dealing with teaching of mathematics in the elementary school.

ELE 667. Investigations in the Teaching of Social Studies. One to three hours. A.
For students who desire to make critical study of investigative and theoretical literature dealing with teaching of social studies.

ELE 668. (Formerly ELE 576.) Techniques and Materials for Remedial Reading. Three hours. II.
Methods, materials and techniques appropriate to the correction of reading difficulties.

ELE 670. Trends in Elementary Science Education. Three hours. I, II.
Exploration of modern trends, practices, and foundation programs drawn from appropriate disciplines which relate to elementary and junior high science teaching.
ELE 671. Reading Improvement in the Primary Grades. Three hours. A.
Intensive study of methods and materials appropriate for developing reading
readiness and for guiding reading instruction in grades K-3. Emphasis upon the
newer approaches and latest research.

ELE 672. Mathematics in Elementary Education. Three hours. I, II.
Exploration of trends, concepts, and issues involved in modern elementary math-
ematics programs. Research findings will be examined and multi-sensory materials
will be presented.

ELE 673. Developmental Reading in the Elementary School. Three hours. I, II.
Advanced study of methods, materials, and organizational procedures appropriate
for teaching developmental reading in the elementary school.

ELE 674. Improvement of Language Arts Instruction in the Elementary School.
Three hours. A.
Examination of current trends and curriculum problems related to teaching of
language arts in the elementary school. Major emphasis on listening, oral and written
expression, spelling and handwriting. Attention is not given to the teaching of reading.

ELE 675. Diagnosis of Reading Problems. Three hours.
Prerequisite: ELE 668 or permission of instructor.
Theory and implementation of diagnostic procedures for the appraisal of reading
problems. Emphasis on assessing quantity and quality of reading disabilities including
psycholinguistic correlates.

ELE 676. Investigations in Elementary School Science. One to three hours. A.
Prerequisite: Permission of the instructor.
Individual research and study of investigative and theoretical literature dealing
with the teaching of science in the elementary school.

ELE 677. Practicum in Remedial Reading. Three hours. A.
Prerequisite: ELE 668 and ELE 675.
Supervised experiences in diagnosis and correction of reading problems.

ELE 678. Practicum in Elementary Mathematics Education. Three hours. A.
Prerequisite: ELE 672.
Practicum experiences in diagnosing children's problems in elementary school
mathematics: observation and limited teaching to correct identified problems.

ELE 691. Issues and Trends in Elementary Education. Three hours. A.
Prerequisite: Permission of the instructor.
Under joint direction by elementary education faculty, this course it to be in-
cluded in the student's first nine hours of specialist degree program. Opportunities
provided for participation in discussion and analysis of critical issues relating to
elementary education.

ELE 697. Independent Study. One to Three hours. I, II.
Primarily for advanced graduate students who desire to investigate special prob-
lems relating to elementary education.

ELE 698. Research Design in Elementary Education. Two hours. A.
A study of research and investigation in the area of specialization: identification
of significant available findings, areas of needed study. Examination of experimental
and research designs, appropriate laboratory methods. Designing a project.

ELE 699. Specialist Project. Four hours. A.
Guided development of a scholarly project appropriate to the student and his
field of specialization. The project may be one of several types: a field project, creation
of media or instructional instruments, or more formal types of research and inquiry.
LABORATORY SCHOOL


The Laboratory School is an integral part of the total teacher education program at Eastern. Three of its major purposes are (1) to provide a quality program of instruction for its own students; (2) to serve as a center for professional laboratory experiences for prospective and in-service teachers, and (3) to provide opportunities for research and experimental programs. Closed-circuit television connects the Laboratory School with the Bert Combs Building where classes in professional education are taught.

The Laboratory School enrolls approximately 700 students with a staff of forty full-time faculty members. It is located in the Donovan Building which was first occupied in 1961. The finest and most recent innovations of school architecture have been incorporated in this splendid building.

Pupils who attend the Laboratory School come from the city and county in the surrounding community. The number of pupils for each grade is limited. Listed below are the tuition fees:

- Nursery school and kindergarten ......................... $90.00 per semester
- Grades 1-12 .................................................... $30.00 per semester

LIBRARY SCIENCE (LIB)

Juanita Phillips, Chairman; Deane, Hatfield

The major purposes of the Library Science program are to prepare school librarians and to provide a foundation for graduate study in the field of Librarianship. Students majoring in Library Science must have a second major in an approved secondary teaching field. Students majoring in Elementary Education may minor in Library Science. In cooperation with the Graduate School, the department offers the following graduate degrees and/or programs:

- Master of Arts in Education Degree with emphasis in Library Science
- Rank II Certification (Fifth Year non-degree Program)
Recommended Curriculum for a Major in Library Science (Teaching)

The first two years of this curriculum may be found in the Central University College section.

**Third Year**

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<th>Second Semester</th>
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**Fourth Year**

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*To be taken in the student's second major teaching field.

Note: Library Science majors desiring 12-grade certification in Librarianship should include ELE 550 (Reading in the Elementary School) and ELE 541 (Survey of Elementary Curriculum Programs) in their programs.

Recommended Curriculum for a Second Major in Library Science (Teaching)

A student desiring a second major in Library Science must complete the following courses: LIB 300, 301, 500, 501, 521, 531, 541, 551, 569 and 563 .............................................31 semester hours

Requirements for a Minor in Library Science, (Teaching): LIB 301, 500, 501, 521, 531, 541, 569 or 551 or 563 .............................................22 semester hours

Note: The Certificate for elementary school librarianship may be validated for the high school or twelve-grade librarianship upon the completion of ESH 498 (Fundamentals of Secondary Education) or a comparable course. The certificate for high school librarianship may be validated for the elementary school or for twelve-grade librarianship upon completion of ELE 541 (Survey or Elementary Curricular Programs) or a comparable course, and ELE 550 (Reading in the Elementary School) or a comparable course.
LIB 125. Instructional Media Fundamentals. I. Three hours. I.
Overview of the instructional media field; sources, selection and cataloging; design principles applicable to instructional media; individual equipment operation and utilization.

LIB 126. Instructional Media Fundamentals II. Three hours. II.
Continuation of LIB 125 with emphasis on the fundamentals of dial-access systems, language laboratories, computer-assisted instruction, and programmed instruction; environmental factors affecting media utilization; reports and record keeping.

LIB 300. Libraries and Librarianship. Three hours. II.
Development of the library as a cultural, fundamental institution of society. School library objectives and standards; the librarian; classroom collections; county and regional library services; understanding of libraries and library work.

LIB 301. Children's Literature and Related Materials. Three hours. I, II.
Prerequisite: GSE 101 and 102; ENG 211 and 212.
For teachers and librarians planning to work with children. Emphasis on library materials to supplement school curriculum and encourage recreational reading grades 1-6. Stresses various types of materials for use by and with children; book selection; reading interests and needs.

LIB 500. Organization and Administration of the School Library. Three hours. I.
Prerequisite: Admission to the Teacher Education Program.
Philosophy, objectives, and administration of the library in the elementary and secondary schools.

LIB 501. Young People's Literature. Three hours. I, II.
For teachers and librarians planning to work with young people. Emphasis placed on library materials to supplement school curriculum and encourage recreational reading in grades 7-12. Stresses reading interests, levels, and needs of young people, including types of adult materials suitable for more mature students and problems of selection.

LIB 502. Reference. Three hours. I, II.
Provides information for satisfactory use of library resources. Stresses essential reference work including dictionaries, encyclopedias, atlases, yearbooks, periodical indexes, and the more important subject and trade bibliographies.

LIB 531. Classification and Cataloging. Three hours. I.
Prerequisite: Skill in typing.
Fundamental principles and methods of classification and cataloging of books and related materials. Attention is centered on classification and cataloging of school library books.

LIB 541. School Library Practice. Three or four hours. I, II.
Prerequisite: LIB 301, 500, 521 or 531.
Library practice is designed to give the trainee practical experience in many phases of school library service including circulation routines, teaching children the use of reference materials, and assisting in the cataloging of new books and materials. Reading guidance, story telling and the organization of unit materials are stressed.

LIB 551. Reading Interests and Advanced Book Selection. Three hours. A.
Role of reading in the educative process; reading habits and interests of groups and individuals; selection of readable materials. Methods of working with children and young adults in the school library; study in depth of titles suitable for children and young adults.

LIB 563. Preparation of Instructional Media. Three hours. II.
Selection and preparation of free and inexpensive materials; displays (boards, bulletin, flannel, magnetic, chalk, posters); graphics (maps, graphs, charts, diagrams); and models.
LIB 569. Instructional Media. Three hours. I, II.
Philosophy and techniques of the effective utilization of instructional media. Emphasis is on slides, tape and disc recordings, films, filmstrips, transparencies, programmed instruction, and the operation of equipment for presenting such media.

GRADUATE COURSES

LIB 605. Advanced Children's Literature. Three hours. A.
Prerequisite: LIB 301 or comparable course.
An advanced course to consider the characteristics of good reading for children; the types and evaluation of the literature; the methods of guidance and use of books and materials for curricular and leisure needs; the correlation of book and nonbook materials. For librarians and teachers.

LIB 607. Problems in Library Science. One to three hours. A.
Prerequisite: Approval of advisor and chairman of the department.
Designed for graduate students who wish to do independent work on a problem in library science, or who wish to enroll in a special workshop or seminar focusing on a particular topic.

LIB 609. History of Books. Three hours. A.
Considers the records of early man, invention of the alphabet, manuscript books, and the making of books from earliest times to the present. Acquaints the student with the techniques and standards for the appraisal of the physical book.

SECONDARY AND HIGHER EDUCATION (ESH)

Joe Wise, Chairman; Arterberry, A. Chase, G. Creamer, R. Henderson, McHone, McLendon, Owens, Randall, Stoess, Vice, Widener

The Department of Secondary and Higher Education has undergraduate curricular responsibility for professional education courses in most secondary subject areas. The department provides for field supervision for secondary student teachers.

The department provides graduate level offerings in curriculum development, higher education, and the Master of Arts in Education degree with emphasis in Secondary Reading. The department cooperates with other academic departments in providing programs toward the Master of Arts in Education degree with emphasis in the subject matter field and non-degree fifth and sixth year programs for secondary teachers.

ESH 365. (Formerly HEC 366.) Methods of Teaching Home Economics. Four hours. II.
Prerequisite: EDF 202 and PSY 211.
Philosophy of home economics education methods of teaching in-school and out-of-school groups; selection, development and use of instructional materials.

ESH 378. (Formerly MUS 378.) Music Education: Principles and Practices in Grades One through Twelve I. Three hours. I.
Prerequisite: Junior standing in music.
Designed to acquaint student with a balanced curriculum in music education in public schools. Emphasis placed on understanding and planning a developmental sequence of musical experiences to assure the sound musical growth of children and youth from kindergarten through the twelfth grade.
ESH 379. (Formerly MUS 379.) Music Education: Principles and Practices in Grades One through Twelve II. Three hours. II.
Prerequisite: ESH 378.
Continuation of ESH 378.

ESH 440. (Formerly ART 461.) Teaching of Art in the Secondary School. Three hours. I, II.
Prerequisite: Open only to senior art students who plan to teach.
Relation of adolescent maturation levels and art experiences; planning for, organization and philosophy of art education in the secondary school.

ESH 441. (Formerly BIO 471.) Teaching of Biology in the Secondary School. Three hours. I, II.
Prerequisite: 24 hours of biology and approval of chairman of department.
Materials and methods in teaching biology in secondary schools; modern approaches to biology; organization, planning, directed observation, execution and evaluation of the classroom and laboratory activities; sources, preparation, and use of biological materials; planning construction, care and use of equipment; conduction of field trips.

ESH 442. (Formerly SPE 463.) Teaching of Speech in the Secondary School. Three hours. I, II.
Prerequisite: Major or minor in speech.
Principles and practice of speech education and its relation to other areas; special attention to content, materials, activities, textbooks, methods evaluation and problems.

ESH 443. (Formerly ENG 463.) Teaching of English in the Secondary School. Three hours. I, II.
Prerequisite: Major or minor in English.
Study of effective methods of introducing composition, grammar, and literature to the secondary school student; special emphasis on programming, lesson planning and evaluating.

ESH 444. (Formerly FRE 463.) Teaching of French in the Secondary School. Three hours. I, II.
Prerequisite: Major or minor in French.
Objectives, content, and methods of teaching French in the secondary schools.

ESH 445. (Formerly GER 463.) Teaching of German in the Secondary School. Three hours. I, II.
Prerequisite: Major or Minor in German.
Objectives, content, and methods of teaching German in secondary schools.

ESH 446. (Formerly LAT 463.) Teaching of Latin in Secondary Schools. Three hours. I.
Objectives, content, and methods of teaching Latin in Secondary Schools.

ESH 447. (Formerly SPA 463.) Teaching of Spanish in the Secondary Schools. Three hours.
Prerequisite: Major in Spanish.
Objectives, content, and methods of teaching Spanish in secondary schools.

ESH 449. (Formerly HIS 466.) Teaching of Social Studies in the Secondary School. Three hours. I, II.
Trends and objectives of the social studies; techniques involved in the learning process; materials, both basic and supplementary, to enrich teaching; various methods of teaching; evaluation of learning processes; understanding of social studies as they develop civic competence and an understanding of social relations.

ESH 450. (Formerly MAT 467). Teaching of Mathematics in the Secondary School. Three hours. I, II.
Prerequisite: Eighteen hours of college mathematics or consent of chairman.
Historical background of the mathematics curriculum; new developments in secondary school mathematics for the modern curriculum; improvement programs for school mathematics; examination of texts and materials; consideration of some of the newer topics, such as sets and bases other than ten.
ESH 451. (Formerly SCI 410.) Teaching of Physical Science in the Secondary School. Three hours. I, II.
Prerequisite: Major or minor in the physical sciences.
Review of fundamentals of chemistry and physics, with emphasis on applications to secondary school teaching of chemistry, physics, and physical science. Emphasis upon techniques that are useful in teaching principles of science in the classroom and in the laboratory. Attention will be given to new concepts in science education.

ESH 452. (Formerly IED 566.) Teaching of Industrial Arts in the Secondary School. Three hours. I, II.
Function and objectives of industrial arts; the industrial arts curriculum; methods of presentation; planning, equipping and organizing the laboratory; instructional materials; evaluation of student achievement.

ESH 453. (Formerly HEC 466.) The Home Economics Curriculum. Three hours. I, II.
Prerequisite: Consent of instructor.
Current trends in organization and content of home economics programs for secondary school students, out-of-school youth, and adults; curriculum planning. Organization and administration of the department. Construction and use of evaluation instruments in home economics.

ESH 454. (Formerly BED 461.) Materials and Methods of Teaching Shorthand. One hour. I, II.
Prerequisite: OAD 116.
Methods, techniques, and devices for teaching shorthand.

ESH 455. (Formerly BED 462.) Materials and Methods in Teaching Bookkeeping. Three hours. I, II.
Prerequisite: OAD 253, ACC 126 or its equivalent, and two courses in Business.
Methods, materials, and techniques used in the teaching of bookkeeping, typing, and the basic business subjects.

ESH 456. (Formerly BED 450.) Special Problems in Business Education. One to three hours.
Prerequisites: Senior standing and permission of department chairman.
Study of significant problems, teaching methods, and research findings in business education; enrollment limited to students in business teacher education.

ESH 457. (Formerly MUS 367.) Instrumental Methods and Materials. Two hours. I, II.
Designed to acquaint the student with the role, objectives and methods of instrumental music in the public schools.

*ESH 458. (Formerly MUS 368.) Choral Methods and Materials. Two hours. I, II.
Designed to acquaint the student with the role, objectives and methods of choral music in the public schools.

ESH 461. (Formerly BED 461.) Methods and Materials in Teaching and Coordinating Distributive Education. Three hours. II.
Prerequisite: DED 460.
Methods, materials and techniques for teaching and coordinating in distributive education programs.

ESH 466. (Formerly PHE 466.) Teaching of Physical Education in the Secondary School. Three hours. I, II.
Theories of play and study of existing play programs; correlation with other subjects; game skills, lesson planning, observation, and demonstration teaching.

ESH 487. (Formerly HEA 487.) Teaching of Health Education in the Secondary School. Three hours. II
Study of the methods, materials, and curriculum design in secondary health education; attention given to characteristics and health needs of secondary students.
ESH 498. (Formerly EDU 462.) Fundamentals of Secondary Education. Three or Six hours. I, II.
Prerequisite: EDF 202 or 300, and 317.
Graduated approach to responsible classroom teaching through experiences in study and discussion, organizing materials, directed observation, laboratory work, and other pre-student teaching experiences.

ESH 499. (Formerly EDU 463.) Supervised Student Teaching. Eight or Ten hours. I, II.
Prerequisite: ESH 498.
Observation, participation, and responsible classroom teaching along with related professional activities.

ESH 499s. (Formerly EDU 463s.) Laboratory Experiences in Secondary Education.
Eight hours. Offered only in Summer Session.
Prerequisite: ESH 498.

ESH 501. (Formerly EDU 501.) The Junior High School. Two hours. A.
Origin, development, and present status of the junior high school movement; the place of the junior high school in the public school system; the aims, purposes, and objectives of the junior high school; evaluation of types of programs; the junior high school plant; library, apparatus, and equipment of the junior high school.

ESH 507. (Formerly EDU 507.) Problems in Secondary Education. One to three hours. A.
Prerequisite: Approval of advisor and the chairman of the department.
Independent work, special workshop, special topic, or seminar.

ESH 574. (Formerly EDU 574.) Teaching Reading in the Secondary School. Three hours. A.
Prerequisite: EDF 317 and admission to Teacher Education Program.
Designed to assist the secondary teacher in teaching reading in the content areas. Includes emphasis on developmental reading, reading skills, (vocabulary development, critical reading, concentration, and study techniques). Attention is given to appraisal of reading abilities, appropriate materials, evaluation, and organization of reading programs at the secondary level.

ESH 575. Advanced Materials and Methods for Modern Biology Teaching. Three hours. A.
Materials and methods of teaching modern biological science at the secondary level. The application of modern learning theories and psychological foundations with their implications for modern science curricula.

GRADUATE COURSES

ESH 612. Curriculum Theory and Development. Three hours. II
Critical study of issues and problems in curriculum development, the rationale underlying major positions of these issues, implications for work at various levels of the educational program, and principles and techniques of curriculum change.

ESH 628. Instructional Television. Three hours. A.
Explainion of television as a teaching tool. Theory and practice of planning the utilization of instructional television programs and courses. Emphasis on the cooperative role of the producer-director. The part of the television-studio teacher and the part of the television-classroom teacher is explored. History of educational television, television research, and the literature in the field are included. Supervised critical viewing of course segments is an integral part of the course.
ESH 663. Secondary School Curriculum. Three hours. II.
Aims of the public secondary schools; plans for evaluating curriculum procedures; qualities of good teaching; procedures of evaluating and improving classroom teaching; methods of making the school a more effective agency.

ESH 680. Organization and Supervision of Student Teaching. Three hours. I.
Prerequisite: Teaching experience.
For school and college personnel concerned with improving student teaching experiences.

ESH 685. Seminar: Problems in the Supervision of Student Teaching. Three hours. A.
Prerequisite: ESH 680 and prior or current experience with student teachers.
Designed to provide opportunity for school and college personnel to explore in depth problems and procedure relating to the supervision of student teaching. Direct experience will be an aspect of the critical study of individual and group problems.

ESH 690. College Teaching. Three hours. II
Designed for students who are teaching or who expect to teach in junior or senior colleges. Critical exploration of the major decisions to be made by the college teacher in the changing scene in higher education. Attention will be given to knowing students as individuals and class groups, planning college courses, practical problems of selecting and guiding learning experiences, using varied instructional media, evaluating student progress.

ESH 691. The Community Junior College. Three hours. A.
Designed for the prospective or in-service junior college teachers or administrators.
Attention will be given to the philosophy, objectives, organization, and operation of community junior colleges. Stress will be placed on the unique role of the junior colleges in American higher education and the rapidly evolving nature of the two-year colleges.

ESH 695. Perspective in Higher Education. Three hours. I.
Origins, evolution, and trends in post-secondary education; the technical school, the junior college movement, the role of public and private colleges and universities in American education. Stress will be placed upon the sociology of higher education.

ESH 696. Theories of College Teaching. Three hours. II.
Prerequisite: ESH 695 or permission of Instructor.
Psychology of college youth; a survey of cognitive and affective systems; the development of a system of Instructional principles; and over view of standardized and classroom evaluation. Direct experience a requirement.

ESH 697. Curriculum in Higher Education. Three hours. II.
Issues, trends, and principles in curriculum development in higher education; the nature, place, and interrelationship of general education and work in fields of specialization. Opportunity for students from various fields to observe and appraise innovative practices, and to project programs of higher education.

ESH 698. Seminar in College Teaching. One hour, I, II.
Topics in higher education. A research paper is required one semester. May be taken concurrently with ESH 699.

ESH 699. Practicum in Higher Education. Three hours, I, II.
Supervised teaching in an acceptable post-secondary school or college.
SPECIAL EDUCATION AND REHABILITATION
(SED & RHB)

Wietse de Hoop, Chairman; H. Eldot, S. Harris, R. Parrish, M. Roberts, M. Thompson, R. White.

The Department of Special Education and Rehabilitation prepares speech pathologists, rehabilitation educators, and special teachers. Programs are offered for teachers of the educable or trainable mentally retarded, for children with behavior disorders (emotionally disturbed) and/or learning disabilities (neurologically impaired), in rehabilitation education, and in speech pathology and audiology. In cooperation with the Graduate School, the department offers the following degree program:

Master of Arts in Education Degree
Special Education

Curriculum for Dual Certification
Special Education and Elementary Education

Endorsement for teaching special education in the areas of mental retardation and behavior disorders and learning disabilities is available to interested persons who are majoring in elementary education. Completion of one of the following fifteen hour programs—in addition to the regular program for elementary education—is required:

Mental Retardation

SED 345. Introduction to Education of Exceptional Children .......... 3 hrs.
SED 360. Speech and Language Development .................................. 3 hrs.
SED 521. Mentally Retarded Children ........................................ 3 hrs.
SED 534. Teaching the Educable Mentally Retarded Child .............. or
SED 535. Teaching the Trainable Mentally Retarded Child .......... 3 hrs.
Electives: SED 522, 523, or 541 ............................................. 3 hrs.
\[15 \text{ hrs.}\]

Behavior Disorders and Learning Disabilities

SED 354. Introduction to Education of Exceptional Children ....... 3 hrs.
SED 360. Speech and Language Development .............................. 3 hrs.
SED 522. Behaviorally Disordered and Socially Deviant Children 3 hrs.
SED 536. Teaching Children with Behavior Disorders and Learning Disabilities .......................................................... 3 hrs.
\[15 \text{ hrs.}\]

All Students

*SED 499. Supervised Student Teaching in Special Education .... 5 hrs.
*Undergraduate students take SED 499 simultaneously with ELE 499 during the professional semester. Students will earn 5 hrs. for each course, ELE 499 and SED 499. Approximately one-half of the supervised student teaching will be done in regular elementary classes; the other half of the student teaching will be done in special classes in the selected area of exceptionality.
Curriculum for a major in Speech Pathology and Audiology (Teaching and Non-Teaching)

The first two years of the curriculum may be found in the Central University College Section.

### Third Year

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### Fourth Year

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**Total:** 15-18

*PSY 301 and PSY 498 are required for the non-teaching majors only.

Curriculum for a major in Rehabilitation Education (RHB) (Non-Teaching)

The first two years of the curriculum may be found in the Central University College section.

### Third Year

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<th>First Semester</th>
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**Total:** 16

### Fourth Year

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**Total:** 16
Minor in Rehabilitation Education

The following courses constitute a minor in Rehabilitation Education:

Rehabilitation Education .......................................................... 12 hours
RHB 300 Introduction to Rehabilitation ....................................... 3 hrs.
RHB 509 Bio-Medical Aspects of Exceptionality ............................. 3 hrs.
RHB 402 Mental Disabilities ...................................................... 3 hrs.
RHB 501 The Rehabilitation Counselor ....................................... 3 hrs.
Restricted Electives ................................................................. 6 hours

Three to six hours within the Department or in related courses to fit the special needs and interests of the student.

SPECIAL EDUCATION (SED)

SED 270. (Formerly SPE 270.) Basic Speech Science. Three hours. II.
Anatomy, physiology, speech and hearing mechanisms.

SED 275. (Formerly SPE 275.) Speech Pathology: A Survey. Three hours. I.
Introduction to the nature and causes of the major disorders of speech.

SED 345. (Formerly SED 545.) Introduction to the Education of Exceptional Children. Three hours. I.
Introduction to the characteristics, problems and educational provisions for children who are exceptional because of mental retardation, giftedness, social or emotional problems, speech defects, defects of vision or hearing, crippling and special health problems or learning disabilities.

SED 360. (CL SPE 360.) Speech and Language Development. Three hours. II.
Normal patterns of speech and language acquisition; application of learning theory and linguistic concepts.

SED 370. (Formerly SPE 370.) Speech Pathology: Disorders of Speech. Three hours. I.
Prerequisite: SED 275.
Principles of diagnosis, and treatment of articulation disorders.

SED 373. (Formerly SPE 373.) Introduction to Speech Therapy. Two hours. II.
Prerequisite: SED 275.
Observation and discussion of therapy. Limited supervised experience.

SED 378. (Formerly SPE 378.) Speech Pathology: Methods and Materials. Two hours. I.
Prerequisite: SED 275.
Procedures of examination for disorders of voice and articulation; interviewing for information; therapy materials for use with children and adults.

SED 380. (Formerly SPE 380.) Introduction to Clinical Audiology. Three hours. II.
A survey of the profession of audiology: study of the principal types of hearing loss; pure-tone testing.

SED 470. (Formerly SPE 470.) Clinical Practice in Speech and Hearing Therapy I. Three hours. I.
Supervised clinical experience in therapy in speech and hearing disorders. Permission of department required.

SED 475. (Formerly SPE 475.) Clinical Practice in Speech and Hearing Therapy II. Three hours. II.
Continuation of SED 470. Supervised clinical experience in therapy of speech and hearing disorders. Permission of department required.
SED 485. (Formerly SED 385.) Audiology. Three hours. I.
Prerequisite: SED 380.
Identification and evaluation of hearing loss. Special diagnostic testing discussed and applied.

SED 499. Supervised Student Teaching in Special Education. Five hours. A.
Observation, participation and teaching in special classes in the selected area of exceptionality.

SED 507. Problems in Special Education. One to three hours. A.
Prerequisite: Approval of advisor and the chairman of the department.
For school-related work, special workshops, special seminars.

SED 521. Mentally Retarded Children. Three hours. I.
Mental retardation as an educational, psychological and social problem. Characteristics, identification, prevalence and educational provisions.

SED 522. Behaviorally Disordered and Socially Deviant Children. Three hours. I.
Definition and description of behavior disorders in childhood including a study of major theoretical bases for child therapy. Concurrent laboratory experiences with individual child therapy and development of case study.

SED 523. Learning Disabilities in Children. Three hours. II.
Definition, description and assessment of learning disabilities in childhood, with an emphasis on current theoretical bases for selecting teaching methods and materials.

SED 534. Teaching the Educable Mentally Retarded. Three hours. II.
Curriculum, methods and materials for teachers of the mildly retarded with emphasis on individual and small group tutoring. Two lecture and two laboratory hours.

SED 535. Teaching the Trainable Mentally Retarded. Three hours. II.
Same as SED 534, for teachers of the severely retarded.

SED 536. Teaching Children with Behavior and Learning Disabilities. Three hours. II.
Academic remediation and therapy for children with behavior and learning disabilities including behavior management techniques and methods and materials for preceptual and conceptual training. Laboratory experiences will consist of individual and small group tutoring. Two lecture and laboratory hours.

SED 541. Behavior Modification of Exceptional Children. Three hours. I.
Directive and non-directive techniques used in educating exceptional children, with emphasis on operant conditioning. Two lecture and two laboratory hours.

SED 560. (Formerly SPE 560). Introduction to Speech Correction. Three hours. II.
Designed to help identify and deal with speech defects. Study of basic types of disorders, emphasis on good environment for the handicapped and sources of specialized help.

SED 565. Seminar: Language Disorders. Three hours. A.
Prerequisite: SED 360 and permission of instructor.
Study of language impairment and principles of remediation.

SED 570. Directed Study in Speech Pathology. One to three hours. A.
Directed projects in speech pathology. Proposal for the project must be submitted one semester in advance. Departmental permission is required.

SED 588. Directed Study in Audiology. One to three hours. A.
Directed projects in audiology. Proposal for the project must be submitted on semester in advance. Departmental permission is required.

SED 587. Aural Rehabilitation. Three hours. I.
Prerequisite: SED 485.
Theory and procedures of speech reading, auditory training and speech improvement.
GRADUATE COURSES

SED 601. Practicum in Special Education. Three hours. A.
A practicum for graduate students who seek certification in an area of special education.

SED 602. (Formerly SED 511.) Psychological Aspects of Exceptional Children. Three hours. I.
Selected psychological aspects of exceptionality. Emphasis is on aspects relevant to the teacher training programs offered. Students select two major and two related aspects acceptable to the major professor.

SED 610. Ecology of the Special Classroom. Three hours. A.
Human interrelationships in, and the impact of the spatial organization of the special classroom. Dyadic interaction as the basis for individualized instruction of exceptional children. Group formation, leaderships, monitoring teacher and student behaviors as an instrument of change. Prosthetic and responsive environments.

SED 615. Administration of Special Education. Three hours. A.
Administration as a catalyst in special education: societal rules and regulations regarding education of exceptional children at the local, state and federal levels, with emphasis on Kentucky’s teacher education certification program. Cooperative programs of special education and rehabilitation education.

SED 625. Psycho-Educational Diagnosis of Exceptional Children, Three hours. A.
Prerequisite: EPY 624.
Identification and psycho-educational diagnosis as the foundation for an educational plan for gifted, sensory impaired, retarded and learning and behavior disordered children. Students will complete psycho-educational diagnosis in each of the areas of exceptionality.

SED 631. Case Studies I: Mental Retardation. Three hours. I.
Methods of identification, diagnosis and characteristics, behavioral management in the total educational setting, teaching methods and materials, the total program of studies, organized into detail, is in the form of case studies performed by the student.

SED 632. Case Studies II: Behavioral Disorders and Learning Disabilities. Three hours. II.
Course description same as SED 631.

SED 685. Independent Project. Three hours. A.
Study of some topic (other than research) which is of interest to the student and to his major professor, and which is of importance to special education in the geographic area, or in general. Topic must provide for considerable investigation and study.

SED 686. Research Project. Three hours. A.
Same as SED 385, but topic must call for an original investigation.

SED 690. (Formerly SED 691.) Foundations of Special Education. Three hours. A.
Study of the defining characteristics of special education and its place in the total of American education and society.

REHABILITATION (RHB)

RHB 300. Introduction to Rehabilitation. Three hours. II.
Nature of disability and disadvantage are discussed. History, philosophy, and current trends in rehabilitation.

RHB 402. Mental Disabilities and Behavior Disorders: Implications for Rehabilitation. Three hours. II.
Survey of various mental disabilities and behavior disorders which entitle an individual to rehabilitation services. Rehabilitation professionals work in mental hospitals, institutions for delinquents and penal institutions is emphasized. Problems of readjustment in home and community, and employment possibilities are discussed.
RHB 451. Problems of Vocational Rehabilitation. Two hours. II.
Provides a survey of the trades, industrial and business careers and the professions with emphasis on implications for disabled individuals.

RHB 501. The Rehabilitation Counselor. Three hours. I.
Opportunities for observing rehabilitation settings and talking with rehabilitation professionals will be provided. Government agencies and private programs at the local, state and federal level are studied.

RHB 502. Practicum. Six hours. II.
Supervised field experiences in rehabilitation. Rehabilitation majors are placed in a field situation of their choice to work under the direct supervision of a rehabilitation counselor or professional worker. Departmental seminar and individual conferences are held weekly to support and evaluate the field experiences.

RHB 509. (Formerly RHB 401 and SED 611) Bio-Medical Aspects of Exceptionality. Three hours. I.
Bio-medical aspects of physical conditions and diseases which are pertinent to special educators, rehabilitation counselors and other educational personnel.

SCHOOL OF HEALTH, PHYSICAL EDUCATION, RECREATION AND ATHLETICS
Ned L. Warren, Director

The School of Health, Physical Education, Recreation and Athletics has undergraduate curricular responsibilities for professional students in health, physical education and recreation as described on the following pages. In addition, the School, in cooperation with the Graduate School and the College of Education, offers the following graduate degrees and/or programs:

Master of Arts in Education Degree
  Physical Education
  School Health

Master of Science Degree
  Physical Education
  Recreation and Park Administration

Rank II Certification (Fifth Year Non-degree Program)
  Physical Education
  School Health

Rank I Certification (Sixth Year Non-degree Program)
  Physical Education

Specialist in Education Degree
  Physical Education
  Physical Education for College Teachers

For additional information regarding these programs, contact the office of the director of the School or consult the Graduate Catalog.
PHYSICAL EDUCATION FOR MEN (PHE)

Fred E. Darling, Chairman; J. Adams, Clardy, D. Combs, Deck, Gentry, Holmes, Hughes, Jennings, Kidd, Lichty, Motley, O. Phillips, Presnell, Strong.

The curricular offerings in physical education from which men students may choose a program and the requirements for each are as follows:

A Single Major in Physical Education with Right of Secondary School Teaching Certificate. A minimum of 30 semester hours in physical education courses is required including PHE 125, 215, 216, 300, 320, 325, 326, 367, 368, 400, 562, 568, 575, and 4 hours chosen from PHE 261, 360, 361, 362, 410, 420, 440. Additional elective requirements are programmed in consultation with the major advisor.

A Single Major in Physical Education with Right of Elementary and Secondary School Teaching Certificate. To meet the requirements for this curriculum a student must complete the single major given above and also PHE 322 and ELE 541.

A Non-Teaching Major in Physical Education. The course requirements are the same as the single teaching major. Students electing this option must complete an area major or a major minor curriculum.

An Area Major in Health, Physical Education, and Recreation with Right of Secondary School Teaching Certificate. A minimum of 48 semester hours is required including HEA 202, 3 hours HEA elective, REC 201, 3 hours REC elective, PHE 410, and the courses required for the single teaching major. Elementary School Certification requirements may be met by completing PHE 322 and ELE 541.

A Corrective Therapy Emphasis in combination with a physical education teaching major. To meet the requirements for this curriculum a student must complete the single teaching major listed above and REC 511, RHB 509, and RHB 402. Also, students electing this option will be required to spend ½ of their student teaching assignment in clinical work experience at the Veterans Administration Hospital in Lexington.


PHYSICAL EDUCATION FOR MEN (PHE)

Curriculum for an area in Health, Physical Education and Recreation (Teaching)—Men. The first two years of this curriculum may be found in the Central University College Section.
### Third Year

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### Fourth Year

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*These courses (PHE 322 and ELE 541) are required only for those students desiring both elementary and secondary certification.

Curriculum for a major in Physical Education (teaching and non-teaching)—Men. The first two years of this curriculum may be found in the Central University College Section.

### Third Year

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</tbody>
</table>

*These courses (PHE 322 and ELE 541) are required only for those students desiring both elementary and secondary certification.

**PHYSICAL EDUCATION FOR WOMEN (PHE)**

Ann Uhlir, Chairman; D. Harkins, Jinks, Kirkpatrick, Maupin, Mullins, Polvino, Stanalond, Welch.
A woman may take a single major in Physical Education with right of teaching certificate by completing a minimum of 36 semester hours in physical education. She may take an area in Health, Physical Education and Recreation with right of teaching certificate by completing a minimum of 48 semester hours in these three disciplines. A woman may minor in Physical Education by completing a minimum of 21 semester hours. These hours must be taken as described by the course sequences and curricular blocks for these majors.

Curriculum for a major in Physical Education (teaching and non-teaching)—Women.

PHE 125, 207, 208, 241, 300, 310, 311, 320, 322, 325, 326, 340 or 341, 345, 365, 380 or 381, 510, 568, 575.

Curriculum for an area in Health, Physical Education and Recreation (teaching)—Women.

PHE 125, 207, 208, 241, 300, 310, 311, 320, 322, 325, 326, 340, or 341, 345, 365, 380 or 381, 510, 562, 568, 575.

REC Two courses from REC 102, 201, 303, 410, 466, 506, 511.

HEA 202, and one course from HEA 345, 365, 375, 380, 421, 500, 510, 546.

Curriculum for a minor in Physical Education (teaching and non-teaching)—Women.

PHE 125, 207, 208, 241 or 341, 300, 310, 345, 365, 380 or 381, 510, 575.

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**PHYSICAL EDUCATION FOR WOMEN (PHE)**

Curriculum for an area in Health, Physical Education and Recreation (teaching)—Women. The first two years of this curriculum may be found in the Central University College Section.

### Third Year

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Curriculum for a major in Physical Education (teaching and non-teaching)—Women. The first two years of this curriculum may be found in the Central University College Section.

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**PHYSICAL EDUCATION (PHE)**

PHE 125. Introduction to Physical Education. Two hours. I, II.
Orientation to the profession. Includes philosophy, aim, objectives, scope, interdisciplinary bases, current problems, professional leadership, publication, and career opportunities.

PHE 207. Field Hockey, Soccer and Volleyball for Women. Two hours. I.
Rules, basic skills, strategy, and teaching techniques related to field hockey, soccer and volleyball for women.

PHE 208. Basketball, Softball, Track and Field for Women. Two hours. II.
Rules, basic skills, strategy and teaching techniques related to basketball, softball, track and field for women.

PHE 215. Skills and Physical Education Activities (Men). Two hours. I, II.
Study and practice of various skills required for participation in a variety of individual and team sports.

PHE 216. Skills in Physical Education Activities (Men). Two hours. I, II.
Continuation of Physical Education 215.

PHE 241. Swimming and Diving. One hour. I, II.
Prerequisite: GSP 180 or 181 Swimming or permission of the instructor.
Introduction to and fundamentals of basic swimming strokes, elementary diving, and self preservation.

PHE 261. Coaching Baseball. Two hours. I, II.
Theory and practice in coaching the fundamentals of baseball; team offense and defense.

PHE 300. Social, Folk, and Square Dance. Two hours. I, II.
Presentation of American and international folk dances, and American ballroom dances. Understanding of basic terms; interpretation and appreciation of customs, traditions, and origins of other peoples; and techniques of leading or directing social dance activities.
PHE 310. Tennis, Badminton, and Recreational Sports for Women. Two hours. I, II.
Rules, skills, etiquette, strategy, and officiating relating to life-time sports with emphasis on tennis, badminton and selected recreational sports.

PHE 311. Bowling, Archery, and Golf for Women. Two hours. I, II.
Rules, skills, etiquette, and strategy relating to individual and dual sports with emphasis on bowling, archery, and golf.

PHE 320. Kinesiology. Two hours. I, II.
Prerequisite: BIO 301.
Study of human movement through anatomical, physiological and biomechanical concepts.

PHE 322. Physical Education in the Elementary School (Grades 1-6). Two hours. I, II.
Theory and practice in the conduct of physical education for children in the elementary grades. Four laboratory hours.

PHE 325. Physiology of Activity. Three hours. I, II.
Prerequisite: BIO 301.
Effects of physical education activities on the various systems of the human body. Principles and approaches to physical conditioning will be studied. Two lecture hours and two laboratory hours.

PHE 326. History and Principles of Physical Education. Three hours. I, II.
Prerequisites: GSS 246 and GSS 247.
Designed to develop understanding of the principles of a good physical education program. Contributions of historical programs to present day programs studied and evaluated.

PHE 340. Advanced Swimming and Water Leadership. Two hours. II.
Prerequisite: GSP 180 (Swimming or equivalent). Waived if student can pass skill test.
Emphasizes advanced skills and water safety, proper conduct of competitive swimming meets, pool management, lifeguarding and pool filtration. Red Cross Instructors (WSI) rating given to those who qualify.

PHE 341. Speed and Synchronized Swimming. One hour, I, II.
Prerequisite: PHE 241 or permission of the instructor.
Introduction to and fundamentals of synchronized swimming, speed swimming, and conduct of competitive swimming events.

PHE 345. Fundamentals of Creative Movement. Two hours. I, II.
Introduction to modern dance and fundamentals of movement and rhythm.

PHE 350. Dance Production and Workshop I & II. One-half hour. I, II.
Prerequisite: Consent of the instructor.
May be repeated once for credit.
Opportunities for preparation, production and performance of individual and group modern dance compositions, culminating in a concert presentation. Three or more hours of rehearsal per week.

PHE 360. Coaching Basketball. Two hours. I, II.
Theory and practice in coaching the fundamentals of basketball; team offense and defense.

PHE 361. Sports Officiating. Two hours. I, II.
Theory and practice of officiating sports and games. Emphasis placed on studying and interpreting rules, and techniques of officiating. One hour lecture, two hours laboratory.

PHE 362. Coaching Track and Field. Two hours. II.
Theory and practice in coaching fundamentals involved in track and field.
PHE 365. Gymnastics for Women. Two hours. I, II.
Fundamentals of stunts and tumbling leading to instruction in events for women's
competitive gymnastics: free exercise, vaulting, uneven bars, balance beam, and
trampoline.

PHE 367. Basic Tumbling and Apparatus Activities. One hour. I, II.
Exercises and stunts upon the horizontal bar, parallel bars, trampoline, long horse,
and horse with pommels for the prospective tumbling, and apparatus teacher. Safety
methods, squad procedures, and pupil leadership stressed.

PHE 368. Advanced Tumbling and Apparatus Activities. One hour. I, II.
Continuation of PHE 367 with emphasis on series exercises on the mats, trampoline,
parallel bars, horse with pommels, and horizontal bar.

PHE 370. Practicum in Physical Education.
Prerequisite: PHE 207.
Techniques and skills of officiating, structure of officiating within girl's and
women's sports, and relationship between performance, behavior, and the official's
duties with emphasis on officiating field hockey and volleyball.

PHE 380. Officiating Team Sports I (Women). One hour. I.
Prerequisite: PHE 208.
Continuation of PHE 380 with emphasis on techniques and skills of officiating
basketball and track and field.

PHE 400. Organization of School Recreation Activities. Three hours. I, II.
Problems related to directing recreational activities within a school system. Two
hours of laboratory assigned each student.

PHE 410. Care and Prevention of Athletic Injuries. Two hours. I.
Problems of athletic injuries as they concern the coach. Discussion, demonstration
and practical experiences in the care and prevention of athletic injuries.

PHE 420. Coaching Football. Two hours, I, II.
Theory and practice in coaching the fundamentals of football; team offense and
defense.

PHE 440. Coaching Swimming and Diving. Two hours. I, II.
Prerequisite: PHE 340 or equivalent.
Designed to develop a body of knowledge concerning philosophy, rules, strategy,
mechanics, and organization involved in developing and administering swimming and
diving programs.

PHE 498. Supervised Field Training

PHE 510. Non-Class Curricular Physical Education Activities for Women. Two
hours. I, II.
Policies, principles and philosophy of participation in physical education programs
for women. Attention given to intramurals, extramurals, sports days, play days, girls
athletic and recreation associations, coaching women's sports, and administration of
women's sports programs.

PHE 521. Developmental Physical Education. Three hours. A.
Prerequisite: EDF 317 or equivalent.
Developmental movement activities which are basic to readiness for performance
at school—techniques of movement experiences and activities aimed at the prevention
or ameliorating of learning disabilities.

PHE 550. Advanced Dance Production and Workshop I & II. One-half hour. I, II.
Prerequisite: Consent of the Instructor.
May be repeated once for credit.
Opportunities for directing the preparation, production, and performance of dance
compositions culminating in a concert presentation. Three or more hours per week.
PHE 554. (Formerly PHE 354). Modern Dance Technique and Choreography. Two hours. I, II. 
Prerequisite: PHE 345. Modern dance technique, improvisation, choreography and production.

PHE 562. Physical Education for the Exceptional Individual. Two hours. I, II. 
Prerequisite: PHE 320 and 325. Principles and practices of adapted physical education emphasizing nature, needs, and abilities of exceptional persons. Activities are modified to provide a program for these individuals.

PHE 568. Administration and Organization of Physical Education. Two hours. I, II. 
Policies and procedures of administration on the elementary and secondary school level. Emphasis on construction and care of facilities, equipment and supervision of personnel.

PHE 575. Tests and Measurements in Physical Education. Three hours, I, II. 
Administration and scoring of tests; evaluation and use of results obtained.

PHE 590. Workshop in Physical Education. One to four hours. A. (This course may be repeated but credit will not be awarded for two workshops by the same sub-title.) Identification and study of significant problems, teaching methods, research findings, evaluation techniques and the use of appropriate demonstrations and participation important to the improvement of teaching.

PHE 596. Workshop for Elementary Teachers in Physical Education Activities. Three hours. A. Comprehensive review of techniques used in teaching physical education in the elementary grades. Emphasis placed on health evaluation, fitness testing, rhythmical activities, game activities, tumbling and self-testing activities.

GRADUATE COURSES

PHE 620. Administration of Physical Education. Three hours. I. 
Procedures, policies, and problems relating to administrative functions of physical education administration. Topical areas include program, facilities and equipment, public relations, personnel, finances and supervision.

PHE 621. Physiological Bases of Physical Fitness. Three hours. I. 
Effects of chronic exercise on neuro-muscular, respiratory, and metabolic function.

PHE 622. Sociology of Sport. Three hours. II. 
Meaning of sport in contemporary societies and the impact of social order on development of attitudes about and promotion of amateur and professional sports.

PHE 623. Professional Preparation in Health, Physical Education and Recreation. Three hours. II. 
Study of undergraduate curricula designed to prepare health, physical education, and recreation specialists with attention to curriculum development, recruitment, selective admission and retention, certification, placement, and follow-up procedures.

PHE 624. Contemporary and Comparative Physical Education. Three hours. II. 
Current trends in physical education resulting from political, sociological, and religious implications of various cultures of man.

PHE 630. Analysis of Human Motion. Three hours. II. 
A study of anatomical and physical laws that govern human motion using research findings as bases for accurate and up-to-date analysis of motor skills.
PHE 649. Philosophical Bases of Physical Education. Three hours. I.
Development of philosophical approaches to physical education with an aim for discovering underlying principles on which physical education is based. Readings and discussion will relate to philosophical interpretations on questions of learning, curriculum, and administration, evaluation, and values.

PHE 650. Curriculum Designs in Physical Education. Three hours. I.
Problems relating to design of programs in physical education. Curriculum project developed by each student.

PHE 651. Equipment and Facilities in Physical Education. Two hours. I.
Problems relating to the programming of equipment and facilities. Visits to and evaluation of surrounding facilities.

PHE 652. Motor Learning and Performance. Three hours. II.
Physiological and psychological factors relating to the learning of motor skills.

PHE 662. Adapted Physical Education. Three hours. II.
Basic principles of a good adapted program for handicapped students. A project will be required of each student.

PHE 669. Organization and Administration of Athletics. Three hours. A.
Administrative problems of high school and college athletics. Considers staff, program, budget, safety, insurance, facilities, and other phases of administration.

PHE 675. Seminar in Physical Education. Three hours. II.
Designed for research and discussion of critical questions in physical education. Issues to be selected will vary according to the concerns of seminar students.

PHE 689. Interpretation of Data in Physical Education. Three hours. II.
Statistical interpretation of physical education data. Written reports using statistics required.

PHE 691. Issues in Physical Education. Three hours. I.
Exploration of critical issues independently using resources and techniques appropriate for gathering supportive evidence and developing substantive positions. Written and oral presentations are required.

PHE 695. Advanced Testing and Evaluation in Health and Physical Education. Three hours. I.
Prerequisite: PHE 575, 680, or permission of the Instructor.
Comparative statistics, construction of measurement instruments, and evaluation techniques applied to health and physical education.

PHE 697. Thesis. Three or six hours. A.
Designed for students preparing a thesis in partial fulfillment of the requirements for masters degree programs.
May be repeated for a maximum of 6 hours.

PHE 698. Research Design in Physical Education. Two hours. I.
Introduction to physical education research including examination of experimental research designs, laboratory methods, execution and reporting. Delimitation of research problems and presentation of thesis plans will be central to the course.

PHE 699. Specialist Project. Four hours. I, II.
Open only to Specialist Degree candidates.
Designed to guide the student in his development of a scholarly project—a field project, a creative study, or more formal types of research and inquiry.
RECREATION AND PARK ADMINISTRATION (REC)
James McChesney, Acting Chairman; Baechtold, Manley, Nieland.

This program is designed to develop competencies needed for administration, supervision, and leadership of recreation services. It focuses upon planning, conducting, and administering recreation programs in a variety of settings.

During the second or third year, students may elect any one of the optional emphases in which they have an interest. Most students who have an interest in recreation will concentrate on the Recreation Program emphasis. However, students who have special interests, needs, or strengths in a particular recreation setting may concentrate more fully in their preparation for employment by electing any of the following special emphases:

Recreation Programming, Camping and Outdoor Recreation, Recreation and Park Administration, Therapeutic Recreation, School-Community Recreation, Voluntary Youth Serving Agencies.

Curriculum for a major in Recreation and Park Administration (non-teaching). The first two years of this curriculum may be found in the Central University College Section.

Curriculum for a major in Recreation and Park Administration
REC 100, 102, 163, 201, 263, 410, 463, 464, 466, 501; 2-3 hours electives from REC 303, 305, 506, 511, 516, 520; POL 320; PSY 211; IED 326, SPE 100, 220; PHE 215 and 216, (women 207 and 208), 241, 300, 322, 400, (women 510), and HEA 202; and Electives (men) 14 hours; Electives (women) 18 hours.

Curriculum for a minor in Recreation and Park Administration
REC 100, 102, 201, 410, 501; and 3 hours elective from PHE 215, 216, (207 and 208 women), 241, 300, 322, 400, (510 women); IED 326; SPE 100; REC 303, 305, 506, 511, 516, 521.

**Third Year**

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**Total Hours:** 15-16

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**Notes:**
- Women may substitute PHE 207 and 208 for PHE 215 and 216.
- Electives may be chosen from the courses listed or from other appropriate courses.

ASSOCIATE OF ARTS DEGREE IN RECREATION SUPERVISION (REC)

This terminal two-year Associate of Arts Degree in Recreation Supervision is designed to prepare students as recreation technicians and supervisors in a variety of recreation positions. If at the end of two years a student desires to continue his college education and is academically eligible, he may enter the four-year program.

ASSOCIATE OF ARTS DEGREE
Major in Recreation Supervision
Two Year Curriculum

First Year

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17

Second Year

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13-16
RECREATION AND PARK ADMINISTRATION (REC)

REC 100. Introduction to Recreation. Three hours. I, II.
Designed as an introduction to the recreation profession. Nature of recreation and the individual, influence of leisure, recreation philosophy, and employment possibilities.

REC 163. Field Training I. One hour. I, II.
Orientation of the recreation major to the profession through observation and practical experiences in a recreation setting.

REC 201. Camp Counseling. Three hours. I, II.

REC 202. Recreation Leadership. Three hours. I, II.
Techniques of leadership in working with individuals and groups in various recreation settings. Methods of organization, guidance and supervision of program activities and laboratory experience.

REC 262. Field Training II. One hour. I, II.
Students are assigned to a recreation agency and required to plan, lead or direct various activities requiring recreation leadership skills.

REC 303. Private and Voluntary Agency Recreation. Three hours. II.
Comprehensive study of recreation services and objectives. Visits to observe programs in action. Agency representatives lecture.

REC 305. Recreation for the Aging. Two hours. I.
Leisure problems of aging citizens, leadership, modification of program activities, trends and developments in geriatrics planning, use of community resources, club organization, facilities, and financing of operation.

REC 410. Community Centers and Recreation-Parks. Three hours. I, II.
Comprehensive study of facilities, equipment, leadership techniques, and programs at community centers and playgrounds.

REC 463. Professional Field Experiences. Eight hours. I, II.
Students work in a recreation agency to observe and conduct activities. Through this training the student has the opportunity to test concepts developed in his regular class work and to develop competencies essential to successful professional recreation leadership.

REC 464. Advanced Leadership Techniques. One hour. I, II.
Review of the leadership techniques used during field experience. Students demonstrate and practice leadership techniques with groups and individuals.

REC 466. The Recreation Program. Two hours. I, II.
Comprehensive course in recreation program planning and development. Students plan a one-year program.

REC 501. Recreation and Park Administration. Three hours. I.
Community organization, administrative practices, legal aspects, recruiting, selecting leaders, personnel practice, and public relations.

REC 506. Planning, Design, and Maintenance of Recreation Facilities. Three hours. II.
Planning principles and procedures of recreation and park areas. Facilities, design problems, details of structure and equipment, master planning methods, study of standards and trends.
REC 511. Therapeutic Recreation. Three hours. I.  
Prerequisite: Approval of the instructor.  
Terminology and programming of a therapeutic setting. Modification of leadership techniques and activities adaptation for the ill and handicapped. Field trips to observe programs.

REC 516. School Camping and Environmental Education. Three hours. A.  
Philosophy, policies, and procedures of organizing and conducting a school-sponsored camping program. Major emphasis is placed on use of natural resources in outdoor education, ecology, and environment.

REC 521. Camp Administration. Three hours. A.  
Camp organization, business management, staffing, and program administration for different types of camps. Selection and development of camp sites.

REC 615. Practicum in Recreation. One-three hours. A.  
Supervised practical work experience in a clinical or administrative setting.

REC 620. Administration of Activity Therapy. Three hours. A.  
Concerned with administration as applied to activity therapy service within federal, state, local and private facilities in institutions and agencies dealing with rehabilitation. Emphasis placed on administration, concepts and the use of management principles in a therapeutic setting.

REC 625. Philosophy and Trends in Recreation and Leisure. Three hours. A.  
The changing environment, significance of leisure in American life, theories and concepts of recreation and leisure, education for the arts of leisure, and recreational use of leisure.

REC 635. Park Management and Operation. Three hours. A.  
Management principles and techniques as related to park areas, facilities, personnel, and finance. Problems and solutions with emphasis on current practices and trends.

REC 640. Administrative Processes and Practices. Three hours. A.  
Principles and concepts of administration. An in-depth investigation of budgeting, policy formulation, and legislative provisions.

REC 645. Seminar: Problems in Recreation. One-four hours. A.  
An extensive collection and analysis of data concerning issues, trends, or problems that should be solved by the profession.

REC 670. Thesis. Six hours. A.

SCHOOL AND PUBLIC HEALTH (HEA)

Herman S. Bush, Chairman; Baugh, Copes, Costigan, F. Francis, Harper, Harville, Hissom, Hood, Ison, King, J. Murray, Plummer, Ramsdell, Shannon.

The purposes of the Department of School and Public Health are to prepare school health educators, community health educators, or environmental health specialists. Students may pursue a major in any of the three curricula and may seek a minor in school health. School health majors must acquire a minor in another teaching field. Students pursuing a public health major with a community health education emphasis are encouraged to minor in psychology or sociology. For public health educators specializing in environmental health, a minor in agriculture, biology or chemistry is strongly recommended. The first two years of these curricula may be found in the Central University College section of this catalog.
Curriculum for a major in school health (Teaching)

Required: HEA 290 and 450. (6 hours)
Electives: HEA 202, 315, 345, 365, 375, 380, 421, 498, 500, 546, 575, 590, SOC 335, and NFA 201. (24 hours)

Curriculum for a minor in school health (Teaching)

Required: HEA 290. (3 hours).
Electives: HEA 202, 315, 345, 375, 380, 421, 450, 500, 546, 575, 590, and NFA 201. (18 hours)

Curriculum for a major in public health (Non-teaching)

Required: HEA 290, 315, 320, 360, 416, 450, 455, 463 and BIO 221. (31 hours)
Electives: HEA 202, 345, 365, 375, 380, 498, 590, AGR 243, 313, 314, SPE 100, JOU 200, BIO 211, 301, 378, PSY 211, SOC 231, PLA 220, 221, and NFA 201. (5 hours)

SCHOOL HEALTH

Third Year

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Fourth Year

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PUBLIC HEALTH

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Fourth Year

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HEA 202. (Formerly HEA 202 and HEA 325) Safety and First Aid. Two hours. I, II.
Accident problems in the home, on the highways, at school and at work. Instruction
in meeting emergencies associated with breathing, bleeding, poisons, burns, and shock.
The Standard Red Cross Certification is awarded upon successful completion of
the course.

HEA 290. (Formerly 300) Foundations of School and Public Health. Three
hours. II.
Historical development of school and public health programs. Discussion of health
principles and concepts to assist the student in attaining a sound and realistic
philosophy of health and health education. A broad view of school and public health
programs as they exist today.

HEA 315. Community Health Problems. Three hours. I.
Opportunities of the community to seek solutions to major health problems. Official
and voluntary health agencies at the local, state, national and international
levels and their roles in health care.

HEA 320. Environmental Health. Three hours. I.
Elements of environmental health including water and waste treatment, air pol-
lution, food and milk sanitation, vector control, solid waste and general sanitation
problems.

HEA 325. Environmental Health, Foods, and Nutrition. Three hours. I.
Biophysical and psychosocial aspects of family living. Development of a whole-
some attitude and sound values system towards sexuality and family living. Emphasis
on curriculum content and developing teaching aspects of family health.
HEA 380. Mental Health Education. Three hours. II.
Basic needs for mental and emotional wellness. Emphasis on curriculum content and teaching aspects of mental health, and a more thorough understanding by the teacher of mental health regarding student behavior.

HEA 416. Public Health Administration and Laws. Three hours. II.
Consideration given to organizational theory, decision making, leadership, and principles of personnel and fiscal control. Includes interpretation of state and local health laws, ordinances, and regulations.

HEA 421. Control and Prevention of Disease. Three hours. I.
Prevalence, causes, dissemination, and means of preventing disease. Consideration is given to chronic, degenerative and communicable diseases.

HEA 450. Interpretation of Health Data. Three hours. II.
Understanding of graphical, statistical and research techniques used in health. Developing competencies in analyzing and interpreting research results.

HEA 455. Epidemiology. Three hours. II.
Prerequisite: Biology 221 (Microbiology).
Factors that affect the occurrence and course of diseases—causative agents, susceptible hosts, favorable environments, and the effective use of epidemiological methods.

HEA 460. Environmental Health Control

HEA 463. Field Training in Public Health. Six hours. II.
Offered cooperatively with the Kentucky State Department of Health to seniors and consists of actual field experience and training in local and state public health work.

HEA 498. Independent Study. One to three hours. I, II.
Prerequisite: Consent of Department chairman.
Opportunity for individual work on a health problem in a supervised situation. Restricted to students who have demonstrated ability in carrying on individual research.

HEA 500. The School Health Program. Three hours. A.
Organizational patterns necessary for an efficient, well-coordinated health program. The interrelated roles of health services, health instruction and healthful school living. Attention given to the role of the school health coordinator.

HEA 546. School Health Screening Services. Three hours. A.
Explores need for school health screening services. Class members develop ability to screen students in the following areas: height, weight, posture, vision, hearing, and nutrition. A proposal for a comprehensive school health services program is developed.

HEA 575. Evaluation in School Health Education. Three hours. A.
Familiarization with standardized and teacher-made instruments designed to evaluate health knowledge, attitudes and practices of students. Tests are constructed, administered and analyzed by class members.

HEA 590. School and Community Health Workshop. Three hours. A.
Utilization of lectures, field trips, films, health demonstrations and group interactions to study health concerns of the school and community.

GRADUATE COURSES

HEA 620. Utilization of Health Resources. Three hours. A.
Various facets of the problems faced by the consumers of health-related products and the intelligent use of available community health resources. Attention given to quackery and misconceptions as they relate to consumer health services.
HEA 650. Curriculum Improvement in School Health Education. Three hours. A. Current practices in elementary and secondary school health programs, an evaluation of health courses of study and textbooks, a study of student health interests and needs, and a determination of the scope of health instruction at the various grade levels.

HEA 675. Seminar in Contemporary Health Problems. Three hours. A. Focuses on prominent health issues of today. Possible topics include the misuse of alcohol, drug abuse, smoking, venereal disease, obesity, etc.

HEA 680. Special Projects in Health and Health Education. One to three hours. A. Individual research into a specific health problem selected by the student with the approval of the instructor.


HEA 697. Thesis. Six hours. A.
GRADUATE SCHOOL

E. E. Moretz, Dean

DEGREES, PROGRAMS, AND REQUIREMENTS

The Graduate School, in cooperation with the College of Applied Arts and Technology, the College of Arts and Sciences, the College of Business, and the College of Education, offers the following degree programs:

College of Arts and Sciences
  Master of Arts Degree
    English
    French
    Geography
    History
    Political Science
    Psychology
    Spanish
  Master of Music Education Degree
  Master of Public Administration Degree
  Master of Science Degree
    Biology
    Chemistry
    Clinical Psychology
    Geology
    Mathematics
    Physics
    School Psychology

College of Applied Arts and Technology
  Master of Science Degree
    Criminal Justice
    Industrial Education
    Industrial Technology
  Specialist Degree in Technology

College of Business
  Master of Business Administration Degree

College of Education
  Master of Arts in Education Degree
    Elementary Education
    Elementary Education—Reading
    Guidance and Counseling
    Library Science
    School Health
    School Social Work
    Special Education
Secondary Education
Art
Biology
Business Education
Chemistry
Earth Science
English
French
Geography
History
Home Economics
Industrial Education
Library Science
Mathematics
Music
Physical Education
Physics
Political Science
Reading
Spanish

Master of Arts Degree
Guidance—Non School
Guidance—Student Personnel

Master of Science Degree
Physical Education
Recreation

Specialist in Education
Educational Administration and Supervision
Elementary Education
Guidance and Counseling
Guidance—Student Personnel
Physical Education

Fifth and Sixth Year Certification Programs for Teachers and School Service Personnel

The Joint Doctoral Program in Education
(Ed.D. and Ph.D. programs are offered cooperatively with the University of Kentucky).

TYPES OF ADMISSION
Students may gain admission to graduate study at Eastern Kentucky University as degree or as non-degree graduate students.

Students seeking to matriculate with degree status may be admitted with or without special conditions, depending upon the extent to which aptitude for graduate study and program prerequisites are satisfactory. The student should refer to the Graduate Catalog for more complete program requirements and details.
GENERAL ADMISSION REQUIREMENTS

1. A graduate of an accredited 4 year institution eligible to grant the baccalaureate degree.

2. Except when specified otherwise in the admission requirements of programs, an over-all undergraduate point standing of at least 2.4 (based on a 4.0). A limited number of students may be admitted in exception to this requirement when other evidence indicates a capacity for graduate study which the undergraduate record does not reveal.

3. Complete data filed by the student in the Office of the Graduate School, including two copies of the transcript of all college credits, both graduate and undergraduate. Failure to submit transcripts for any part of previous work may lead to disciplinary action.

UNDERGRADUATE ADMISSION

An undergraduate student who needs not more than nine semester hours in one semester (or three semester hours in one summer session) to complete all of the requirements for a bachelor's degree may be allowed to register for graduate credit work under the conditions described below.

All work for undergraduate credit will be completed during that semester or summer session.

The total registration for all work will not exceed twelve semester hours in a semester (or six semester hours in a summer session).

All work to be counted for graduate credit will be approved in advance by his college dean and advisor and by the Dean of the Graduate School.

The student must meet all pertinent conditions for admission to the Graduate School, and credits must not be used to meet undergraduate requirements.

GRADUATE RECORD EXAMINATION*

All graduate students must submit, either at the time of application for admission or no later than the completion of the first session of graduate work, the scores of the aptitude sections of the Graduate Record Examination or the undergraduate record examination. Certain programs require Advanced Graduate Record Examinations in the subject field in addition to the aptitude sections. The Graduate Record Examinations are administered at Eastern in October, April, and July. Application to take the Graduate Record Examination must be received in the office of the Educational Testing Service, Princeton, New Jersey, more than three weeks in advance of the testing date. Application forms are available in the office of the Dean of the Graduate School. It is the student's responsibility to apply for, to take the examination, and to have the scores sent to the Dean of the Graduate School at Eastern.

*The undergraduate Record Examination is accepted in lieu of the G.R.E. All Eastern seniors are strongly advised to take this examination.
RESIDENCE REQUIREMENTS FOR DEGREES

The minimum residence requirement shall be two semesters. At least one-half of the course requirements and one-half of the residence work shall be met as a full-time graduate student. A load of six semester hours of credit shall be regarded as full-time during an eight week summer term and a minimum load of nine hours of credit shall be regarded as full-time during one semester.

GRADE POINT AVERAGE

Candidates for a master's degree must have an average standing of at least 3.00 on a 4.00 scale. No credit shall be granted for a grade below C.

ADMISSION TO CANDIDACY

1. A graduate student must be admitted to candidacy by the Graduate Council before he is eligible for the master's degree. At least 9 hours of graduate credit must be earned before admission to candidacy and at least 12 hours must be earned after admission to candidacy.

2. More detailed requirements for admission to candidacy are specified in the outlines of the degree programs listed in this Catalog and the Graduate Catalog.
Richmond Community College
RICHMOND COMMUNITY COLLEGE
Kenneth Clawson, Dean

GENERAL INFORMATION

RICHMOND COMMUNITY COLLEGE has been established as a major division within Eastern Kentucky University in recognition of the growing importance of trained people with specific skills and education requiring less than four years. Within the next decade, approximately fifty percent of the work force will be in technical, semi-professional, and service oriented jobs. Preparation for many of these jobs will require the skills and education of at least two years of college (Associate Degree). Young people and adults who wish to take advantage of these job opportunities are now enrolling in college programs such as those provided by Eastern Kentucky University.

RICHMOND COMMUNITY COLLEGE might be referred to as Eastern Kentucky University's "opportunity college," for one purpose is to extend educational opportunities to students. It assures one of high quality education at reasonable costs in order to help one attain the knowledge and skills needed for more productive and rewarding employment in a minimum of time.

Included among the services and educational opportunities offered by RICHMOND COMMUNITY COLLEGE are:

— Information about all one and two-year programs offered by Eastern Kentucky University.

— Guidance for students or prospective students in selecting a program of study.

— Community services in cooperation with the Office of Continuing Education and the various Colleges of the University.

— Clearinghouse for information on new or proposed programs.

— Short Courses, institutes, seminars and other programs for adults (In cooperation with the Division of Continuing Education and other Colleges of the University).

In cooperation with the respective Colleges of Eastern Kentucky University, the following programs of study are offered. Additional programs are being considered and may be available when a student is ready to enter college.
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PURPOSES AND CHARACTERISTICS OF CURRICULA

The main purpose of Eastern Kentucky University’s one and two-year programs is to provide high quality instruction in a variety of technical, business, semi-professional, and service oriented professions. In general, these programs have the following characteristics:

— **minimum amount of time** is needed for completion of a program (two years is normally required to complete an Associate of Arts Degree).

— **programs of study are specialized**, emphasizing specific skills and knowledge needed for particular jobs.

— **many programs may be pursued on a part-time basis.**

— **job opportunities** for graduates abound at very attractive and rewarding salaries. Many more can be placed than are graduated from each program.

— **graduates of Associate Degree programs may continue their education** toward a baccalaureate or higher degree.

— **programs of study combine academic training with laboratory experiences, observations, and “on-the-job” experience.**

— **programs of study and job opportunities are available to all—men and women, young and old, rich and poor.**

— **departments maintain close contact and seek the support and advice of business, industry, and potential employers in each specialized area.**

— **in addition to university-wide loans, scholarships, work-study grants, etc., additional or special loans and scholarships are available for students in specific associate degree programs.**

**HIGHLIGHTS**

Some of the outstanding features of the RICHMOND COMMUNITY COLLEGE programs are:

— **Classes and laboratories are taught by outstanding faculty who combine the best professional training with practical experience.** The same faculty teach students in associate degree programs that teach students in other college programs. All hold the doctorate or other advanced degrees in their fields of specialization.

— **The university provides a library, shops, laboratories, and other specialized facilities with the latest equipment for use in instruction.**

— **Outside resource people are brought to the university to lecture and demonstrate the latest equipment, methods, and techniques.**

— **Graduates with an Associate of Arts Degree are better equipped as citizens, for community leadership and service to others, to earn a living, and to enjoy a life of productive work.**
Continuing Education

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DIVISION OF CONTINUING EDUCATION
LaRue Cocanougher, Dean

Institutions of higher education can no longer meet their full responsibilities by offering only the services provided by the traditional campus programs. Many people who desire additional educational opportunities find it impossible, or at least impractical, to participate in the regular university program.

In this age of rapid change in all areas of education, it has become essential that practitioners must either keep informed of the knowledge which is constantly being expanded or become less effective in their jobs. There are also many people who have not reached the desired level of education for the vocation in which they are now engaged. In addition, increased leisure time for some groups offers opportunities for explorations of educational activities purely from an interest standpoint.

Eastern Kentucky University's Division of Continuing Education attempts to meet their needs through extension classes, correspondence study, and Saturday and evening classes. Consultative service by staff and faculty, institutes, workshops, conferences, and other short term course offerings are also available.

CORRESPONDENCE STUDY DEPARTMENT

Eastern Kentucky University, through its Division of Continuing Education, offers a number of regular college and high school correspondence courses as a means of study open to anyone who desires to continue his education in this manner. These courses may be taken on either a credit or non-credit basis. The college courses may be applied toward a bachelor's degree from Eastern Kentucky University or other institutions of higher education. The high school courses may be applied toward a high school diploma. Correspondence courses may also be taken on a non-credit basis for other goals such as studying for professional advancement, exploring new interests, or learning new skills.

Correspondence courses cover essentially the same material as the same or similar courses offered on campus. Students prepare assignments and submit them, along with any questions they may have, to their instructor through the Continuing Education Office. The instructor then evaluates the work and returns the evaluation form with his comments. This type of instruction offers an opportunity for the student to be taught on an individual basis. In essence, he has a tutorial type of arrangement which defies distance.

Fees and Enrollment Procedures

A. Instructional fees, which do not include costs of textbooks and other reference materials, are governed by the following regulations:

1. All fees are payable in advance and are subject to change without notice to the student.
2. Instructional fees for college courses are based upon the number of semester hours of credit given for the course. The fee, at present, is $12.00 per semester hour. For a two-semester hour course the fee is $24.00; for a three-semester hour course the fee is $36.00.

3. The instructional fee for high school courses is $20.00 for each one-half unit.

B. Registration for a correspondence course includes the following procedures:

1. Applicants are required to make a separate application for each course on registration forms furnished by the institution.

2. College students are to use the four by six inch perforated pink registration card and high school students are to use the four by six inch white registration card.

3. The registration form must be completed in full by using ink or typewriter. The applicant should check to make sure that the same information is given on the form for the Office of Continuing Education and the form for the Registrar's Office.

4. Send Both completed registration forms together with the instruction fee to the Office of Continuing Education, Eastern Kentucky University, Richmond, Kentucky 40475. Do Not Send Forms To The Registrar.

5. Do not fold or bend the registration card except where perforated.

6. Additional registration forms can be obtained by writing to the Office of Continuing Education. Please state whether you desire to enroll for college or high school courses. The Continuing Education Bulletin which contains a listing of correspondence courses offered and regulations pertaining thereto, will also be sent upon request.

EXTENSION DEPARTMENT

Purposes and Objectives

Eastern Kentucky University strongly holds to the philosophy that there should be a close relationship with the homes, schools, industry, and various community groups of the state to the end that any citizen may feel free to call upon the University for any assistance which the institution may be able to render. The off-campus educational program of Eastern is designed to serve students who are unable to enroll in residence or who find it more helpful to work in local groups on certain common problems. More specifically, off-campus educational programs are designed to accomplish one or more of the following purposes:

1. To provide greater opportunities for those who want to increase their knowledge while regularly employed or improve their efficiency and skills either on credit or non-credit basis.
2. To encourage communities to make effective use of the resources of the University.

3. To assist in acquainting the faculty of the various departments with the educational programs and needs facing the communities served by the University.

Request for Off-Campus Courses
Anyone who desires to do so may request an off-campus course if, in his opinion, there will be sufficient interest to justify offering the course. If a course is desired, please contact the Office of Continuing Education, Eastern Kentucky University, in order that procedures may be worked out for getting the course organized.

General Requirements
Students may be permitted to audit an off-campus course without credit by paying the minimum fee required.

A minimum of 40 student-teacher contact hours involving a minimum of 12 calendar days are required for a three-semester hour course. For a two-semester hour course there must be at least 27 student-teacher contact hours within a minimum time of 8 calendar days.

The minimum charge for graduate and undergraduate work shall be $3.00 per hour more than the fee for part-time resident students.

Courses and Credit Limitations
Off-campus credit courses offered by Eastern are of various types. To a large extent, the nature of off-campus courses is determined by the needs of the local community. All courses offered are approved by the vice-president for academic affairs and the dean of the college in which the course is listed. Courses requiring laboratories or extended library service are not offered off campus.

A teacher employed on a full-time basis shall not be allowed to receive credit through off-campus courses and/or correspondence for more than a maximum of four semester hours each semester or eight semester hours during the regular school year of nine months.

Undergraduate students may apply a maximum of 32 semester hours by extension and/or correspondence toward a degree or certification.

Graduate students may apply a maximum of twelve semester hours of extension work toward an M.A. degree, fourteen hours toward completion of fifth year program, and fifteen hours toward completion of sixth year program.

ADDITIONAL CONTINUING EDUCATION SERVICES
For information pertaining to Saturday and evening schedules, institutes, workshops, conferences, and consultative services by faculty and staff, please write the Office of Continuing Education, Eastern Kentucky University, Richmond, Kentucky 40475 or call 622-2001.
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B.A., Berea College; M.A., Eastern Kentucky University; additional graduate work at Eastern Kentucky University. At Eastern since 1970.

*EDITH L. WILLIAMS, B.A., M.A.  Assistant Professor of English
B.A., North Texas State University; M.A., University of Kentucky and Eastern Kentucky University; additional graduate work, University of Cincinnati. At Eastern since 1964.

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*on leave Second Semester, 1971-72
ARThUR C. WILSON, B.S., M.A., C.P.A. Assistant Professor of Accounting
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JOE WISE, A.B., M.A., Ed.D. Chairman, Department of Secondary and Higher Education
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*VANCE WISEBAKER, JR., B.A., M.S. Assistant Professor of Sociology
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ROBERT W. WITT, A.B., A.M., Ph.D. Assistant Professor of English
A.B., Georgetown College; A.M., Ph.D., University of Mississippi. At Eastern since 1970.

LYLE C. WOLFROm, B.M., M.M., M.M. (String Bass) Associate Professor of Music
B.M., University of Kansas; M.M., Indiana University; M.M. (String Bass), Ohio State University. At Eastern since 1960.

W. POTTER WOODBERRY, B.A., M.A., Ph.D. Associate Professor of English
B.A., M.S., Florida State University; B.D., Union Theological Seminary; Ph.D., Emory University. At Eastern since 1969.

LEONARD F. WOOLUM, A.B., M.A., Ed.D. Professor of Educational Foundations
A.B., Union College; M.A., University of Kentucky; Ed.D., University of Maryland. At Eastern since 1957.

EUGENIA WORONIN, M.D., Cand. Sci. Docent Associate Professor of Russian and German
M.D., Medical College at Kharkov, Russia; Candidat in Science, Medical College, Kharkov; Senior Scientific Fellow with highest qualifications, Moscow Scientific Committee; Docent, awarded by Moscow Scientific Committee. At Eastern since 1964.

JAMES H. WRIGHT, B.F.A., M.F.A. Assistant Professor of Art

NANCY C. WRIGHT, B.A., M.A. Instructor of Social Studies Supervising Teacher, Laboratory School
B.A., DePauw University; M.A., University of Illinois; additional graduate work at University of Evansville. At Eastern since 1970.

RUDOLPH B. WULLEUMIER, B.S. Assistant Professor of Economics
B.S., Eastern Kentucky University; additional graduate work at the University of Kentucky. At Eastern since 1971.

SUNG-CHUL YANG, A.B., M.A., Ph.D. Assistant Professor of Social Science
A.B., Seoul National University; M.A., University of Hawaii; Ph.D., University of Kentucky. At Eastern since 1970.

FRANK YATES, JR., B.A., J.D. Assistant Professor of Business Administration
B.A., Murray State University; J.D., University of Louisville. At Eastern since 1967.

*On leave 1971-72
CEDRIC A. YEO, B.A., Ph.D.  Professor of History
B.A., Dalhousie University; Ph.D., Yale University; post-doctoral research, University of Chicago (Oriental Institute). At Eastern since 1965.

JOSEPH H. YOUNG, B.S., Ed.M., Ph.D.  Dean, College of Business
Professor of Business Administration
B.S., Indiana State University; Ed.M., Harvard University; Ph.D., Indiana University. At Eastern since 1963.

MARY ETTA YOUNG, B.Ed., A.B.  Academic Counselor, Learning Laboratory
Central University College
B.Ed., Detroit Bible College; A.B., Eastern Kentucky University. At Eastern since 1969.

EDWARD ZOLAS, B.S., M.S.  Associate Professor of Music
B.S., M.S., Juilliard School of Music; additional graduate work, Teachers College, Columbia University. At Eastern since 1970.

MILITARY SCIENCE STAFF

COLONEL JOSEPH L. PILANT, B.A.  Professor of Military Science

MAJOR WILLIAM D. ADAMS, B.S.  Associate Professor of Military Science
B.S., Eastern Kentucky State College. Graduate of: Infantry Officer Basic Course, Infantry Officer Career Course, Basic Airborne and Jumpmaster Course, The Infantry School, Fort Benning, Georgia; Defense Language Institute, West Coast, Monterey, California. At Eastern since August 1969.

MAJOR HARLEY C. DAVIS, B.S.  Associate Professor of Military Science

MAJOR EDWARD H. GEORGE, III, B.S.  Associate Professor of Military Science
B.S., California State Polytechnic College; B.S., University of Missouri at Rolla. Graduate of: The Engineer Officers' Basic Course, Post Engineer Management Course, Nuclear Weapons Employment Course and Engineer Officers' Career Course, all at the Engineer School, Fort Belvoir, Virginia; The Defense Language Institute (Portuguese) in Washington, D.C. At Eastern since August 1970.
MAJOR DELMER H. LIVENGOOD, B.S.  Associate Professor of 
Military Science

B.S., West Virginia University. Graduate of: Basic Officers' Course, 
Advanced Officers' Course, and Armor Officers' Maintenance Course, 
The Armor School, Fort Knox, Kentucky; Chemical, Biological, and 
Radiological Officers' Course, The Chemical School, Fort McClellan, 
Alabama; Officer Rotary Wing Course, Primary Helicopter School, Fort 
Walters, Texas; Officers' Rotary Wing Course and Instructor Pilot 
Course, The Aviation School, Fort Rucker, Alabama. At Eastern since 
August 1970.

MAJOR SAMUEL R. FARRIS, B.S.  Associate Professor of 
Military Science

B.S., Auburn University. Graduate of: Field Artillery Officers' 
Basic Course, Associate Field Artillery Officers' Career Course, Nuclear 
Weapons Employment Course, The Artillery School, Fort Sill, Oklahoma; 
Hawk Officers' Qualification Course, Air Defense School, Fort Bliss, 
Texas; Air Ground Operations School, Hurlburt Field, Florida. At 
Eastern since September 1970.

MAJOR MICHAEL A. RANDALL, B.G.S.  Associate Professor of 
Military Science

B.G.S., University of Nebraska at Omaha. Graduate of: Officer 
Candidate School, The Infantry School, Ft. Benning, Ga.; Ranger Course 
and Basic Airborne Course, The Infantry School, Ft. Benning, Georgia; 
Adjoint General Officers' Career Course, Ft. Benjamin Harrison, In-
diana. At Eastern since March 1969.

MAJOR JOHN D. WHEELAN, B.S.  Associate Professor of 
Military Science

B.S., Texas A & M University. Graduate of: Signal Officers' Basic 
Course, Fort Gordon, Georgia and Signal Officers' Career Course, Fort 
Monmouth, New Jersey. At Eastern since December 1970.

CAPTAIN ROLLAND H. BERRY, JR., B.S.  Assistant Professor of 
Military Science

B.S., Virginia Polytechnic Institute and State University. Graduate 
of: Officers' Basic Course, Hawk Officers' Qualification Course, The 
Air Defense School, Fort Bliss, Texas; Advanced Course, Nuclear Wea-
pons Employment Course, The Field Artillery School, Fort Sill, Okla-
ahoma; Chemical, Biological, and Radiological Course, Fort Buckner, 
Okinawa. At Eastern since September 1970.

CAPTAIN DONALD M. BROOKE, B.A.  Assistant Professor of 
Military Science

B.A., Ripon College. Graduate of: Basic Armor Officers' Course, 
Fort Knox, Kentucky; Advanced Ordnance Officers' Course, Aberdeen 
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CAPTAIN DONALD J. CATRON, A.B.  Assistant Professor of 
Military Science

A.B., Eastern Kentucky University. Graduate of: Basic Signal Of-
ficers' Course and Radio Officers' Course, Ft. Monmouth, New Jersey. 
At Eastern since May 1970.

CAPTAIN DONALD L. ESTES, B.S.  Assistant Professor of 
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CAPTAIN JAMES T. HENNESSEY, JR., B.S.  Assistant Professor of
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B.S., Eastern Kentucky University. Graduate of: Infantry Officers' Basic Course, Airborne School and Advanced Officers' Course, Fort Benning, Georgia. At Eastern since September 1970.

CAPTAIN HENRY J. MINCKE, B.S.  Assistant Professor of
Military Science
B.S., Tennessee Technological University. Graduate of: Infantry Officers' Basic Course, Fort Benning, Georgia; United States Special Warfare School, Fort Bragg, North Carolina; Quartermaster Advanced Course, Fort Lee, Virginia. At Eastern since August 1970.

CAPTAIN JAMES B. PARHAM, B.S.  Assistant Professor of
Military Science
B.S., Central State University. Graduate of: Field Artillery Basic and Career Course, Fort Sill, Oklahoma; Nuclear Weapons Employment and Assembly Course, Fort Sill, Oklahoma; Radiological Monitoring Course, Eastern Defense Institute, New York, New York; Basic Airborne Course, Fort Benning, Georgia; Basic Demolition Course, Fort Sill, Oklahoma; Chemical, Biological and Radiological Warfare Course, Fort Sill, Oklahoma; Instructor Training Course, Fort Sill, Oklahoma. At Eastern since November 1971.

CAPTAIN BOHDAN PREHAR, B.S.  Assistant Professor of
Military Science
B.A., University of Minnesota. Graduate of: Sergeant Officers' Missile Course, Fort Sill, Oklahoma; Field Artillery School, Fort Sill, Oklahoma; Survey Officers' Course, Field Artillery School, Fort Sill, Oklahoma; Ranger Course and Basic Airborne Course, The Infantry School, Fort Benning, Georgia; Nuclear Weapons Employment Course, Fort Sill, Oklahoma; Field Artillery Officers' Career Course, Fort Sill, Oklahoma; Fire Direction School, Pleiku, Vietnam. At Eastern since September 1969.

SENGEANT MAJOR FLOYD KELNHOPER  Chief Enlisted Instructor
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MASTER SERGEANT GEORGE W. KOSTUN  Assistant Instructor
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SENGEANT FIRST CLASS ROBERT A. ROSS  Assistant Instructor
At Eastern since May 1970.

STAFF SERGEANT CASHOUS BURDINE  Supply Sergeant
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SPECIALIST FOURTH CLASS JERRY GOODWIN  Specialist in Administration
At Eastern since October 1970.

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Military Science
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HAROLD B. BARTON (DAC)  Assistant Adjutant
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KENTUCKY LAW ENFORCEMENT COUNCIL

ROBERT C. STONE, B.S., J.D.  Executive Director
B.S., J.D., University of Kentucky. With KLEC since 1966.

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ANNIE ALVIS, B.S., A.M.

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MARY E. BARNHILL, A.B., M.A., LL.B.

J. G. BLACK, B.S., M.S., Ph.D.
B.S., M.S., Ph.D., 1947-1968.

PEARL L. BUCHANAN, B.L., B.A., M.A.

MARY K. BURRIER, B.S., M.S.
B.S., M.S., 1925-1963.

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D. THOMAS FERRELL, A.B., A.M., Ph.D.

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Dean of Faculties, Professor of Education

President

Professor of History

Assistant Professor of Elementary Education;
Supervising Teacher, Laboratory School

Assistant Professor of English

Associate Professor of English

Professor of Physics

Associate Professor of English

Associate Professor of Home Economics

Associate Professor of Education

Associate Professor of Education, Dean of Women

Professor of Chemistry

Professor of History and Government

Professor of Education

Professor of Education

Associate Professor of Commerce

Professor of English

Professor of Chemistry

Professor of English

Professor of Education
WILLIAM LEE KEENE, B.S., M.A.  

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Distinguished Professor of Home Economics  

CORA LEE, B.S., A.M.  

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SMITH PARK, B.S., M.S., Ph.D.  
B.S., M.S., Ph.D., 1923-1967.  

ALLEN E. RAGAN, A.B., M.A., Ph.D.  

VERA V. RAILEIGH, A.B., M.A.  

HELEN M. REED, A.B., M.A., Ed.D.  

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ROLLIN RHOTEN RICHARDS, A.B., M.B.A.  

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BLANCHE S. SEEVERS, B.Mus., B.A., M.Mus  

EVELYN SLATER, B.S., M.S.  
B.S., M.S., 1939-1969.  

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VIRGINIA F. STORY, B.S., M.A.  
FLORENCE B. STRATEMEYER, B.S., M.A., Ph.D., Ed.D.  Distinguished Professor of Education

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B.S., 1917-1962.

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BETTY W. VAN CLEVE, A.B., Ph.D., M.A., Certificate in L.S.  Assistant Professor of Library Science

CHARLES F. VAN CLEVE, A.B., A.M., Ph.D.  Professor of English

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SAMUEL WALKER, A.B., A.M., Ph.D.  Assistant Professor of Mathematics

ARVILLE WHEELER, A.B., M.A., Ph.D.  Professor of Educational Administration

LUCILE R. WHITEHEAD, B.S., B.S. in L.S.  Assistant Librarian

ELIZABETH WILSON, B.S., M.A.  Assistant Professor of Elementary Education; Supervising Teacher, Laboratory School

---

**RETIRED ADMINISTRATIVE STAFF**

KATHLEEN BALES  1950-1963.  Night Supervisor, Burnham Hall

FRED BALLOU  1925-1970.  Manager Campus Bookstore

LOUISE BROADDUS  1936-1966.  Recorder, Office of Registrar

G. M. BROCK  1918-1969.  Comptroller

KATHARINE CHENAULT, A.B.  Hostess, Student Union Building
1940-1959.

LOIS COLLEY  1929-1967.  Director of Student Loans

NELLE HILL  1943-1962.  Cafeteria Manager

MYRTIE B. HOLDER  1957-1967.  House Director
EARL P. McCONNELL
1923-1958.

E. B. NOLAND

HELEN W. PERRY
1921-1966.

ELLEN SMATHERS
1957-1964.

AILEEN WICKERSHAM

EUNICE WINGO
1925-1959.

Bookkeeper
Cashier, Business Office
Administrative Assistant to Dean of Students
Night Supervisor
Secretary, Business Office
Assistant to the Dean of Women
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### COLLEGES AND DEPARTMENTS

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