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Graduate Catalog

# Graduate Catalogue, 1966-1967 

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## Graduate

## Catalogue



## 1966/67

A Bulletin Of
PASIDRN KINIUCKY UNIVBRSITIY
Richmond

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August, 1966

## EASTRIN KENTICKY UNIVERSITY

## Graduate Catalogue



[^0]MEMBER OF<br>Kentucky Association of Colleges, Secondary and Elementary Schools<br>American Association of Colleges for Teacher Education<br>Association of State Colleges and Universities<br>National Association For Business Teacher Education<br>Association for Field Services in Teacher Education<br>American Association of University Women<br>American Council on Education<br>National League For Nursing

## ACCREDITED BY

Southern Association of Colleges and Schools
National Council for Accreditation of Teacher Education
National Association of Schools of Music

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# EASTERN KENTUCKY UNIVERSITY Six Decades of Service to Kentucky 

## INTRODUCTION

Eastern Kentucky University is a public coeducational institution of higher education offering general and liberal arts programs, and professional training in education and other fields at both the undergraduate and graduate levels. The University, located at Richmond, Madison County, Kentucky, is composed of approximately 325 acres of rolling bluegrass slopes. A replica of an ancient Greek amphitheater forms the nucleus of the main campus. The beauty of the campus is further enhanced by an abundance of native trees and shrubs. The University is housed in 41 buildings with new construction an almost continuous process.

The completed Interstate Highways, I-64 and I-75, and the Mountain Parkway all converge near Richmond. Not only these arterial highways, but U. S. 25 (Dixie Highway), U. S. 227, and Kentucky Route 52 running to and through the city, help to put the city in a unique and advantageous position that is easily accessible from all areas of the state and nation.

Located twenty-six miles southeast of Lexington and 112 miles south of Cincinnati, Ohio, Eastern's proximity to metropolitan areas is convenient. Rail transportation to Richmond can be obtained over the L. \& N. Railroad.

Richmond and the surrounding area accomplish the double chore of maintaining a proud heritage and keeping pace with our modern age. This provides an excellent environment for the college student. The city is an expanding community of approximately 13,000 persons. Shopping facilities are conveniently located. The community is served by fine churches representing most Christian faiths.

The student will appreciate the scenic, recreational, and historical areas that are available. Boonesboro State Park, with a replica of the settlement that was the birthplace of Kentucky and the pioneer West, is twelve miles to the north. Ashland, the home of Henry Clay, is twenty-six miles northwest.

## HISTORY

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

Eastern's birth as a four-year institution came in 1922 under the name of Eastern Kentucky State Normal School and Teachers College. This institution awarded the first degrees in 1925. The college was accredited by the Southern Association of Colleges and Secondary Schools in 1928. In 1930, the General Assembly renamed the school as the Eastern Kentucky State Teachers College.

A graduate program leading to the Master of Arts in Education was approved for the College in 1935. The 1948 General Assembly removed the word "Teachers" from the name of the college and granted the right to award non-professional degrees. During the six decades since its founding in 1906, Eastern has grown rapidly in size and prestige. From a beginning of a few students engaged in courses for review and certification purposes, the University now 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. Further, a graduate program leading to the Master of Arts degree in Education and an additional year's graduate work beyond the Master's degree is offered for those seeking additional training for positions in the field of education. The most recent additions to the growing curricula are the granting of Masters' degrees in English and history. Provisions have been made to grant the Standard Leadership Certificate which covers virtually all phases of educational endeavor.

A significant milestone in Eastern's progress was reached on February 26, 1966, when Governor Edward T. Breathitt signed into law a bill granting university status to Eastern and other state colleges in the Commonwealth. Eastern interprets this new role as a privilege and a responsibility. A privilege to serve the state as a university; a responsibility to further broaden the curricula, services, and resources to better serve the educational interests of Kentucky and the nation. To neglect these would be to neglect the purpose for existing as an institution of higher learning.

Ever-mindful of the purpose of its founding, Eastern continues to recognize as its primary function that of preparing excellent dedicated teachers for the elementary and secondary schools of the Commonwealth. This is not to say, however, that the institution
neglects a strong liberal arts curriculum that leads to appropriate degrees in pre-professional courses in several areas. These programs enable Eastern to serve the state as a general university.

The University has a broad program of offerings in the field of Business Education with a curriculum offering thorough training in secretarial practice, accounting methods and materials, and general business.

## PURPOSE

The purpose of Eastern Kentucky University is to provide for its students those intellectual and cultural pursuits which, if seriously followed, develop: 1) habits of scholarship and intellectual curiosity; 2) a deep understanding of American democracy and of the role of the individual in maintaining its strength and vitality; 3) a deep and sympathetic knowledge of man and his aspirations; 4) the ability to communicate effectively and efficiently.

Within this general purpose, the University has the following specific purposes: 1) to provide instruction in the arts and sciences, in business, in professional education, and in technological 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; 3) to foster 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.

## EXPENSES AND LIVING ACCOMMODATIONS

## 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 and Incidental Fees | Kentucky <br> (Per Semester) |
| :---: | :--- | | Out-of-State |
| :---: |
| Resident |

Registration Fee
Full-time ......................................... $\$ 100.00$ \$270.00

Part-time (Fewer than 9 semester hours) per hour
12.00
30.00

Health Fee-Full-time ............................... 3.00 3.00
Special Classroom Fee
Full-time
5.00
5.00

Part-time ................................................ 2.50 2.50
Activity Fee (Optional for Graduate
Students)
8.25
8.25

College Yearbook (The Milestone)
Payable once each academic year by
full-time students .................................... 3.75
3.75

## Registration and Incidental Fees

(Summer Term)
Registration Fee
Full-time
50.00
135.00

Part-time (Fewer than 6 semester hours), per hour
12.00
30.00

Health Fee-Full-time ................................. 1.50 1.50
$\begin{array}{lll}\text { Activity Fee (Optional for } \\ \text { Graduate Students) } & & \\ 6.0 . . . . . . . . . . . . . . . . . . . . . . . . . . . . ~ & 600\end{array}$
Special Classroom Fee
Full-time
2.50
2.50

Part-time …
Other Fees
Late Registration Fee (per day late) ............................... 1.00
Voluntary change of schedule fee ....................................... 1.00
Transcript Fee (other than the initial copy) .................... 1.00
Graduation Fee (includes cost of diploma, cap and gown rental, and other expenses incidental to graduation) Master of Arts degree 20.00

Post office box rent (for each dormitory resident).................... 1.00

## STUDENT IDENTIFICATION CARD

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

If the card is lost, it must be replaced. A replacement fee of $\$ 5.00$ is assessed. Application for replacement must be made at the office of the Dean of Students.

## LIVING ACCOMMODATIONS

Eastern Kentucky University maintains a number of residence halls for single students. Within limits of the capacities of these halls all single students not living at home are required to live in University facilities. When the capacity of the halls has been reached single students may secure lodging in privately-owned facilities, provided these facilities have been approved by the University. All students, whether living in University or private facilities, are subject to regulations and supervision of the University.

All rooms have single beds for which pillows and linens are furnished. The University bears the expense of having these sheets and pillow cases laundered. Each student is expected to provide his own blankets, towels, window drapes, and similar articles. Students will find it to their advantage to have their own study lamps.

Eastern maintains various housing facilities for married students. included among these are: efficiency apartments, one-bedroom apartments, two-bedroom apartments, and trailer spaces. The efficiency apartments are for couples only and are furnished with a hide-a-bed, table, stove, chairs, and a refrigerator. The one-bedroom and two-bedroom apartments are for families and are furnished with a stove and a refrigerator. These facilities are assigned on a priority basis. Requests for additional information should be sent to the Director of Housing, Eastern Kentucky University, Richmond, Kentucky.

Residence Halls for Women

|  | Rent |  |
| :---: | :---: | :---: |
|  | Semester | Summer |
| Burnam | \$105.00 | \$52.50 |
| Case | ... 105.00 | 52.50 |
| Sullivan | 105.00 | 52.50 |
| McGregor | 115.00 | 57.50 |
| Sidney Clay | 115.00 | 57.50 |

## Residence Halls for Men

|  | Rent |  |
| :---: | :---: | :---: |
|  | Semester | Summer |
| Keith | 105.00 | 52.50 |
| Martin | 105.00 | 52.50 |
| Mattox | 105.00 | 52.50 |
| Miller, Beckham, and McCreary | 105.00 | 52.50 |
| O'Donnell | 105.00 | 52.50 |
| Combs | 115.00 | 57.50 |
| Todd | . 115.00 | 57.50 |
| Dupree | ... 115.00 | 57.50 |
| Palmer | 115.00 | 57.50 |

A few student bedrooms, located in the basements of various dormitories, are available at a reduced rate.

## DORMITORY POLICIES

All students desiring housing at Eastern Kentucky University should complete an application for a room reservation and forward it to the Dean of Students, Eastern Kentucky University, Richmond, Kentucky.

An advance rental payment of $\$ 45.00$ 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 August 15 for the first semester, January 15 for new students for the second 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 University for late arrival.

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

Dormitory rent is paid by the semester and is due and payable at registration. Refunds, when authorized, shall be made on the following schedule, based on weeks of occupancy of the room. Semester: up to two weeks, $75 \%$; two to four weeks, $50 \%$; four to six weeks, $25 \%$. After six weeks no refunds will be made. Summer term: one week, $75 \%$; two weeks, $50 \%$; three weeks, $25 \%$. After three weeks no refunds will be made.

## FOOD SERVICE

The University operates several food service facilities on the campus. Large, modern, air-conditioned cafeterias in the Johnson Student Union Building and Martin Hall serve attractive, wholesome meals at reasonable prices. In addition, snack bars are located in the Johnson Student Union Building, Case Hall, Martin Hall, and Mattox Hall,

## SCHOLARSHIPS, FINANCIAL AID, AND STUDENT EMPLOYMENT

## 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 Myrtle Mae Sloan Memorial Fund was established in 1959, in memory of Miss Myrtle Mae Sloan, by her sister, Miss Viva Odean Sloan, resident of Berea, Kentucky. The income from this fund will be paid to a high ranking student who needs help to enable him or her to remain in college.

The Lily Christopher Ogg McWhorter Memorial Fund was established in 1959, in memory of Mrs. Nina Rachel Ogg Pee 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.

The Presidential Scholarships are awarded annually by the President on the basis of high scholastic potential and need. These scholarships have an approximate value of $\$ 65.00$ per semester.

## Phi Delta Kappa Scholarship

Eligibility:
(1) A male student who is or will be eligible for graduate study at Eastern Kentucky University during the semester in which he desires to enroll.
(2) Must be willing to be a full-time graduate student (a minimum of twelve semester hours) during the scholarship period.

How to Apply:
(1) Applications should be by letter to the Graduate Office. The letter should be accompanied by transcripts of all college credits and an explanation of the experience and background of the applicant. The applicant should also briefly outline his plans for graduate study and future employment.
(2) The application should also be accompanied by letters of recommendation from three instructors who knew the applicant as an undergraduate student.

All applications will be evaluated by the Committee on Scholarships and Awards of Epsilon Rho Chapter of Phi Delta Kappa. The name of the person selected will then be submitted to the membership for final approval.

The deadline for applying for this scholarship is July 1.

## Graduate and Research Assistantships

Departmental chairmen having needs for graduate or research assistants may proceed to request them through the president of the institution. After the president has given his approval, each candidate is cleared for eligibility for graduate study through the Graduate Office.

Graduate assistantships are available for graduate students who are in residence through the academic year. These assistants are permitted to carry a maximum of twelve semester hours of graduate work. They are assigned duties of approximately twelve hours per week. Stipends amount to $\$ 1,600.00$ per year. The registration fee is waived for graduate assistants.

Research assistantships are available under the same requirements as graduate assistantships. Research assistants are assigned duties requiring twelve to fifteen hours per week. The stipends are $\$ 1,800.00$ per year with a waiver of registration fees.

To be eligible for assistantships, the applicant must meet all the requirements for admission to the Graduate School. The applicant is urged to take the Graduate Record Examination prior to applying for an assistantship. Interested candidates must apply on or before May 1 of each year for an assistantship beginning the following fall semester.

Application forms for assistantships and/or admission to the Graduate School may be obtained by writing to the Dean of the Graduate School.

## LOAN FUNDS

The National Defense Student Loan Program at Eastern provides loans for students. Priority is given to students who have superior records in high school and college and who are majoring in Mathematics or Science or who are planning to prepare themselves to teach. To get application forms and a statement of conditions relating to the loans, applicants should send their requests to the Chairman of the National Defense Student Loan Fund, Eastern Kentucky University.

The Student Loan Fund of the Eastern Kentucky University 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 upperclass students. Those having high scholarship 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.

## STUDENT EMPLOYMENT

There is opportunity for student employment, whereby a limited number of students may earn a part of their expenses by working in the University Cafeteria, Library, Bookstore, Post Office, Dormitories, Administrative Office, 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 greater number of 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.

## OTHER FINANCIAL ASSISTANCE

The Veterans Program at Eastern Kentucky University is approved by the Veterans Administration for the education of veterans under provisions of Public Law 894, Public Law 634, Public Law 550, Veterans Readjustment Act, Korean GI Bill, and the recently enacted Cold War GI Bill. Those entering under the latter should exercise extreme care in interpreting their eligibility. Students concerned with veterans training should have, at the time of their 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 other necessary information about students who receive this aid.

## VOCATIONAL REHABILITATION

Vocational Rehabilitation for students with physical handicaps of various kinds may be approved, and 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, Division of Special Education, Frankfort, Kentucky, for specific instructions.

## PLACEMENT OFFICE

The Placement Office is maintained by the University to assist students and alumni in obtaining positions in schools, businesses and industry. Each year, Superintendents, Principals, and other public school officials come to this office to secure qualified individuals to fill their vacancies. No charge is made for this service. Graduates of Eastern may leave pertinent information and records of recommendations in the office until such time as they will need it as a reference.

Departmental chairmen, professors, and citizens furnish great amounts of data which are filed in the Placement Office.

## 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 11,000 graduates. Many of these men and women hold more than one degree from the University. All of them are eligible for membership in 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. Annual memberships are $\$ 2.00$ single and $\$ 3.00$ for joint membership (husband and wife). Life memberships are $\$ 50.00$ for single and $\$ 75.00$ for joint memberships.

The Alumni Association sponsors Homecoming in the fall, K.E.A. breakfast in the spring and Alumni Day at commencement time. The latter features an Alumni Dinner honoring the 50 year and the 25 year classes and the presentation of the Outstanding Alumnus Award. In addition, active Alumni Clubs at Louisville, Greater Cincinnati, Ashland-Huntington-Ironton area, and Pulaski County have numerous meetings throughout the year open to all alumni and former students in the area. Many more Eastern Alumni Clubs are expected to be installed during the 1966-67 school year.

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

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 Administration Building 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.

## THE GRADUATE SCHOOL

## PURPOSE

The Graduate School, in cooperation with the Colleges of Arts and Sciences, Business, Education, and Technology, provides course offerings leading to the Master of Arts in Education degree, to Rank I certification for elementary and secondary teachers, and to the Master of Arts and Master of Science degrees in academic disciplines. The graduate work is planned to meet the needs of elementary and secondary teachers; to provide curricula for supervisors, principals, superintendents, attendance officers, guidance counselors, public school librarians and reading specialists; to prepare college level instructors (especially for junior colleges) and to provide a foundation for graduate work toward the doctoral degree. A major purpose of the school is to encourage scholarly research and publication.

## TYPES OF STUDENTS

Graduate courses are open to: (1) students who enter and become candidates for the degree of Master of Arts in Education; (2) students who enter and become candidates for the degrees of Master of Arts or Master of Science in academic disciplines; and (3) students who wish to broaden their education without reference to a graduate degree.

The Master of Business Administration degree will be offered beginning with the fall semester 1967.

## ADMISSION REQUIREMENTS

## Requirements For Admission to the Graduate School

1. A graduate of an accredited 4-year institution eligible to grant the Baccalaureate Degree.
2. An over-all undergraduate point standing of at least 2.4 (based on a 4.0). A standing of not less than 2.25 may be considered (with reduced load) provided the student's standing in his last year of undergraduate study was at least 2.5 .
3. Complete personal and professional data, filed by the student in the Graduate Office. A transcript of all college and secondary school credits must be filed with the Graduate Office and with the Dean of Admissions.
4. A grade of no less than "C" in student teaching at the undergraduate level.

## ADMISSION TO CANDIDACY FOR THE DEGREE OF MASTER OF ARTS IN EDUCATION, MASTER OF ARTS IN ENGLISH, OR MASTER OF ARTS IN HISTORY.

1. Completion of the verbal ability and the quantitative ability sections of the Graduate Record Aptitude Tests. The test must be taken during the first semester of course work. The cut-off point is 800 (scaled scores), and a student falling below this point must appeal through his advisory committee to the Graduate Council for consideration for his degree candidacy.
2. (a) A minimum of 15 semester hours of graduate course work must be taken after the test is suecessfully completed.
(b) A minimum of 6 semester hours of graduate course work must be completed with a standing of at least 3.0 .
3. An interview with the Graduate Committee.
4. Approval by the Graduate Council upon the recommendation of the student's advisory committee. In making the recommendation, the advisory committee will take into consideration personality, character, academic proficiency, and any other factors which are deemed important for the particular curriculum in which the student is working.
5. Each graduate committee will apply additional criteria which have been developed by the committee for the selection of students in their own particular curriculum area. A copy of the criteria developed by each graduate committee shall be filed with the Graduate School.
6. A valid teaching certificate, based on four years of standard college preparation in the state in which it was issued.

After a student becomes a candidate for the Master's degree, he will then be expected to meet all course requirements prescribed in his curriculum and to satisfy all residence and other degree requirements as prescribed by the institution. The Graduate Office will verify his eligibility for an oral examination and the granting of the degree in accordance with approved curriculum patterns on file with the Division of Teacher Education and Certification in Frankfort.

Late Registration.-No student will be permitted to register for regular day classes after the second week of a semester or after the first week of a summer term. Special consideration for registration beyond these periods of time may be required from the Admissions Committee.

Withdrawal from the University.-Students who find it necessary to leave the University under any conditions must visit the Office of the Dean of Students and secure an official Withdrawal Card. This card is then processed with appropriate personnel on the campus in order that all campus records may be cleared. Unless this procedure is followed the permanent records in the Registrar's Office are incomplete. Thus students receive grades of " $F$ " for the semester's courses and would not be eligible for readmission.

Official Schedule Changes.-The University reserves the right to cancel a course when the registration is not sufficient to warrant its continuance, to divide classes if the enrollment is too large for efficient instruction, and to change instructors when necessary. Additional courses will be organized if the demand is sufficient.

Transfer of Credit and Extension Work.-A graduate student is permitted to take a maximum of 6 semester hours of credit off the Eastern campus. These credits may be earned either by extension or by transfer from another institution provided the course work is acceptable to the curriculum in which the student is working. In no case can the total number of extension and transfer credits exceed 6 semester hours.

## REQUIREMENTS FOR ALL CANDIDATES FOR THE MASTER'S DEGREE

1. A student may receive the Master's degree when he has completed other requirements set out in these regulations and in addition thereto has completed a four-year curriculum for the education of elementary or secondary teachers as prescribed by the Council on Public Higher Education or holds a certificate based upon four years of standard college preparation and valid for teaching in the state in which it was issued.
2. The students shall have an average standing of at least 3.0 and no credit shall be granted for a grade below "C".
3. Graduate students may take upper division courses but at least 50 per cent of all course work must be in courses open to graduate students only.
4. Requirements for the degree of Master of Arts in Education or Master of Arts in English may be satisfied by one of the following plans:
Plan I-With a Thesis
The residence requirements shall be 36 weeks. The minimum course credit shall be twenty-four semester hours, and six semester hours will be allowed for the thesis.
Plan II-Without a Thesis
The residence requirements shall be 36 weeks. The minimum credit shall be 30 semester hours.
5. The student shall pass a final examination on all fields presented toward fulfillment of requirements for the degree of Master of Arts in Education, Master of Arts in English, or Master of Arts in History.
6. Teachers holding what would ordinarily be considered a full-time position shall not be permitted to receive graduate credit for more than 4 semester hours during any semester.
7. Residence credit for part-time study at the graduate level shall be $11 / 2$ weeks for each semester hour of credit and shall apply to students who carry less than a minimum full-time load.
8. One-half of the course requirements and one-half of the residence work shall be done as a full-time graduate student. In evaluating residence credits a summer term of 8 weeks, with a minimum load of 6 semester hours of credit shall be regarded as 9 weeks in residence.
9. The average graduate student, unless special approval is secured from the Dean of the Graduate School, should take a load ranging from 12 to 15 hours per semester with a maximum of 8 hours per summer term of 8 weeks.
10. Part-time students with full-time positions are advised to take loads ranging from 2 to 4 hours per semester, and are expected to meet the high standards prescribed for full-time students.
11. Twelve hours of graduate work earned on a part-time basis shall entitle the student to one semester of residence.
12. Graduate students planning to pursue a Master's degree will be expected to take the Graduate Record Examination at least during the first semester or summer of residence. It is to the student's advantage to have taken this examination before entering Graduate School.
13. The student should have a graduate committee appointed during the first semester or summer term that he is a student at Eastern, or before entering the Graduate School. The chairman of his graduate committee will act as his advisor.
14. A graduate student is expected to complete requirements for the degree no later than eight years after beginning course work. In cases of hardship the time limit may be extended to ten years with the approval of the Graduate Council.

The following requirements are set forth for candidates in the various fields:

## Master of Arts Degree in Education

1. Every candidate for the degree of Master of Arts in Education shall present a minimum of 9 semester hours of graduate credit in professional education and must have had a minimum of 27 semester hours at the undergraduate and/or graduate level.

The minimum residence for a student who does not have a minimum of 12 semester hours in education, upon being admitted to the Graduate School, shall be 45 weeks to complete course requirements for the degree of Master of Arts in Education.
2. The remainder of the course work shall be determined by the institution in terms of the student's need, provided that it shall be upper division and/or graduate courses.
3. A student preparing for the secondary certificate must select a major field of interest in which he has at least a minor of eighteen hours. If he does not have a minor, he will be required to take work at the undergraduate level sufficient to make the minor.
4. The Master's degree shall not be granted to one who does not have at least thirty hours in his major field, including both graduate and undergraduate work.

## Master of Arts Degree in English

The following requirements are set forth for those pursuing a Master's degree in English:

1. The student must meet all requirements of and be admitted to the Graduate School. In addition, he must meet all requirements for degree candidacy.
2. Graduate work in English normally requires an undergraduate major in English from an accredited college.
3. At least a 3.00 standing must have been achieved in the upper division English courses taken, or, if this normal prerequisite is lacking, compensatory strengths and/or remedial work may be considered.
4. In order to be eligible for the advanced English degree, a student must make scores satisfactory to the Department in both the Verbal Aptitude Test and the Advanced Literature Test of the Graduate Record Examination. In lieu of this requirement, the student must indicate special strengths which are at least of equal importance to the achievement of satisfactory test scores on these examinations.

## Master of Arts Degree in History

The following requirements are necessary for admission of students pursuing the Master's degree in hitory.

1. The applicant must meet all requirements of and be admitted to the Graduate School. In addition, he must meet all requirements for degree candidacy.
2. Satisfactory performance on the Graduate Record Examination, including the Advanced Test in history. A score of at least 800 is required on the Aptitude Section.
3. A high standard of undergraduate achievement, normally a 2.75 over-all standing (on a 4.0 scale).
4. Completion of a satisfactory undergraduate major in history.
5. Two letters of recommendation from faculty members with whom the applicant has studied.

## SEMINAR REQUIREMENTS

Seminars or research courses are required of graduate students. Two types of seminar are provided: (1) for graduate students who prepare a Master's thesis and (2) for students who do not prepare a thesis.

## THE THESIS

The thesis should show, among other things, the following characteristics: (a) ability of the candidate to work independently on an approved problem; (b) a reasonable familiarity with the literature of the field of specialization; (c) a practical working knowledge of research methods; and (d) conclusions justified by supporting data.

The thesis must conform to regulations approved by the Graduate Council for writing theses. Two typewritten copies of the thesis must be filed in the University Library at least one week before the degree is conferred.

## EXAMINATIONS

Before the graduate student can become a candidate for the Master's degree he must take the Graduate Record Examination. This examination is given each semester and each summer term. At least one-half of the work required for the degree must be completed after the qualifying examination.

The graduate student shall, upon official notification, pass an oral and/or written examination on his major, his minor fields, and his thesis.

## APPLICATION FOR DEGREE

A student planning to receive the Master's degree in June should file application before the end of the first semester. August candidates should file application not later than the beginning of the second semester. Applications should be filed in the office of the Dean of the Graduate School. Fees are to be paid at the Business Office and receipts presented in the office of the Dean of the Graduate School.

## CURRICULA

The institution has worked out specific curricula for the following certificates: Standard Elementary Certificate, Standard High School Certificate, Provisional Certificate for Principalship; Provisional Certificate for Supervisor, and Provisional Certificate for Guidance Counselor. Elementary and secondary teachers may take work leading to Rank I. The Standard Leadership Certificate, covering principalship, supervision, and superintendency is available for school leaders who complete a planned curriculum for one year above the Master's degree. The Standard Certificate is also available for Guidance Counselors.

Information concerning these curricula may be obtained from the Dean of the Graduate School.

## CERTIFICATION AT THE GRADUATE LEVEL STANDARD ELEMENTARY CERTIFICATE

The Standard Elementary Certificate valid for ten years shall be issued to a person who meets the requirements of law and general regulations of the State Board of Education and files a transcript of credits showing the completion of the four-year curriculum for the training of elementary teachers as prescribed by the Council on Public Higher Education, and who, in addition thereto, completes the requirements for a Master's degree in a standard graduate school, as prescribed.

The curriculum, approved by the State Board of Education, leading to the Standard Elementary Certificate shall be based upon the following:
a. Completion of the requirements for the Master's degree which shall be based upon at least 30 semester hours of graduate work. For students who write a thesis, a minimum of 24 semester hours shall be required.
b. At least 15 of the 30 hours required for the Master's degree must be in courses open only to graduate students. Nine of the 15 hours must be in professional education courses.
c. At least nine semester hours of the required work shall be in professional education courses designed to develop the recommended competencies.
d. At least 12 semester hours of the total hours required for the degree shall be non-professional subject matter courses. These courses must be selected from the fields of study required in general education and/or in subject matter courses used in partial fulfillment of the four-year elementary curriculum for elementary certification.
The Standard Elementary Certificate may be extended for life upon three years of successful teaching experience during the life of the certificate. If the holder fails to meet the requirements for life extension before the certificate expires, the certificate may be registered at the end of each ten-year period in the Division of Teacher Education and Certification of the State Department of Education on basis of four semester hours of graduate work for each of the three years the teacher fails to teach.

## STANDARD HIGH SCHOOL CERTIFICATE

The Standard High School Certificate valid for ten years shall be issued to a person who meets the requirements of law and general regulations of the State Board of Education and files a transcript of credits showing the completion of the four-year curriculum for the training of high school teachers as prescribed by the Council on Public Higher Education, and who, in addition thereto, completes the requirements for a Master's degree in a standard graduate school as prescribed.

The curriculum leading to the Standard Secondary Certificate shall be based upon the following:
a. Completion of the requirements for the Master's degree which shall be based upon at least 30 semester hours of graduate work. For students who write a thesis, a minimum of 24 semester hours shall be required.
b. At least 15 of the 30 hours required for the Master's degree must be in courses open only to graduate students. Nine of the 15 hours must be in professional education courses.
c. At least nine semester hours of the required work shall be in professional education courses designed to develop the recommended competencies.
d. At least 12 of the 30 smester hours required for the degree shall be non-professional subject matter courses. These courses must be selected from the general education courses and from the list of subjects in which majors and/or minors may be completed on the undergraduate level and used in partial fulfillment of requirements for the bachelor's degree and the Provisional High School Certificate.
The Standard High School Certificate may be extended for life upon three years' successful teaching experience during the life of the certificate. If the holder fails to meet the requirements for life extension before the certificate expires, the certificate may be registered at the end of each ten-year period in the Division of Teacher Education and Certification of the State Department of Education on basis of four semester hours of graduate work for each of three years the teacher fails to teach.

## CURRICULA FOR SCHOOL LEADERS

## (Principals, Supervisors)

Eastern offers curricula leading to the Provisional Certificate for School Leaders (principals and supervisors). For each of the Provisional Certificates the applicant must have completed a curriculum leading to the Master's degree. In the case of the principal and supervisor three years of successful teaching experience or the equivalent are required. The University also offers a sixthyear program leading to the Standard Certificate for School Leaders. This certificate includes Principalship, Supervision, and Superintendency.

## CURRICULUM FOR GUIDANCE COUNSELORS

Eastern offers a curriculum leading to the Provisional Certificate for Guidance Counselor. The Master's degree is required for this certificate. The Provisional Certificate for Guidance Counselor shall be valid for a period of ten years and renewable each tenyear period on the basis of three years of experience as a guidance counselor. The applicant must have had three years of successful teaching experience or two years of teaching experience and one year of employment in fields other than teaching.

# graduate courses of study 

# College of Arts and Sciences 

F. D. Ogden, Dean<br>Anthropology and Sociology Department

Anthropology 555. (formerly Anthropology 455) Anthropological Theory. Three hours. II.

Prerequisite: Anthropology 100 and 350 or consent of instructor. Anthropology 445 recommended.

A systematic analysis of the current major theories on society and culture with emphasis on their importance in research.

Anthropology 580. (formerly Anthropology 480) Applied Anthropology. Three hours. A.

Prerequisite: Twelve hours in Anthropology or Sociology or consent of the instructor.

An advanced review of the main areas of Anthropological knowledge and how it is utilized in resolving problems in contemporary situations. Among areas considered are linguistics, thought systems, technology, and personality.
*Anthropology 590. (formerly Anthropology 490) Tutorial in Anthropology and Sociology. One to three hours. A.

Prerequisite: Twelve hours in Anthropology or Sociology and consent of the instructor.

Individual reading and research on a problem or area within the field of anthropology chosen by the student after consultation with the instructor. The student's work will culminate in a research paper or essay. (May be repeated for a maximum of six hours.)
*Anthropology 595. (formerly Anthropology 495) Seminar in Anthropology and Sociology. Two hours. A.

Prerequisite: Eighteen hours in Anthropology and Sociology or consent of the instructor.

A topic of major importance in the fields of Anthropology and Sociology will be selected for intensive investigation. Topic will change from semester to semester. (May be repeated for a maximum of six hours.)

Anthropology 600. (formerly Anthropology 500) Anthropology and Modern Life. Three hours. A

An intensive review of the field of anthropology with emphasis on the implications of recent theoretical and factual developments for man in the modern world.

[^1]> Anthropology 610. (formerly Anthropology 510) Anthropology and Education. Three hours. A

> Prerequisite: Anthropology 600 or an undergraduate background in Anthropology. A cross-cultured analysis of educational processes; the 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 (effect of class, group alignments, prestige, ranking, status and role, and social control:) implications for modern education.

> Sociology 545. (formerly Socology 445) Sociological Theory. Three hours. I

Prerequisite: Sociology 231, 321 and 330 or consent of instructor.

A chronological analysis of the major theories on society and culture from earliest times through the 1920's.

Sociology 570. (formerly Sociology 470) Research Methods in Sociology. Three hours. A

Prerequisite: Twelve hours in Anthropology and Sociology or consent of the instructor.

A study of various research methods employed in collecting, processing, and interpreting data in sociology. Some emphasis on statistical methods. Completed studies are reviewed critically.
*Crosslisted in both disciplines

## Art Department

Art 521. (formerly Art 421) Advanced Drawing. Three hours. I Prerequisite: Art 100, 101.
Designed to meet the needs of students who wish to further develop their skill in, and understanding of, drawing.

Art 522. (formerly Art 422) Advanced Painting. Three hours. II Prerequisite: Art 203, 204.
Designed to meet the needs of students who wish to further develop their skill in, and understanding of, painting.

Art 560. (formerly Art 460) Art Workshop for Elementary Teachers. Three hours. A

Prerequisite: Teaching experience.
A workshop involving current art processes, motivation, recent research and publications, and the contemporary philosophies of art education in the elementary school.

Art 562. (formerly Art 462) Aesthetics and Criticism. Three hours. I, II

Prerequisite: Art 390, 391.
The study of the formal analysis, description, and criticism of works of art.

Art 563. (formerly Art 463) Problems in Art. Three to nine hours. I, II

Designed to meet the needs of students who wish to continue certain art projects started in other courses. Problems in painting, design, ceramics, and problems in research in the arts are considered. May be repeated twice.

Art 601. (formerly Art 501) Art Appreciation: Great Periods and Their Influences. Three hours. A

Prerequisite: Six hours in Art.
A course for graduate students who want to pursue art study as it is applied to the examination of the arts and ideas of great periods of development in the Western world.

Art 602. (formerly Art 502) The Art Program in the Public School. Three hours. A

Prerequisite: Six hours in Art.
A study of the origin, trends, philosophy, and current practices in the art programs of the public schools. Types of programs in the elementary and secondary school will be considered and evaluated. Special attention will be given to program planning, selection and procurement of materials and art room facilities, preparation of teaching personnel, and in-service workshops.

## Biology Department

Biology 511. (formerly Biology 445) Microtechnique. Two hours. I, II.

Prerequisite: Biology 141 and 142 or Biology 131 and 132.
The technique of preparing plant and animal tissues for microscopic study. Four laboratory hours.

Biology 515. (formerly Biology 325) Genetics. Three hours. I, II.
Prerequisite: Science 112 or Biology 132 or 142.
Laws governing inheritance, variations and evolution in plants, animals and man; the role of heredity in the improvement of cultivated plants, domesticated animals and the human race. Three lecture hours.

Biology 517. (formerly Biology 451) Ecology. Three hours. A.
Prerequisite: Biology 131, 132, 141, 142.
The relation of plants and animals to their environment. Field trips required. Two lecture hours, three laboratory hours.

Biology 521. (formerly Biology 421) Morphology of NonVascular Plants. Three hours. I.

Prerequisite: Biology 132.
The morphology, anatomy, reproduction, development and unusual biological activities of the algae, fungi, liverworts, and mosses. One lecture and four laboratory-discussion hours.

Biology 522. (formerly Biology 422) Morphology of Vascular Plants. Three hours. II.

Prerequisite: Biology 132.
The morphology, anatomy, reproduction, development and geological history of psilophytes, club mosses, horsetails, gerns, cycads, conifers, and flowering plants. One lecture and four labora-tory-discussion hours.

Biology 523. Mycology. Three hours. A.
Prerequisite: Biology 111, 121.
The morphology, physiology, taxomony, and economic importance of fungi. Field trips required. One lecture and four laboratory-discussion hours.

Biology 528. (formerly Biology 334) Plant Physiology. Three hours. A.

Prerequisite: Biology 131 and 132.
A study of the chemical, physical, and biological processes which occur in vascular plants. Two lecture and four laboratory hours.

Biology 531. (formerly Biology 335) Local Flora. Two hours. II. Prerequisite: Biology 131 and 132.
The identification, classification and phylogeny of vascular plants; principles of taxonomy; field trips required. Four laboratory hours.

Biology 534. (formerly Biology 336) Dendrology. Two hours. A.
The identification and classification of local trees and shrubs; key construction. Four laboratory hours.

Biology 541. (formerly Biology 441) Invertebrate Zoology. Four hours. A.

Prerequisite: Biology 141 and 142.
Characteristics, life histories, taxonomy, ecology and evolution of the invertebrates. Two lecture and four laboratory hours.

Biology 546. (formerly Biology 446) Histology. Three hours. II. Prerequisite: Biology 342.
The microscopic study of animal tissues and an introduction to organology. One lecture and four laboratory hours.

Biology 547. (formerly Biology 347) Embryology. Four hours. I, II.

Prerequisite: Biology 342.
Detailed study of the embryology of the starfish, frog, and chicken, with some consideration of mammalian embryology. Two lecture and four laboratory hours.

Biology 548. (formerly Biology 481) Animal Physiology. Four hours. I, II.

Prerequisite: Biology 141, 142 and Chemistry 111.
Detailed study of the chemistry and physies of the physiological activities of animals. Two lecture and four laboratory hours.

Biology 551. (formerly Biology 351) Vertebrate Natural History. Three hours. II.

Prerequisite: Biology 142.
Lectures, laboratory and field exercises on the taxonomy, evolution, distribution, morphology, behavior, adaptations, habits and life histories of fishes, amphibians, reptiles and mammals. One lecture and four laboratory-discussion hours.

Biology 554. (formerly Biology 344) Ornithology. Two hours. A.
Identification, anatomy, physiology, economic importance and natural history of birds. Early morning field trips will be required. One lecture and two laboratory hours.

Biology 555. (formerly Biology 343) Entomology. Three hours. A.

Prerequisite: Biology 141 and 142.
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.

Biology 591. (formerly Biology 490) Experimental Biology. Three hours. A.

Prerequisite: Senior or graduate standing in biology and departmental approval.

An introduction to experimental procedures in biology and to the use of special instruments in biological teaching and research. Six laboratory-discussion hours.

Biology 599. (formerly Biology 499) Biology Seminar. One hour. I, II.

Prerequisite: Major in biology and five semesters of college credit.

Required of all biology majors. Members of the faculty and majors will meet weekly for presentation and discussion of classical and current developments in specialized fields of biology.

Biology 671. (formerly Biology 511) Biology for Elementary Teachers. Three hours. A.

Experiments and demonstrations essential to the teaching of biological concepts of science in grades K through 6. Six laboratorydiscussion hours.

Biology 681. (formerly Biology 501) Advanced Botany I. Three hours. A.

Individual study in one or two fields of botany selected to meet the specific needs of the student. Topics may be selected from such areas as anatomy, physiology, taxonomy, mycology, morphology, and ecology. Laboratory work will be stressed. Six lecture-discussion-laboratory hours.

Biology 682. (formerly Biology 502) Advanced Botany II. Three hours. A.

A continuation of Biology 681.

Biology 683. (formerly Biology 503) Advanced Zoology I. Three hours. A.

Individual study in one or two fields of zoology selected to meet the specific needs of the student. Topics may be selected from such areas as morphology, physiology, taxonomy, ecology, invertebrate zoology, anatomy, and embryology. Laboratory work will be stressed. Six lecture-discussion-laboratory hours.

Biology 684. (formerly Biology 504) Advanced Zoology II. Three hours. A.

A continuation of Biology 683.
Biology 685. (formerly Biology 505) Principles of Biology I. Three hours. A.

A study of the basic principles of biology and the history of their development. Included may be such topics as the cell theory, evolution, anthropology, inheritance, conservation, alternation of generations, ontogeny, life, classical experiments, economics, and philosophy. Three lecture-discussion hours.

Biology 686. (formerly Biology 506) Principles of Biology II. Three hours. A.

A continuation of Biology 685.
Biology 691. (formerly Biology 571) Research and Thesis Seminar. Two hours. A.

Prerequisite: Approval by chairman of biology department. Research in biology followed by the preparation of a thesis under the guidance of a member of the biology faculty.

Biology 692. (formerly Biology 572) Research and Thesis Seminar. Two hours. A.

Continuation of Biology 691.
Biology 693. (formerly Biology 573) Research and Thesis Seminar. Two hours. A.

Continuation of Biology 692.

## Chemistry Department

Chemistry 514. (formerly Chemistry 401) Chemical Literature. One hour. I, II.

Prerequisite: Chemistry 310.
The students will be introduced to the use of the fundamental periodicals, abstract journals, handbooks, review series and encyclopedias of chemistry. One lecture hour.

Chemistry 525. (formerly Chemistry 420) Instrumental Methods. Four hours. I.

Prerequisite: Chemistry 222, 361 and permission of instructor.
The 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 four laboratory hours.

Chemistry 530. (formerly Chemistry 313) Biochemistry. Three hours. II.

Prerequisite: Chemistry 362.
The chemistry and metabolism of carbohydrates, proteins, liquids, and nucleoproteins and the action of vitamins, hormones, and enzymes related to cellular metabolism and body processes. Three lecture hours.

Chemistry 550. (formerly Chemistry 440) Advanced Inorganic Chemistry. Three hours. I.

Prerequisite: Three years college chemistry or permission of instructor.

Modern concepts of atomic nuclei, atomic structure, and classification of elements. Complexions and coordination compounds. Three lecture hours.

Chemistry 570. (formerly Chemistry 413) Physical Chemistry for the Biological Sciences. Five hours. I.

Prerequisite: College Algebra and Chemistry 111, 112, 221, 222 or equivalent.

This course is recommended for premedical students and students in the biological sciences or related disciplines. Topics to be considered are: states of matter, colligative properties of solutions, thermodynamics, equilibrim, electrochemistry, colloids, and reactions kinetics. (Chemistry majors will take Chemistry 571 and 572). Three lecture and four laboratory hours.

Chemistry 520. Advanced Analytical Chemistry. Three hours. I. Prerequisite: Chemistry 222.
A general survey of modern analytical methods especially with respect to the following: statistical treatment of results, errors, precision, accuracy; calibration of equipment, tolerances; sampling and preparation of samples; separation methods; standards and standard methods; instrumental techniques; references. Three lecture hours.

Chemistry 545. (formerly Chemistry 330) Chemistry Laboratory and Demonstration Techniques. Three hours. A.

Prerequisite: Six semesters of undergraduate work in chemistry or permission of instructor.

A course in the techniques of constructing and demonstrating apparatus to illustrate principles of chemistry. Primarily for high school science teachers. Two lecture and two laboratory hours.

Chemistry 555. Inorganic preparations. Three hours. II.
Prerequisite: Three years college chemistry including quantitative analysis and Chemistry 550 or the equivalent.

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. Six laboratory hours.

Chemistry 560. Advanced Organic Chemistry. Three hours. A. Prerequisite: Chemistry 362.
Nomenclature, application of absorption spectroscopy to organic compounds, survey of new reactions and reaction mechanisms. Three lecture hours.

Chemistry 565. Qualitative Organic Analysis. Four hours. A.
Prerequisite: Chemistry 362.
Identification of unknown organic substances through a systematic study of their physical and chemical properties and their chemical derivatives. One hour lecture and six laboratory hours.

Chemistry 571. (formerly Chemistry 415) Physical Chemistry. Five hours. I

Prerequisite: Chemistry 222 and 261, Mathematics 352 (or concurrent enrollment therein) and one year of physics.

A study of the thermodynamic properties of physiochemical systems; free energy and equilibria; kinetic theory of gases and reaction rates; electrochemistry. Three lecture and four laboratory hours.

Chemistry 572. (formerly Chemistry 416) Physical Chemistry. Five hours. II

Prerequisite: Chemistry 571, Mathematics 352.
A study of phase equilibria; phase rule; solutions, ionic equilibria and activity; atomic and molecular structure; Boltzman distribution, partition functions and thermodynamic relations. Three lecture and four laboratory hours.

Chemistry 580. (formerly Chemistry 450) Seminar, One hour. I, II
Presentation of significant developments from the recent literature to a meeting of members of the chemistry faculty and department majors. One weekly meeting.

Chemistry 595. (formerly Chemistry 430) Introduction to Research. Three to five hours. I, II

Prerequisite: Chemistry 222 and 361.
Objectives and techniques of chemical research. Problems in analytical, inorganic, organic, and physical chemistry. Nine laboratory hours.

## Drama and Speech Department

Drama 500. (formerly Drama 300) History of the Theater. Three hours. A

An intensive examination of the development of theater from the primitive times to the present. Includes both Oriental and Occidental theater.

Drama 540. (formerly Drama 465) Child's Theater. Three hours. A Prerequisite: Drama 242 and 363.
Dramatization of children's stories and presentation of plays for children. Student will work in training school. Principles of creative dramaties. Course developed through study, observation, and practice.

Speech 550. (formerly Speech 210) Phonetics of the English Language. Three hours. A

Prerequisite: Speech 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.

Speech 560. (formerly Speech 331) Speech Correction. Three hours. A

Prerequisite: Speech 131 or 231; English 101 and 102.
This course is designed to help the classroom teacher know the various types of speech defects, the behavior patterns of speech defectives, diagnostic and remedial procedures for functional disorders; what speech problems can be corrected by the classroom teacher and what steps should be taken for guidance in seeking specialized help.

## English Department

English 502. (formerly English 402) Seminar in Creative Writing. Three hours. II. A.

Prerequisite: English 101 (or equivalent), English 102, and two other English courses; permission of the instructor,

A course open to those students who have a desire to have their manuscripts criticized before being submitted for publication; fiction, drama, poetry, biography, or the informal essay accepted.

English 503. (formerly English 403) Creative Writing Conference. One hour. A

Prerequisite: English 101 (or equivalent) and English 102; permission of the instructor.

A one-week course of fifteen informal lectures and discussions led by Eastern faculty members and visiting lecturers; special conference and counseling; criticism of student writing; lectures on modern creative art and artists; reading from their own work by visiting authors; discussions of the problems of composition and publication. Each student must submit a short story, or a one-act play, or four poems, or the equivalent.

English 504. (formerly English 404) General Semantics. Three hours. A

Prerequisite English 101 (or equivalent), English 102, and two courses in literature.

An examination of the basic principles underlying the influence of language on human action and interaction; special emphasis on the relationship between semantics, composition, and literature; course includes a brief introductory unit on the history of the English language.

English 505. (formerly English 565) Seminar in the Structure of English. Three hours. A

Prerequisite: English 101 (or equivalent), English 102, at least two courses in literature; upper division or graduate status; recommendation of advisor.

A course for advanced students based upon the examination of various structural approaches to English and their application; emphasis on new approaches to grammar and rhetoric, e.g., transformational grammar, applied linguistics and semanties; emphasis on order through structure; strengths and weaknesses of the systems; development of literary skills on technical and professional levels; practice in writing and developing of an acceptable style; class discussion and reports; extensive reading in such professional journals as College English, American Literature, PMLA.

English 521. (formerly English 421) Renaissance and Elizabethan Literature. Three hours. I, A

Prerequisite: English 101 (or equivalent), English 102, and two courses in literature.

Spirit of the Renaissance; influence of Italian and other continental literatures; early English humanists; Elizabethan enthusiasm; the Elizabethan language; new literary influences; chief literary forms; Spenser and Elizabethan poetry; the great sonneteers; Sidney and criticism; Bacon and scientific writing, prose fiction; Elizabethan drama.

English 522. English Poetry and Prose of the Seventeenth Century Exclusive of Milton. Three hours. A

Prerequisite: English 101 (or equivalent), English 102, and two courses in literature.

Donne and the metaphysicals; the Cavalier poets; Jonson and the "Sons of Ben"; readings in the prose of such writers as Donne, Jonson, Sir Thomas Browne, Jeremy Taylor, Izaak Walton, and Robert Burton; special attention paid to prose and poetic styles.

English 523. (formerly English 423) Milton and His Age. Three hours. A

Prerequisite: English 101 (or equivalent), English 102 and two courses in literature.

The historical background; life of Milton, as it affected his writings; his earlier poetry; development of his genius; the great epic Paradise Lost and its interpretation; Paradise Regained and Samson Agonistes; other selected writers of the period and their works.

English 524. (formerly English 424) Chaucer. Three hours. II, A
Prerequisite: English 101 (or equivalent), English 102, and two courses in literature.

Major emphasis on the works of Chaucer.
English 525. (formerly English 425) The Age of Dryden, Pope, and Johnson. Three hours. II, A

Prerequisite: English 101 (or equivalent), English 102, and two courses in literature.

Social backgrounds of neo-classicism; Restoration drama as a reaction against Puritanism; Dryden and the rise of the critical spirit; Pope and the Augustans; the literary dictatorship of Dr. Johnson; new techniques of the pre-romantic writers.

English 534. The Nineteenth Century English Novel. Three hours. A

Prerequisite: English 101 (or equivalent), English 102, and two courses in literature.

A study of the great nineteenth century English novelists from Austen through Hardy with emphasis on such writers as Scott, Dickens, the Brontes', Thackeray, Eliot, Meridith, Trollope, and other novelists of the period.

English 540. (formerly English 440) Applied Grammar and Linguistics. Three hours. A

Prerequisite: English 101 (or equivalent), English 102, and at least six additional hours in English.

Includes an introductory unit in the history of the English language; a study of grammar and its application to various aspects of composition, such as style, variety of sentence patterns, logic, precision, and lucidity; the study of English through linguistic analysis; composition of and contrast between traditional and grammatical approaches to composition and more recent linguistic approaches through studies in various techniques which can be applied to the American language for achieving improved correlations between the knowledge of language structure and writing ability.

English 541. (formerly English 441) History and Structure of the English Language. Three hours. A

Prerequisite: Two years of work in English toward a major or minor in English.

Study of the history of the English language in terms of the social, historical, and linguistic forces from which it developed into modern English; special emphasis upon the Indo-European family of language as it has evolved through the Old English, Middle English, and Modern English periods.

English 547. Age of Emerson. Three hours. A
Prerequisite: English 101 (or equivalent), English 102, and two courses in literature.

Study of the prose and poetry of the American Renaissance (1832-1870), with emphasis on the writings of Emerson and his circle; Thoreau, Hawthorne, Melville, Whitman, and Dickinson as their work relates to the period.

English 550. Realism and Naturalism in American Fiction. Three hours. A

Prerequisite: English 101 (or equivalent), English 102, and two courses in literature.

Study of the development of the realistic novel in the nineteenth century and the rise of naturalism in the early twentieth, with special emphasis upon the social and philosophical problems of the age as represented in the works of such writers as Howells, James, Garland, Norris, Crane, Dreiser, and others.

## English 560. Continental Fiction. Three hours. A

Prerequisite: English 101 (or equivalent), English 102, and two courses in literature.

Western non-English novels and novellas in translation; a consideration of great western fiction from Cervantes to the present; cmphasis upon such writers as Tolstoy, Dostoevski, Turgeniev, Hugo, Stendhal, Balzac, Flaubert, Dumas, Manzoi, and Sienkiewicz.

English 565. Greek and Roman Drama as Literature. Three hours. A

Prerequisite: English 101 (or equivalent), English 102, and iwo courses in literature.

Brief study of dramatic criticism, the theory of tragedy, and the Greek and Roman theater; wide reading of plays by Aeschylus, Sophocles, Euripides, Aristophanes, Plautus, and Seneca.

English 601. (formerly English 501) Bibliography and Research. Three hours. A

Work in critical theory and practice with attention to bibliography and library resources. Each student is expected to compile an extensive bibliography and to write a thorough research paper on a subject or author of his or his professor's choice.

English 611. (formerly English 511) The Development of English Drama to 1642 . Three hours. A

Medieval liturgical drama; early miracle plays and the guild cycles; morality plays and interludes; early Tudor Renaissance drama; the development of the Elizabethan theater; the Stuart dramatists.

English 615. (formerly English 515) English Criticism. Three hours. II, A

A study of the development of English criticism from its beginnings to the end of the nineteenth century. Foreign influences in English criticism; changing conceptions of the criteria of criticism; the great critics, and their works.

English 626. (formerly English 526) Early and Middle English Literature. Three hours. I, A

Selection of major literary works of the Old English and Middle English periods. Emphasis on Beowulf, selected Old English poetry, Sir Gawain and the Green Knight, The Pearl, the Middle English Lyric, Piers Plowman, Malory's Morte d' Arthur, and other works, not including Chaucer.

English 632. Seminar in the Age of Tennyson and Browning. Three hours. I, A

Primary emphasis on the poetry of Tennyson and Browning; additional selected readings and studies in English literature from 1832 to the twentieth century, with secondary emphasis on such masters as Carlyle, Newman, Ruskin, the Rossettis, Arnold, Pater, Swinburne, and Hardy.

English 646. (formerly English 546) Seminar in American Fiction. Three hours. I, A

Treatment of sources and origins of American fiction in relation to the English novels of the mid-eighteenth century; early American novels; examinations of fiction of the United States during the nineteenth and twentieth centuries, with special emphasis on the works of major writers of the twentieth century.

English 647. Seminar in Hawthorne and Melville. Three hours. A

Extensive study of the major novels; the Puritan background and influence; structure and symbolism in the novel; criticism and evaluation, with attention to the themes of the period.

English 648. Seminar in Whitman and Dickinson. Three hours. A

Extensive study of the poetry of Whitman and Dickinson as "New Voices in American Literature" in relation to the poetic styles of nineteenth-century America; attention to such matters as influences on and sources of Whitman and Dickinson; their influence on later poets.

English 649. Seminar in Twain and James. Three hours. A
Studies in the work of both writers and the comparison of and contrast between the two, representing respectively unique traits of the West and East in their time.

English 652. Seminar in Faulkner and Hemingway. Three hours. A

Studies in the work of the two Nobel Prize winners, with special emphasis on sources and influences, style, techniques, and the similarities and differences of selected works.

English 660. The Epic. Three hours. A
Homer and the epic tradition; the Aeneid; the Divine Comedy; Orlando Furioso; Jerusalem Delivered; Paradise Lost; anonymous epics; the Cid; the Song of Roland, the Nibelungenlied; the Kalevala.

English 686. Literature in Relation to the History of Ideas. Three hours. A

Studies in the history of ideas as related to literature, with emphasis on philosophical approaches to English and American literature.

English 68\%. Studies in Sources and Influences. Three hours. A
An investigation of the sources and influences which have affected the works, styles, philosophies, and points of view of Ameri-
can and English writers - e. g., the influence of Greek mythology upon James Joyce, or The Old Yellow Book as the source for Robert Browning's The Ring and the Book.

## English 690. Special Studies. One to three hours. A

Independent research and writing designed to fulfill the individual needs and interests of advanced students; studies directed by a professor in the student's field of concentration; credit ranges from one to three hours and is determined by the extent and excellence of the student's work.

English 691. Special Studies. One to three hours. A
A continuation of English 690.
English 692. (formerly English 592) Graduate Seminar in Shakespeare. Three hours. A

Selected concentration on the tragedies, comedies, historical dramas, and poetry; treatment of special studies on Shakespeare.

English 698. Thesis I. Three hours. A
English 699. Thesis II. Three hours. A

## Geography Department

Geography 571. (formerly Geography 471) Geography of World Problems. Three hours. I, II.

Prerequisite: Six hours of geography.
Geography and the evolution of nations; the expansion of Europe; European influence in world affairs; economic resources; the British Empire and its many problems-India, Egypt, Ireland, South Africa; geography and problems of major nations of the Orient; Islamism; Russia, past and present; Europe in Africa; the problems of the Far East.

Geography 573. (formerly Geography 473) Geography of Asia. Three hours. I, II.

Prerequisite: Geography 101 or 102.
The structure of Asia; the physiography of Asia; the climates of Asia; the vegetation of Asia; the population of Asia; the exploration and exploitation of Asiatic countries by European nations; Asia's position in the world: the agricutural resources of Asia; summary of the economic resources of Asia; Turkey; Arab Asia; the Iranian Plateau; India; Burma; Ceylon; Southeastern Asia; the East Indies; China; Japan; Asiatic Russia; growing interest of the United States in Asia; the geographic advantages and disadvantages of the continent.

Geography 574. (formerly Geology 474) Geology and Geography of Kentucky. Three hours. I, II.

Kentucky, its regions, climate, waters, soils, agriculture, occupations, manufacturing, cities, and natural resources. Regional geology and specific treatment of cave areas, natural bridges, Cumberland Falls, Cumberland Gap, Lake Cumberland, Kentucky Lake, Big Bone Lick, and river features. The future of Kentucky and its geographic and geologic associations. Three lecture hours.

Geography 5\%5. (formerly Geography 475) Geography of Africa. Three hours. I, MI.

Prerequisite: Geography 101 or 102.
Structure; physiography; climate; vegetation; population; exploration; exploitation; position in world affairs; agricultural and economic resources; transportation; climatic and physiographic regions; foreign trade and foreign interests; comparisons and contrasts with other continents; the geographic advantages and disadvantages; changes resulting from the World Wars and postwar conditions; present-day problems and their geographic background.

Geography 600. (formerly Geography 500) Historical Geography. Three hours. I.

Prerequisite: Twelve hours of Social Science or six hours of Geography.

The geography of the world and the United States in the past; the relations between earth's conditions and resources on the one hand, and the historical development of nations on the other; the adjustments of nations and peoples to varied environments; the evolution of the environmental relationships of the people in selected areas of the world; evolutionary geography.

Geography 601. (formerly Geography 501) Geography in Education. Three hours. II.

Prerequisite: Twelve hours of Social Science or six hours of Geography.

A survey of geography in the present day school systems of the world from the elementary school to the university; examination and comparison of courses of study; objectives; outlines; offerings and problems; evaluation of departments; geographic literature; equipment; books; magazines; and other materials; the place of geography in the service of the nations.

Geography 602. (formerly Geography 502) Urban Geography. Three hours. I, II.

Prerequisite: Twelve hours of Social Science or six hours of Geography.

A survey of the rise of urbanism throughout the world; an intensive study of the problems of the cities of America with all their growing pains; magalolopis; metropolitan centers; municipal porblems; shopping centers; planning and replanning of cities; rehabilitation developments; community housing; the location and size of cities; the hinterland; the major characteristics of cities.

Geography 60\%. (formerly Geography 507) World Regional Geography. Three hours. II.

Prerequisite: Departmental permission.
A study of the major culture regions of the world with emphasis on areal relationships; the processes which shape and are responsible for the areal distribution of cultural landscape features; recognition and appreciation of the personality of the major world cultural regions; and the concepts associated with the structure and continual change of the culture regions.

Geography 608. (formerly Geography 508) Physical Geography. Three hours. I.

Prerequisite: Departmental permission.
A study of the forces and processes which modify the landscape; stress is placed on the integral functional relationships of these various phenomena which collectively shape our physical world; heat budget, water budget, landform classification, edaphic factors, and botanical associations.

Geography 609. (formerly Geography 509) Geography Seminar. Two hours. I.

Prerequisite: Departmental permission.
Individual study of special problems in geography.
Geography 610. (formerly Geography 510) Geography Seminar. Two hours. II.

Prerequisite: Departmental permission.
A continuation of Geography 609.
Geography 611. (formerly Geography 511) Geography Seminar, Two hours. I or II

Prerequisite: Departmental permission.
A continuation of Geography 610.

## Geology Department

Geology 506. (formerly Geology 306) Geomorphology. Three hours. I, II.

Branch of science that deals with the surface features of the globe; their form, nature, origin, and development, and the changes they are undergoing. Designed to introduce geology to the teacher with emphasis on current geologic interests and findings. Some elementary map interpretation of landforms. Two lecture and two laboratory hours.

Geology 507. (formerly Geology 307) Economic Geology. Three hours. I.

Prerequisite: Geology 108 or 200.
The application of geology to mineral materials. A summary of modern knowledge about where and how our valuable mineral resources are formed by nature. Non-geological background material to give the beginner an appreciation of minerals (metallic, non-metallic, and fuels) and their importance to mankind. Two lecture and two laboratory hours.

Geology 509. (formerly Geology 309) Invertebrate Paleontology. Three hours. II.

Prerequisite: Geology 305.
The classification and morphology of fossil invertebrates. The anatomy, structure, of exoskeleton and endoskeleton, nomenclature, evolution, ecology, and geologic history of fossil invertebrates including protozoa, porifera, coelenterata, vermes, echinodermata, bryozoa, brachiopoda, mollusca, and anthropoda. Methods of fossilization and preservation. Observations and collections will be made in the field. Two lecture and two laboratory hours.

Geology 574. (formerly Geology 474) Geology and Geography of Kentucky. Three hours. I, II.

Kentucky, its regions, climate, waters, soils, agriculture, occupations, manufacturing, cities, and natural resources. Regional geology and specific treatment of cave areas, natural bridges, Cumberland Falls, Cumberland Gap, Lake Cumberland, Kentucky Lake, Big Bone Lick, and river features. The future of Kentucky and its geographic and geologic associations. Three lecture hours.

Geology 599. (formerly Geology 399) Earth Science. Three hours. I, II.

The solar system and the heavenly bodies with their distances, motions, and the laws which control them; the air and its effects on weather, its motions and their effects, its elements and its controls; a brief study of the earth, its topography, structure, origin, and the forces which activate it.

## Health and Physical Education Department

Health 585. (formerly Health 485) Teacher Preparation in Driver Education. Three hours. A.

Critical analysis of traffic accidents, attitude factors, essential knowledge of automobile operation, and traffic laws and regulations. Includes introduction to laboratory experiences; the use of psycho-physical testing and the development of driving proficiency.

Health 588. (formerly Health 488) Workshop in School Health Services. Three hours. A.

A study of school health services, and the relationship to the total health and school program. This course includes a detailed study in theory, evaluation techniques, and follow-up procedures in the health screening program.

Physical Education 501. (formerly Physical Education 401) Community Recreation. Three hours. I, II.

The problems of leisure; vacation time for children; adult recreation; content of school programs for leisure education; dramatics; reading; music; art; handicrafts; nature study; extracurricular activities.

Physical Education 540. (formerly Physical Education 340) Advanced Swimming and Water Safety. Two hours. II.

Prerequisite: To have passed the Red Cross Beginners and Intermediate swimming tests or their equivalent. A screening test will be given those who have not had the opportunity to take Red Cross tests to determine if they are eligible to take the class.

Emphasis on advanced skills in swimming and water safety in which the Red Cross Instructors Course in Water Safety will be taught.

Physical Education 568. (formerly Physical Education 468) Administration and Organization of Physical Education. Two hours. I, II.

Policies and procedures of administration on the elementary and secondary school level. Special emphasis on construction and care of facilities, equipment, and supervision of personnel.

Physical Education 5\%. (formerly Physical Education 370) Camp Administration. Two hours. I.

The responsibilities of a camp director concerning program, leadership, health and sanitation and related problems in a modern camping program. Field trips will be taken to camping areas.

Physical Education 5\%1. (formerly Physical Education 470) Workshop for Women in Gymnastics, Track and Field, Synchronized Swimming, and Modern Dance. One to four hours. A.

A workshop designed for those women physical education teachers who wish to better acquaint themselves with skills in and conduct of gymnastics, track and field, synchronized swimming, and modern dance programs.

Physical Education 575. (formerly Health 475) Tests and measurements in Physical Education. Three hours. I, II.

The students become familiar with the various tests and measurements in this field. They learn how to give and score the tests, evaluate and use the results obtained in the testing program.

Physical Education 596. (formerly Physical Education 496) Workshop for Elementary Teachers in Physical Education Activities. Three hours. A

This workshop will present a comprehensive review of techniques used in teaching physical education in the elementary grades. Emphasis will be placed on health evaluation, fitness testing, rhythmical activities, game activities, tumbling and self-testing activities.

Physical Education 598. (formerly Physical Education 498) Athletic Coaching Workshop. Three hours. A

A comprehensive review of fundamentals in coaching basketball, football, baseball, and track on both secondary and college levels. It will include lectures and demonstrations on offensive and defensive techniques to meet modern trends in sports today.

Physical Education 599, (formerly Physical Education 499) Implementing Physical Fitness. Three hours. A

A course designed to assist physical education teachers in acquiring further competency in the conduct of fitness activities in a typical elementary and secondary school situation. Emphasis will be placed on the review of the fundamentals of testing, interpretation, and program planning necessary to meet the needs of pupils.

Physical Education 649. (formerly Physical Education 549) Advanced study in History, Principles, and Modern Trends in Physical Education. Three hours. I

Students will review history and principles and their application to new trends in this field of study. (A research project is required.)

Physical Education 650. (formerly Physical Education 550) Curriculum Design in Physical Education. Three hours. I

Problems relating to design of programs in physical education will be studied. A curriculum project will be developed by each student.

Physical Education 651. (formerly Physical Education 551) Planning and Construction Techniques of Facilities and Equipment in Physical Education. Two hours. II.

The problems relating to programming facilities and equipment in physical education will be studied. Students will visit and make surveys of surrounding facilities under the direction of an instructor.

Physical Education 662. (formerly Physical Education 562) Adapted Physical Education. Three hours. II

Students will study the basic principles of a good adapted program for handicapped students. A practical project will be required of each student.

Physical Education 669. (formerly Physical Education 569) Organization and Administration of Athletics. Three hours. A

This course deals with the organization of high school and college athletics with reference to national, state, and local control. It considers staff, program, budget, health and safety, insurance, facilities, and other phases of administration.

Physical Education 680. (formerly Physical Education 580) Interpretation of Data in Physical Education. Three hours. II

Methods and techniques in statistics and their interpretation as related to physical education activities will be studied. Students will be assigned statistical problems with physical education data.

Physical Education 691. (formerly Physical Education 591) Independent Problems in Physical Education. Three hours. I

The student will solve an independent problem in physical education. The solution of this problem will be made by using proper research techniques and through scheduled conferences with an assigned member of the physical education staff.

## History Department

History 501. (formerly History 401) The American Colonial Period. Three hours. I, II.

Political and social history of the Thirteen Colonies and their neighbors; European background, settlement, and Westward expansion: intercolonial conflicts; beginnings of culture; and colonial opposition to imperial authority.

History 502. (formerly History 402) The American Revolution and the Constitution. Three hours. I, II.

Prerequisite: History 202 or consent of instructor.
Colonial background of Revolution; internal as well as external nature of Revolution; problems associated with Confederation; and events leading up to the American Constitution.

History 503. (formerly History 403) Jacksonian Democracy. Three hours. I, II.

Criticism of the concept. Party issues, nationalism, and the importance of the age.

History 504. (formerly History 404) The Ante-Bellum Period. Three hours. I, II.

Prerequisite: History 202 or consent of instructor.

Political sectionalism; young nationalism; economic transition; democracy's mind; politics as an art.

History 505. (formerly History 405) America's Westward Expansion. Three hours. I, II.

Prerequisite: History 202 and 203, or consent of instructor.
The Colonial frontier; conflicts of Empire; trans-mountain movements; the Ohio-Mississippi valleys; Indian problems; Manifest Destiny; the West and the sectional struggle; the trans-Mississippi frontier of mining, railroads, cattle, and agriculture; West versus East.

History 506. (formerly History 406) The South in American History. Three hours. I, II.

Prerequisite: History 202 and 203 , or consent of instructor.
Colonial developments in society and politics; the origins of sectional consciousness; the institutions of Negro slavery and the plantation system; southern ideas and ideals; the Civil War and Reconstruction; the modern South.

History 507. (formerly History 407) Civil War and Reconstruction. Three hours. I, II.

Prerequisite: History 202 or consent of instructor.
The ante-bellum South, the ante-bellum North; anti-salvery agitation, the growth of sectional consciousness, recurrent crises, secession, and war; military operations, internal developments in the North and South; the Confederate collapse; problems of reconstruction; social, political, and economic reconstruction; aftermath.

History 510. The Gilded Age, 1877-1898. Three hours. I, II.
Prerequisite: History 203 or consent of instructor.
America's industrial expansion; rise of labor unions; farm protest, political bossism.

History 511. (formerly History 511, 1900-1929) The Progressive Era and World War I, 1898-1920. Three hours. I, II.

Prerequisite: History 203 or consent of instructor.
Progressive movement; imperialism; American entry into war; the Treaty of Versailles and the League of Nations.

History 512. (formerly History 512, 1929 to present) Prosperity, Depression, and War, 1920-1945. Three hours. I, II.

Prerequisite: History 203 or consent of instructor.
Internationalism and isolationism; prosperity in the twenties; the depression and efforts to cope with it; the coming of World War II; United States participation in war.

History 513. (formerly last part of History 512) The United States and World Responsibility, 1945 to present. Three hours. I, II.

Prerequisite: History 203 or consent of instructor.
The problems of post-war adjustment; the cold war; the affluent society; problems inherent in world leadership.

History 520. (formerly History 420) The Negro in American History. Three hours. I, II.

Prerequisite: History 202, 203, 246, and 247.

The African heritage; middle passage; the peculiar institution; the Negro and the Civil War; reconstruction; the strange career of Jim Crow; modern emancipation; black nationalism.

History 530. (formerly History 430) American Social and Intellectual History to 1850. Three hours. I, II.

Prerequisite: History 202 or consent of instructor.
European influences; the colonial mind; revolutionary attitudes; New England's leadership; the movement of protest and reform; the rise of a native literature.

History 531. (formerly History 431) American Social and Intellectual History since 1850. Three hours. I, II.

Prerequisite: History 203 or consent of instructor.
The Civil War; Protestantism and Capitalism; Social Darwinism; the literature of nationalism and realism; the twentieth century mind.

History 533. (formerly History 433) American Diplomatic History. Three hours. I, II.

Prerequisite: History 202 and 203.
The history of American foreign relations from 1776 to the present with special emphasis on the development of major trends such as isolationism, imperialism, and internationalism.

History 535. (formerly History 320) Ancient History in the Near East and Greece. Three hours. I, II

The Ancient Near East and Greece from prehistoric times to Alexander the Great and his successors; early food production; the rise of civilization in Babylonia and Egypt; the development of economic and political institutions; art; science; literature; and religion.

History 536. (formerly History 321) History of Rome. Three hours. I, II

Rome from prehistoric village to the dominant power of the Mediterranean world; rise and decline of the Empire in the West.

History 540. (formerly History 440) Renaissance and Reformation. Three hours. I, II

This course deals with the transformation of European civilization from the medieval to the modern period, 1350-1650. Special emphasis will be placed upon changes in the political, religious, and economic institutions of Europe and the reflection of these changes in intellectual thought.

History 541. (formerly History 441) The Age of Enlightenment. Three hours. I, II

European intellectual history, 1650-1789; the scientific revolution, the Cartesian and Newtonian schools; the Englightenment as a European phenomenon; special emphasis on the eighteenth century as an age of political and social criticism.

Histery 542. (formerly History 442) The French Revolution and Napoleon. Three hours. I, II.

Background for the French Revolution; analysis of the various stages of the Revolution and their reflection in foreign policy; the establishment of the First Empire and the reasons for its collapse; the effects of the French Revolution upon France and Europe; 1815 as a watershed of European history.

History 544. (formerly History 444) European Intellectual History Since 1815. Three hours. I, II

A study of European civilization in the 19th and 20th centuries with special emphasis upon institutions, ideas, and cultural forms distinguishing the period.

History 545. (formerly History 445) Europe from 1815 to 1870. Three hours. I, II

The Congress of Vienna and reaction following the Napoleonic wars; the revolutions of 1820,1830 , and 1848 ; liberalism, realism, and nationalism; the growth of science and technology.

History 546. (formerly History 446) Europe from 1870 to 1914. Three hours. I, II

A survey of the rapidly growing European society, economy, and world-wide impact in the period of uneasy Euorpean peace prior to the First World War; industrialism; imperialism; the diplomatic background of World War I.

History 547. Tudor England, 1485-1603. Three hours. I, II.
Henry VII and the resurgence of the monarchy; dynastic consolidation; Early English Renaissance; Henry VIII and the revolt against Rome; The Protestant Reformation; Cromwell's reforms; Economic and Social Change; Edward VI and the Mariam Reaction; character and policies of Elizabeth; Elizabethan Settlement; Catholic vs. Puritans; Elizabethan diplomacy and the Spanish War; the Tudor Constitution and the rise of Parliament; origins of the empire; the Elizabethan Renaissance.

History 548. Stuart England, 1603-1714. Three hours. I, II.
Characters and policies of the early Stuarts; constitutional conflicts; Anglicanism vs. Puritanism; socio-economic developments; the gentry and aristocracy; the collapse of the Tudor Constitution; the English Civil War; Cromwell and the Interregnum; Charles II and the Restoration; the Scientific Revolution; the growth of the Empire; the Glorious Revolution; new constitutional developments; Britain as a Great Power; the wars of Louis XIV; the reign of Queen Anne.

History 550. (formerly History 450) Victorian Britain. Three hours. I, II.

Economic and intellectual backgrounds of the 19th century; the French Revolution and the Napoleonic threat; reaction and reform after 1815; the Victorian compromise in politics; common denominators of Victorian thought; origins of the Commonwealth; the age of Palmerston in foreign affairs.

History 551. (formerly History 451) Britain and the Empire in Adversity. Three hours. I, II.

Characteristics of a new era; the Reform Bill of 1867; economic and intellectual trends in the late 19th century; the decline of liberalism in politics; the revival of imperialism; coming of World War I; economic and social dislocations; emergence of the Commonwealth; political futility at home and abroad; the impact of World War II; the Conservative-Labor contention; the liquidation of Empire; Britain's role in the "cold war."

History 557. (formerly History 470) Germany Since 1870. Three hours. I, II.

Background, including the rise of Prussia; German nationalism and German particularism; the creation of the German Empire and its rule under Bismarck and William II; the Peace Treaty and the Weimar Republic; Nazi Germany; the Second World War and Allied Occupation.

History 560. (formerly History 360) History of Russia I. Three hours. I, II.

Prerequisite: History 246 and 247. The Eastern Slavic nations from earliest times to the modern imperial period of 1801. Political, socio-economic, and cultural developments of the period.

History 561. (formerly History 361) History of Russia II. Three hours. I, II.

Prerequisite: History 560.
Russia from the beginning of the 19th century to the Revolution of 1917. Serfdom, industrialization, agrarian reforms and the revolutionary movements.

History 562. (formerly History 362) The History of the Soviet Union. Three hours. I, II.

A survey of Russia from the 1917 revolutions to the present; the Civil War; Lenin's New Economic Policy; the five-year plans; the Soviet system of government; and Russia's emergence as a world power following World War II. Attention is also given to those cultural trends underlying the political, economic, and social developments of the Soviet era.

History 566. (formerly History 480) Imperial Spain, 1489-1815. Three hours. I, II.

A political and cultural history of Spain from the period of its predominance in European and American affairs until its decline in the 17 th and 18th centuries.

History 5\%. (formerly History 370) Far Eastern History to the 19th Century. Three hours. I, II.

A survey of the history of China and Japan from ancient times to the end of the 18th century, emphasizing characteristic political, economic, social, religious, and cultural developments in both countries. Reference will also be made to peripheral areas.

History 571. (formerly History 371) Far Eastern History in the 19th and 20th Centuries. Three hours. I, II.

A survey of the history of China and Japan in the 19th and 20 th centuries. Special attention is given to the impact of the

West, intellectual and cultural movements, and political, economic, and social developments. Reference also will be made to peripheral areas.

History 580. (formerly History 350) History of Latin America I. Three hours. I, II.

European and Amerindian background; discovery, conquest, and expansion; techniques of government; social and economic institutions to independence.

History 581. (formerly History 351) History of Latin America II. Three hours. I, II.

Comparative treatment of political, economic, and social institutions of the Latin American republics from attainment of indedence to the present.

History 598. (formerly History 498) The Ideological Foundations of Western Civilization I. Three hours. I, II.

Introduction to the basic concepts in the ideological heritage of the Western World from the end of the medieval age through the Enlightenment. Reading materials will consist largely of selections from the great books and documents in religion, science, economics, political theory, and philosophy.

History 599. (formerly History 499) The Ideological Foundations of Western Civilization II. Three hours, I, II.

Introduction to the basic concepts in the ideological heritage of the Western World from the Enlightenment to the present. Reading materials will consist largely of selections from the great books and documents in religion, science, economics, political theory, and philosophy.

History 601. (formerly History 501) Survey of Historiography. Three Hours. I, II.

A Seminar approach to the history of historical writing and interpretation. The course directs attention to the selected works of great historians from Herodotus to the present day.

History 603. (formerly History 503) Historical Criticism. Three hours. I, II.

A Seminar in fundamental techniques of the historian: using basic bibliographical tools; locating and evaluating source materials; writing book reviews; critically interpreting historical evidence.

History 604. (formerly History 504) History as a Social Science. Three hours. I, II.

The scientific approach to social problems and their historical interpretations; an analysis of the economic, social, intellectual, and political backgrounds of contemporary civilization.

History 605. The Humanities Approach to History. Three hours. I, II.

Prerequisite: Consent of Instructor.
An examination of the "American Character" and its development as an example of the Humanities approach to the study of history.

History 606. Problems in Interpreting World History. Three hours. I.

A Seminar concentrating upon selected controversial developments in World History.

History 607. Problems in Interpreting American History. Three hours. II.

A Seminar concentrating upon selected controversial developments in American History.

History 610. (formerly History 510) Pro-Seminar in American History. Three hours. I, II.

Readings and investigations in a field other than the student's speciality.

History 611. (formerly History 511) Seminar in American History. Three hours. I, II.

Techniques of research, note-taking, documentation; occasional lectures and class discussions provide continuity and acquaint the student with the major problems and controversies of the area. Fields vary from semester to semester as announced.

History 620. (formerly History 520) Topics in Early 19th Century English History, 1815-1867. Three hours. I, II.

A Seminar in the Victorian era. Students conduct original research; prepare papers; and submit their work to the class for criticism and discussion.

History 698. (formerly History 598) Thesis Tutorial I. Three hours. I.

History 699. (formerly History 599) Thesis Tutorial II. Three hours. II.

## Mathematics Department

Mathematics 508. (formerly Mathematics 408) Introduction to Modern Algebra. Three hours. I, II.

Prerequisite: Mathematics 251 or consent of the 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.

Mathematics 509. (formerly Mathematics 409) Linear Algebra. Three hours. I, II.

Prerequisite: Mathematics 251 or consent of instructor.
Matrix algebra; vector spaces; systems of linear equations; linear transformations.

Mathematics 533. (formerly Mathematics 333) Introduction to Non-Euclidean Geometry. Three hours. I, II.

Prerequisite: Mathematics 251 or consent of instructor.
Finite geometries; foundations of Euclidean geometry with investigations of the tacit assumptions of Euclid; Hilbert's postulates; Euclid's Fifth Postulate; the discovery of Non-Euclidean geometry; hyperbolic plane geometry; elliptic plane geometry; consistency of the Non-Euclidean geometries.

Mathematics 534. (formerly Mathematics 334) Modern College Geometry. Three hours. I, II.

Prerequisite: High school geometry and Mathematics 232.
Logical systems and basic laws of reasoning; special topics of axiomatic geometry; Menelaus's and Ceva's theorems; harmonic elements and cross ratio; projective geometry; basic axioms; duality; Desargue's theorem; perspective figures; coordinate projective geometry; transformation theory.

Mathematics 553. (formerly Mathematics 453) Differential Equations. Three hours. I, II.

Prerequisite: Mathematics 352.
Differential equations of the first order; applications; singular solutions; linear equations with constant coefficients; miscellaneous methods for solving equations of higher order than the first; integration in series; total differential equations.

Mathematics 554. (formerly Mathematics 454) Advanced Calculus. Three hours. I.

Prerequisite: Mathematics 352.
Review of elementary calculus with attention focused on the concepts of function and limit; the real number system; continuity; least upper bounds; nested intervals; continuous functions; Cauchy's generalized law of the mean; indeterminate forms; Taylor's series with remainder; functions of several variables; homogeneous functions; implicit functions; partial differentiation; allied topic.

Emphasis is placed throughout on the fundamental principles and methods of analysis.

Mathematics 556. (formerly Mathematics 456). Vector Analysis. Three hours. II.

Prerequisite: Mathematics 352 and Physics 202.
The algebra and calculus of vectors. Applications of vector analysis to solution of problems in geometry and physics.

Mathematics 558. (formerly Physics 455 and Mathematics 455) Classical Mechanics I. Three hours. I (1967-68).

Prerequisite: Mathematics 553.
Corequisite: Physics 202.
An introduction by means of the calculus to the formulation and use of the principles of classical mechanics. Some of the topics treated are force and motion of particles, work, Newton's Law of Gravitation, free and forced harmonic oscillations, translational and rotational motion of rigid bodies, wave motion. Three recitation hours per week. Offered on alternate years. Offered fall, 1967-1968.

Mathematics 559. Classical Mechanics II. Three hours. II (196768).

Prerequisite: Physics 558 or Mathematics 558.
A continuation of Math. 558. Some of the topies discussed are central forces, generalized coordinates, La Grange's equations, Hamilton's equations, vibrating systems and normal coordinates,

Three recitation hours per week. Offered on alternate years. Offered spring, 1967-1968.

Mathematics 571. Introduction to Numerical Analysis. Three hours. A.

Prerequisite: Mathematics 553 (and an understanding of the algebra of matrices).

This course is an introduction to the basic problems of approximation of functions, numerical integration of ordinary differential equations, and numerical solution of polynomial equations and systems of linear algebraic equations. The techniques are relatively simple methods that have been found useful in modern computation problems and these problems are small enough for solution on a desk calculator. The student should expect to spend some time outside the class period in laboratory work.

Mathematics 601. (formerly Mathematics 501) Foundations of Elementary School Mathematics. Three hours. A.

A course designed exclusively for elementary school teachers working toward the Master of Arts in Education degree. However, credit may not be earned by those who already have credit for Mathematics 201 and 202.

Counting and numeration; fundamental concepts of the whole, rations and real number systems; variables and conditions; logic; non-metric geometry; measurement; congruence; parallelism; area and volume.

Mathematics 602. (formerly Mathematics 502) Mathematics for Elementary School Teachers. Three hours. A.

The course is designed to enable students to increase their strengths in mathematics to somewhat greater depth and breadth than that which is recommended for minimum preparation. At the same time, the content is conceived to reflect the spirit of the modern elementary school mathematics programs as exemplified by the various national and local study groups concerned with the improvement of instruction in the field of mathematics at this level.

Mathematics 607. (formerly Mathematics 507) Foundations of Secondary School Math. I. Three hours. A.

A course designed exclusively for secondary school teachers of mathematics who are 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.

Mathematics 608. (formerly Mathematics 508) Foundations of Secondary School Math. II. Three hours. A.

A course designed, in sequence with Mathematics 607, exclusively for secondary school teachers of mathematics who are working toward the Master of Arts in Education degree.

Topics include: History and development of geometry; logic and the nature of proof; foundations of synthetic and analytic Euclidean geometry; discovery of non-Euclidean geometries; rector approaches to the study of geometry; consideration of these topics as they are likely to affect the mathematics program in the modern high school.

## Music Department

Music 560. (formerly Music 460) Public School Music II. Two hours. A.

Prerequisite: Music 360.
A course designed to give more detailed and extensive study of music teaching procedures in the elementary grades. To give the teachers of these grades experience in compiling and using materials which may be taken directly into the classroom. The following aspects of music teaching will be emphasized: the use of rhythmic instruments and devices to encourage bodily expression and to create pleasurable music experiences; the perfection of reading skills; examination of new music series and their accompanying records; and the development of music programs appropriate for each grade level.

Music 561. (formerly Music 461) Band and Orchestra Procedures and Materials I. Two hours. A.

Analysis and organization of various courses of study for instrumental groups of varying abilities; rehearsal routines; training student sectional leaders; duties which may be assumed by students; adaptation of practice quarters to fit acoustical needs; program mechanics for public appearances; publicizing and interpreting music activities; care of equipment; program and teaching materials; consideration of the modified Prescott system and similar courses of study.

Music 562. (formerly Music 462) Band and Orchestra Procedures and Materials II. Two hours. A.

Continuation of Music 561.
Music 563. (formerly Music 463) Teaching Piano in Classes. Two hours. I, II.

Prerequisite: Three years of piano study in college or the equivalent.

Music 583. (formerly Music 483) Composition. Two hours. A.
Music 584. (formerly Music 384) Band Arranging. Two hours. I.
A beginning course in instrumentation and arranging for band and orchestra.

Music 585. Choral Arranging. Three hours. I.
An introductory course in arranging for typical junior and senior high school vocal ensembles.

Music 595. (formerly Music 395) Advanced Sight Singing and Ear Training. Two hours. A.

Review and continuation of Music 292. Designed primarily for graduate students and for students who are preparing for graduate work. Emphasis on hearing and writing chords.

Music 612. (formerly Music 512) Piano. One to four hours. I, II.
Prerequisite: Music 312. Four years or equivalent, as demonstrated by the student's proficiency on the instrument.

This is a continuation of the graduate level, requiring more work of better quality than is required on the undergraduate level.

Music 622. (formerly Music 522) Voice. One to four hours. I, II. Prerequisite: Music 322.
This course is designed to enlarge the teaching repertoire of the graduate voice student. Emphasis will be placed on cantatas, oratorios, and operas. The student will be given an opportunity to teach voice under supervision.

Music 630. (formerly Music 530) Problems and Research in Class Teaching of Strings. Three hours. A.

A graduate course in the problems and methods of the teaching of strings in classes, with consideration of the homogeneous and the heterogeneous class, research in available materials, with attention to their actual success in class teaching.

Music 631. (formerly Music 531) Curriculum Practices and Trends in the Teaching of Stringed Instruments. Three hours. A.

A course designed for the graduate music student whose major applied interest is in strings, with attention to the development of teaching procedures for the various instruments particularly as their problems become more divergent.

Music 632. (formerly Music 532) Violin. One to four hours. A.
Prerequisite: Music 332. Four years or equivalent, as demonstrated by the student's proficiency on the instrument.

Music 633. (formerly Music 533) Special Problems in String Teaching. One to three hours. A.

Music 636. (formerly Music 536) Violoncello. One to four hours. A.

Music 642. (formerly Music 542) Organ. One to four hours. A.
Music 652 (formerly Music 552) Wind Instrument. One to four hours. I, II.

Continuation of Music 352 on the graduate level, requiring more work than was required on the undergraduate level.

Music 665. (formerly Music 565) Music in Junior High School. Three hours. A.

A consideration of the purposes of the junior high school general music class, of the needs and interests of the pupils, and of methods and materials instruction.

Music 6\%1. (formerly Music 571) Music History Survey to the Romantic Period. Three to four hours. A.

A detailed and intensive study of music history and of music literature to the end of the classical period.

Music 672. (formerly Music 572) Music History Survey from Romantic Period to the Present. Three to four hours. A.

A continuation of Music 671.

Music 676. Current Trends in Elementary Music. Three hours. A.
A summer workshop for elementary teachers and music specialists designed to explore current thought and practices in elementary school music; knowledge of society, the learner, and the learning process, the structure of music, and ways of behaving in music will be related to a practical program of experiences designed to promote children's musical growth. Emphasis will be placed on learning through doing.

Music 67\%. Practicum in Music Education-Secondary School Music. Two hours. A.

Consideration of problems encountered at secondary level in the teaching of music, with emphasis on instrumental, choral, and music literature procedures. Discussions, lectures, and readings will be coupled with observation and participation of students in the Foster Music Camp. Offered during Summer Session only.

Music 678. The Principles of Music Education. Three hours I.
Prerequisite: Graduate Status.
Presentation and discussion of basic educational principles and their implications for music education, with reference to all types of school situations. Emphasis placed upon the educative process, implications of human growth and development for music programs, planning for musical growth, guiding learning experiences in music, and evaluating pupil growth in music.

Music 679. The Foundations of Music Education. Three hours. II.

Prerequisite: Graduate Status.
An examination of the historical, philosophical and psychological foundations of music education and their relationship to curriculum development; development of musicianship; organization of the music education program; music reading; methods of teaching; administration and supervision in music evaluation in music education.

Music 680. Field Work in Music Education. Three hours. I, II.
Prerequisite: Graduate Status and Music 678 or 679 .
Professional activities in the field under the guidance and supervision of members of the music department staff. Course emphasis will be on curriculum improvements through student work on projects and problems faced in actual teaching situations. Selected readings pertinent to individual problems and needs.

Music 681. (formerly Music 581) Acoustics, Construction and Development of Musical Instruments. Three hours. A.

Prerequisite: Music 350-351 or the equivalent.
A graduate research course, investigating the historical development, the construction, the acoustical properties of wind instruments. The student is expected to complete three research projects each semester.

## Physics Department

Physics 502. (formerly Physics 302) Physical Optics. Three hours. A.

Prerequisite: Physics 201 and 202, or equivalent.
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. Three recitation hours.

Physics 503. (formerly Physics 303) Thermodynamics. Three hours. A.

Prerequisite: Physics 201 and 202, or equive lent; Mathematics 352 should be taken simultaneously.

Review of theories and discoveries; thermometry; specific heats; thermal expansion; transfer of heat; laws of thermodynamics; radiation; change of state; continuity of state; production of low temperatures; production of high temperatures. Three recitation hours.

Physies 506. (formerly Physics 401) Physics for High School Teachers. Three hours. A.

Prerequisite: One year of college physics.
Topics from general physics designed to assure that the teacher is prepared to teach high school physics with ease and confidence. Topics from advanced physics and modern physics designed to give the teacher that extra knowledge which will enable him to teach with a greater understanding, and possibly inspire the students. Two hours lecture and two hours laboratory and discussion.

Physics 507. (formerly Physics 402) Physics for High School Teachers. Three hours. A.

A continuation of Physics 506.
Physics 508. (formerly Physics 360) Topics in Physics for Teachers. Four hours. A.

Topics from general physics selected to aid the high school teacher of physics and general science to teach with greater confidence. Lecture three hours; laboratory and discussion two hours.

Physics 510. (formerly Physics 310) Special Problems. One to three hours. A.

Prerequisite: Physics 202 or equivalent.
Working hour of special laboratory experiments; development of new equipment; or solution of special mathematical problems related to physics.

Physics 511. (formerly Physics 311) Special Problems. One to three hours. A.

This course is a continuation of Physics 510.
Physics 515. (formerly Physics 315) Radioactivity and Nuclear Physics. Three hours. A.

Prerequisite: Physics 300, or equivalent.
Natural radioactivity; radiation detectors; induced radioactivity; Alpha, Beta, and Gamma rays; neutrons; other particles; cosmic radiation; nuclear fission; applications of radioactivity. Three recitations per week.

Physics 516. (formerly Physics 304) Electricity and Magnetism I. Three hours. A.

Prerequisite: Physics 202.
Corequisite: Mathematics 553.
An introduction by means of the calculus and vectors to the formulation and use of the principles of classical electricity and magnetism. Some of the topics treated are electric fields and potentials, capacitance, direct and transient currents, alternating currents. Three recitation hours per week. Offered on alternate years. Offered fall, 1966-1967.

Physics 517. Electricity and Magnetism II. Three hours. A.
Prerequisite: Physics 516.
A continuation of Physics 516. Topics included are dielectrics, resistance, thermoelectricity, electromagnetic induction, magnetic properties of matter, Maxwell's equations. Three recitation hours per week. Offered on alternate years. Offered spring 1966-1967.

Physics 520. (formerly Physics 415) Advanced Nuclear Lab. Two hours. A.

Prerequisite: Physics 515.
Performance of approximately twelve experiements in nuclear physics; radiation instruments and methods; range and energy of particles; absorption, half-life; neutron moderators and neutron flux measurements; coincidence techniques.

Physies 525. (formerly Physics 305) Advanced Electricity and Magnetism Lab. Two hours. A.

Prerequisite: Physics 132 or 202 , or equivalent.
Calibration and use of advanced electrical instruments; precision measurements of inductance, capacitance, resistance, and voltage; basic experiments on vacuum tubes; use of cathode ray oscilloscope. Four laboratory hours per week.

Physics 556. (formerly Physics 456) Vector Analysis and its Physical Application. Three hours. II.

Prerequisite: Mathematics 352 and Physics 202, or equivalent.
The algebra and calculus of vectors. Applications of vector analysis to solution of problems in geometry and physics.

Physics 558. (formerly Physics 455 and Mathematics 455) Classical Mechanics I. Three hours. I, (1967-1968).

Prerequisite: Physics 202.
Corequisite: Mathematics 553.
An introduction by means of the calculus to the formulation and use of the princibles of classical mechanics. Some of the topics treated are force and motion of particles, work, Newton's Law of Gravitation, free and forced harmonic oscillations, translational and rotational motion of rigid bodies, wave motion. Three recita-
tion hours per week. Offered on alternate years. Offered fall, 1967-1968.

Physics 559. Classical Mechanics II. Three hours. II (1967-1968).
Prerequisite: Physics 558 or Mathematics 558.
A continuation of Physics 558. Some of the topics discussed are central forces, generalized coordinates, La Grange's equations, Hamilton's equations, vibrating systems and normal coordinates. Three recitation hours per week. Offered on alternate years. Offered spring, 1967-1968.

## Political Science Department

Political Science 501. (formerly Political Science 401) British Government and the Commonwealth. Three hours. I.

Prerequisite: Political Science 201 and either six additional hours of political science or six hours of English history, or graduate standing.

A study of the constitutional system and political institutions of Great Britain. Attention is given to the historical, geographical, social, and economic factors which influence the political system. The nature and development of the Commonwealth and the significance of the Commonwealth for Great Britain are examined.

Political Science 505. (formerly Political Science 405) Government and Politics of the Far East. Three hours. I, II.

Prerequisite: Political Science 201, 202 and three additional hours of political science, or graduate standing.

A consideration of the modern political systems of Japan, Korea, Communist China and Nationalist China on Formosa. Some attention will also be paid to the nations of Southeast Asia.

Political Science 510. (formerly Political Science 410) American Foreign Policy. Three hours. II.

Prerequisite: Political Science 101 and 202 and either three additional hours of political science or six hours of American history, or graduate standing. A study of the processes and content of United States foreign policy.

Political Science 515. (formerly Political Science 415) 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 the international problems of the people. Designed especially for secondary teachers in the social science field, although open also to other qualified students. Lectures and discussions led by the director and visiting lecturers. Offered only during the summer session.

Political Science 520. Workshop in Local Government and Politics. Three hours. A.

A course designed to focus attention on major problem areas of Kentucky local government. A different area of concern will be explored each time the course is offered.

Political Science 530. (formerly Political Science 430) Municipal Government and Administration. Three hours. II.

Prerequisite: Political Science 101 and either 102 or 103 or graduate standing.

A study of the powers, organization, and current problems of municipalities and urban areas.

Political Science 555. (formerly Political Science 455) History of Political Theory I. Three hours. I.

Prerequisite: Six hours in political science and six hours in history or economics, or graduate standing.

A survey of political thought from the time of Plato to the Reformation.

Political Science 556. (formerly Political Science 456) History of Political Theory II. Three hours. II.

Prerequisite: Six hours in political science and six hours in history or economics, or graduate standing.

A survey of political thought from the Sixteenth Century to the present.

Political Science 557. (formerly Political Science 457) American Political Thought. Three hours. I.

Prerequisite: Six hours in political science and six hours in economics or history, or graduate standing.

An intensive exploration of the major currents in political thought which have justified and guided the growth of the American republic. Largely organized on a chronological basis, but delves into the main schools of thought that have both reflected and energized the developed of the American political process.

Political Science 630. Seminar in the Political Process. Three hours. A.

Prerequisite: Consent of instructor.
An examination of the theories of community power structure; analysis of political activity by pressure groups; the legislative process; a survey and evaluation of sources for political information. The course will be conducted through discussion of problems arising in relationships between educational institutions and political affairs. Case studies and individual projects will comprise a substantial part of the content.

## College of Business Joseph Young, Dean Accounting Department

Accounting 525. (formerly Accounting 425) Accounting ProbIems. Two hours. A.

Prerequisite: Accounting 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.

## Business Department

Business 543. (formerly Business 443) Market Research. Three hours. I.

Prerequisite: Business 344 .

The use of secondary research resources; building of bibliographies; preparation of reports for executives and clients,

Business 545. (formerly Business 445) Marketing Management. Three hours. II.

Prerequisite: Six hours of marketing.
Coordinates marketing techniques and policies in the major marketing fields. In addition, it is specifically concerned with determining 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.

## Business Education Department

Business Education 501. Office Management. Three hours. II.
Prerequisite: Junior 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 job analysis.

Business Education 661. (formerly Business Education 561) Improvement of Instruction in Bookkeeping and General Business. Two hours. I. A.

Business Education 662. (formerly Business Education 562) Improvement of Instruction in the Skill Subjects. Two hours. II, A.

Business Education 663. (formerly Business Education 563) Principles of Business Education. Two hours. I, A.

Objectives, principles, curricula, trends, and major problems of business education on the secondary level. For students preparing to teach business subjects.

Business Education 664. (formerly Business Education 564) Seminar in Business Education. Two hours. II.

Prerequisite: Business Education 663.
Reading and discussion relating to the major current problems in business education.

Business Education 665. (formerly Business Education 565) Administration of a Business Education Department. Two hours. I.

Prerequisite: Business Education 663.
Problems in layout, equipment, curriculum planning, supervision, and testing, in business education departments.

## Economics Department

Economics 510. History of Economic Thought. Three hours. I. Prerequisite: Economics 231.
In this course a survey of economic thought and doctrine from the ancient period to the end of the classical period will be made.

Economics 511. Economic Thought Since the Austrian School. Three hours. II.

Prerequisite: Economics 510.
This is a continuation of Economics 510. The chief economical doctrine since the Austrian school will be studied.

Economics 592. (formerly Economics 492) Business Cycles. Three hours. II.

Prerequisite: Economics 231.
This course will deal with such as the following: Economic decision-making; growth, instability, inflation, and change; longrun 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; the cyclical pattern; problems and procedures in forecasting; dynamic policies for business; dynamic policies for individuals.

Economics 593. (formerly Economics 493) Intermediate Economic Theory and Analysis. Three hours. I, II.

Prerequisite: Economics 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.

Economics 595. (formerly Economics 495) The Economics of Growth and Development. Three hours. II.

Prerequisite: Economics 350 .
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.

Economics 600. (formerly Economics 500) Problems in Consumer Economics. Three hours. A.

An advanced treatment of some of the problems in the area of consumer economics. The place of consumption in economic theory; the institutional background of consumer habits; sources of information on consumption; government regulation of consumer standards; intelligent consumer choices; savings as part of the family spending; investments, estate planning and wills; consumer credit; consumer in taxes.

Economics 601. (formerly Economics 501) Contemporary Economic Problems. Three hours. A.

Prerequisite: Economics 231.
This course involves a consideration of such goals of society as economic growth, economic stability, economic security, economic freedom, etc. The problem-approach method will be utilized. Students will be expected to demonstrate their understanding of and ability to use the tools of economic analysis in connection with the problems studied.

# College of Education <br> Dixon A. Barr, Dean <br> Education Department 

Education 501. (formerly Education 301) 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.

Education 507. Problems in Education. One to three hours. A.
Prerequisite: Approval of advisor and the Head of the Department of Education. Designed for students who wish to do independent work on a problem in education, or who wish to enroll in a special workshop or seminar focusing on a particular topic.

Education 508. (formerly Education 302 and 303) Administration of Pupil Personnel Services. Three hours. A.

This course is designed for the preparation of pupil personnel workers, and covers a study of various approaches to understanding of the pupil with an educational setting as the basis of study.
It also includes the relationship of attendance to pupil progress; social and economic factors affecting attendance; school census and personnel records. Study will be made of personnel work in typical schools in Kentucky. Some attention is given to social case work as it relates to the social and economic problems of the community.

Education 515. (formerly Education 415) The Role of the Teacher in Guidance. Three hours. A.

This course is designed to aid the prospective teacher in examining the concepts, principles, and foundations of guidance as these apply to the role of the teacher, Particular emphasis will be given to those guidance functions which can be perfomed by teachers. The interrelationships of counselor, teacher, and administrator as these are related to guidance will be stressed.

Education 516. (formerly Education 416) Child Development Laboratory I. Three hours. A.

This course involves the direct study of children. 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. In regular periodic meetings with other participants, the materials are presented for criticism and analysis. Emphasis is placed upon skill in observation, objectivity in recording, and realism in analysis of causes of bahavior. The course, for in-service teachers, runs for the entire school year, and each participant must complete his analysis in a structured summary.

Education 517. (formerly Education 417) Child Development Laboratory II. Three hours. A.

This course is a continuation of Education 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 records must be summarized in terms of developmental tasks within these areas.

Education 518. (formerly Education 418) Child Development Laboratory III. Three hours. A.

This course is a continuation of Education 517.
Education 519. (formerly Education 419) Teaching in the Kindergarten. Three hours. A.

This course is designed primarily for students who are especially interested in the theory and practice of teaching in the kindergarten.

Topics: The kindergarten movement; nature, development, and education of the child of kindergarten age; organization, equipment, curriculum, and procedures used with children of this age; kindergarten education, its leaders; and its literature. Some opportunity will be provided for observing and participating in the kindergarten.

Education 520. (formerly Education 420) Creative Experiences in Early Childhood Education. One to three hours. A.

Designed for prospective and in-service nursery school, kindergarten, and day-care center teachers to explore ways of fostering creativity in children under six. Focus will be on the nature of creativity, development of skills used in creative expression (e.g., listening and observing), and activities which promote creativeness in the pre-school child. Laboratory experiences with a variety of art, media, recent films, and appropriate field trips will be included. Special attention will be given to the organization of the daily program for creative learning.

Education 545. (formerly Education 445) Introduction to the Education of Exceptional Children. Three hours. I.

Introduction to programs, problems, and procedures of working with children who are exceptional-mentally, physically, or emotionally. Focuses on children who have problems of vision, hearing, and speech, as well as those with physical and neurological defects. Some attention is given to recent research dealing with the exceptional child and special education programs.

Education 569. (formerly Education 369) Audio-Visual Methods. Three hours. I.

A survey of various types of audio-visual aids; with instruction in the utilization of pictures, maps, graphs, slides, records, recorders, projectors, and other audio-visual materials.
(also Library Science 569).
Education 574. (formerly Education 474) Teaching Reading in the Secondary School. Three hours. I, II.

Prerequisite: Education 315 and 316; admission to teacher education.

This course is designed to assist the secondary teacher in teaching reading in the content areas. Includes emphasis on developmental reading, reading skills, appraisal of reading abilities, appropriate materials and organization of reading progress at the secondary school level.

Education 576. Techniques and Materials for Remedial Reading. Three hours. I, II.

Prerequisite: Education 354 or its equivalent.
This course includes a study of methods, materials, and techniques (group and individual) appropriate for correcting of reading problems of children and adults. Includes emphasis on organization of the reading program.

Education 577. Practicum in Remedial Reading. Three hours. I, II.

Prerequisite: Education 576.
This practicum is designed to provide supervised experiences in diagnosis and the correction of reading problems. Direct experiences in working with children and/or adults are provided.

Education 600. (formerly Education 500) Introduction to Educational Administration. Two hours. I, II.

This course is designed as the first course to be taken by those who plan to complete all or a part of the leadership curricula. It deals with theories of administration and the practice of these theories at the system level and community level; it deals with the functions of those who work with learners, with teachers, with plant, with curriculum, and with other aspects of a functioning education program at the local, state, or national level. The studies of administrative functions of school personnel will be examined in this course. Research in the administrational field by CPEA will make up a large part of the materials for the course.

Education 601. (formerly Education 501, School Administration I) School Personnel Administration. Two hours. A.

Federal relations to education; the state as a fundamental school unit; general school law and court decisions relating to public education; powers and duties of state school officials; work of the state department of education; local units of school control; power and duties of local school officials; administration of adult education and other types of special education; the administration of teacher personnel; public-school relations; closer school-community relationships; principles of good school-community relationships; education and the community; non-government controls of education; school insurance administration; the non-public or protest school; community administrative structure; principles of operation.

Education 602. (formerly Education 502, School Administration II) School Buildings and Grounds. Two hours. A.

Administration of pupil accounting; the school census; attendance; records and reports; organization and administration of the supervisory program; curriculum administration; selection of school
sites; building plans and designs; school building management; operation and maintenance of the school plant; selection and use of equipment and supplies; organization of school libraries; auxiliary agencies; administration of health education; school consolidation and transportation; office administration; classification and progress of pupils; administration of pupil guidance; appraisal; interpretation; advanced education; major steps in building a school.

Education 603. (formerly Education 503, School Administration III) School Finance. Two hours. A.

The background of school finance; the school finance situation; the control of public education; tests of wholesomeness of fiscal policy; economic effects of school finance; cost and character of education; a conceptual basis for local financial administration; budgeting school funds; auditing school accounts; school revenuesources and management; financial accounting; cost analysis; financial statements and reports; salaries of school employees; school supply management; procedures; qualities of good teaching; procedures of evaluating and improving classroom teaching; methods of making the school a more effective agency; management of school property; financing capital outlay; the American state and central support of public education; the foundation program; designing programs for marshaling effective support for an adequate foundation program-equalization; designing programs for marshaling effective support for vigorous local autonomy; progress and compromise; designing fiscal programs to establish the desired balance of controls between central and local agencies; measures of the educational need for use in state programs; measures of relative ability for use in evaluating fiscal policy and in designing state programs; state educational endowment; the state and taxation; federal financing of education.

Education 605. (formerly Education 505) Kentucky School Law. Two hours. A.

This course will be primarily concerned with developing knowledge and understanding of: The principles of school law, constitutional provisions relating to public schools in Kentucky, school districts, school buildings and other school property, school officers, the State Department of Education, school support, conduct of schools, compulsory attendance, school faculties and other employees, retirement, tenure, vocational education, rehabilitation education, higher education, and court interpretation of the laws.

Education 610. (formerly Education 510) Improvement of Instruction in the Elementary School. Three hours. I, II.

Meaning and function of education; underlying principles developed for curriculum use and curriculum revision; interpretation of the learning experiences (school subjects in light of the meaning and function of education); study of concrete materials and classroom procedure with a representative range of practical problems in various subject areas; types of organization used in
modern instruction; how children learn; various educational agencies in the community; how the school may be made a real community center; laboratory study and field trips.

Education 611. (formerly Education 511) General Supervision. 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; locating and using community resources and other aids available to public school teachers; techniques for developing desirable professional relations; problems of in-service education for teachers. Each member of the group will plan a supervisory program for a local school system in Kentucky as a special project in the course.

Education 612. (formerly Education 512) Curriculum Development. Two hours. II.

This course is designed for graduate students who desire to make a critical study of the principles and techniques of curriculum making in public schools. Recent curriculum developments are evaluated and effective curriculum programs are considered. Some attention is given to the recent progressional literature on curriculum development and trends.

Education 613. (formerly Education 513) Principles of Guidance. Two hours. I.

This course includes selection, evaluation, and usage of group guidance methods; emphasis will be placed upon appropriate methods and materials for specific situations in group guidance programs. This course will also deal with educational and occupational information. It will include a survey of pertinent educational and occupational material with emphasis being placed upon intensive and extensive use of these as they apply to secondary school students.

Education 614. (formerly Education 514) Organization and Administration of Guidance Services. Two hours. I.

Prerequisite: Education 613.
This course will focus on the selection of materials and organization of programs for school guidance. Types of organizational patterns, methods of initiating a program, and evaluative techniques will be considered. The relationship of guidance personnel to other staff members and to the community will be examined. The course will assist the counselor to develop or initiate a more suitable and workable guidance and counseling program in his school.

Education 615. (formerly Education 515) Human Development. Three hours. I, II.

Developmental factors and individual differences; motives, goals, and purposes; arranging the learning situation; problem
solving and creative expressions; acquiring skill and information; transfer; the curriculum; social setting for learning; evaluation of development and learning.

Education 616. (formerly Education 516) Measurement and Guidance. Three hours. I.

An intensive study of measurement and other techniques for guidance and counseling in schools, including counseling and guidance principles and techniques. Some attention is given to statistical methods. Recent developments in guidance and counseling are evaluated and effective programs are given special consideration. Fee, \$2.00.

Education 618. (formerly Education 518) Practicum in Counseling. Two hours. II.

This course is designed to build proficiency in counseling and interviewing. Includes brief review of modern counseling and interviewing techniques and their purpose in guidance; major emphasis is given to compilation and study of case histories of records, and actual interviewing and counseling with pupils, teachers, parents, supervisors, and administrators.

Education 619. (formerly Education 519) Clinical Study of Exceptional Children. Two hours. A.

Methods are studied for diagnosing and teaching brilliant, retarded, physically handicapped, and emotionally maladjusted children.

Education 620. (formerly Education 520) Group Processes in Guidance. Two hours. II.

Prerequisite: Education 613, or experience as a guidance counselor.

Theories, issues, and trends in the use of group methods in guidance will be the main topics in this course. It is designed to assist counselors to better understand and apply sound principles of group processes as part of the ongoing guidance program. Included will be emphasis on the choice of appropriate experience for effective guidance and counseling. Some experience with actual groups will be included.

Education 622. (formerly Education 522) Occupational and Educational Information. Two hours. II.

Prerequisite: Education 613 and 614 , or experience as a guidance counselor.

A survey of the development and use of occupational and educational information in counseling and guidance. The course will assist the student to examine the significance of various types of prepared materials which may be appropriate for school guidance. An analysis of methods for evaluating these materials and of integrating them into the counseling process will be presented.

Education 625. (formerly Education 525) Guidance in the Elementary School. Three hours. A.

A survey of the current trends, issues, and concepts of elementary guidance and counseling. Current programs of elementary guidance will be analyzed and implications for integration in the students' situation will be examined. Opportunity for observation of elementary students will be provided so that the developmental pattern of these youth may be integrated more accurately into the didactic material. The relationship of the elementary counselor to other staff members will be considered.

Education 628. (formerly Education 528) Instructional Television. Three hours. A.

Exploration 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 producerdirector. The part of the television-studio teacher and the tele-vision-classroom teacher will be explored. History of educational television, television research, and the literature in the field will be included. Supervised critical viewing of telecourse segments will be an integral part of the course.

Education 631. (formerly Education 531) History of Education. Two hours. A.

Brief survey of the history of education in ancient and medieval times with social reference to the contribution of Greece, Rome, and Christianity to modern education; educational influences of the Renaissance and the Protestant Reformation; the role of the doctrine of formal discipline; educational influence of Cemenius, Rousseau, Pestalozzi, Froebel, and Herbart.

Education 632. (formerly Education 532) History of Education in the United States. Two hours. A.

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 reorganizations; the influence of John Dewey; brief study of the development of public education in Kentucky.

Education 636. (formerly Education 536) Philosophy of Education. Two 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.

Education 637. (formerly Education 537) Comparative Education. Two hours. A.

Examination, comparison, and discussion of the background of conditions and theories which have resulted in the present practices in education in the world today.

Education 638. (formerly Education 538) Modern Trends in Educational Philosophy. Two hours. A.

Prerequisite: Education 636 or its equivalent.
A study of alternative philosophies and their implications for current educational theory and practice.

Education 642. (formerly Education 542) Applied Statistical Methods. Two hours. A.

Prerequisite: Education 368.
Measurements in psychology and education; frequency distributions; measures of central tendency; measures of variability; applications of the normal distribution curve; reliability and significance of statistics; testing hypothesis; prediction and errors of prediction; correlation methods; reliability and validity of tests.

Education 650. (formerly Education 550) Educational Sociology. Three hours. I, II.

Relation of sociology to education; sociological problems and their educational implications; social groups and institutions in relation to education; social forces and their significance in society; the sociological determination of educational objectives; social elements and values in the curriculum; democracy in school administration and supervision; essential elements of a socialized educational program.

Education 662. (formerly Education 562) The Role of the Principal. Three hours. I, II.

Nature of demands made on school principals; organization of duties for effective management; planning the year's work; responsibilities for schedule-making; guidance functions of the principal; projecting a guidance organization; office duties of the principal; duties pertaining to records and reports; organizing the program of student activities; administering the program of student activities; duties pertaining to the need of youth; adjusting school to pupil needs; evaluating the progress of pupils; the administration of teacher personnel; duties pertaining to supervision; educational diagnosis and remedial treatment; the improvement of curriculum materials; the use of tests in instruction; the school library; business duties of principals; administering the school plant; the principal in the community; and the future of the school principalship.

Education 663. (formerly Education 563) Improvement of Instruction in the Secondary School. 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.

Education 665. (formerly Education 565) Investigations in Reading. Two hours. II.

This course is designed for graduate students who desire to make a critical study of the investigative and theoretical literatures dealing with the teaching of reading in the elementary school.

Education 666. (formerly Education 566) Investigations in Elementary School Mathematics. Two hours. A.

This course is designed for graduate students who desire to make a critical study of the investigative and theoretical literatures dealing with the teaching of mathematics in the elementary school.

Education 667. (formerly Education 567) Investigations in the Teaching of Social Studies. Two hours. A.

This course is designed for graduate students who desire to make a critical study of the investigative and theoretical literatures dealing with the teaching of social studies.

Education 669. (formerly Education 569) Research in Education. Two hours. I, II.

Functions of educational research; types of research and the principal techniques of each type; bibliography; discovering educational problems for study; organization and interpretation of data; preparing and evaluating research reports; class discussions and reading reports.

Required of all graduate students who do not prepare a thesis.
Education 670. (formerly Education 570) Seminar. One to three hours. A.

The Seminar is 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, Education 669, Research in Education, is required.

Education 675. (formerly Education 575) Diagnosis of Reading Problems. Three hours. I.

Prerequisite: Education 354 or its equivalent.
This course focuses on the theory and interpretation of diagnostic procedures necessary for the appraisal of reading problems. Includes the study of factors causing reading difficulties and various kinds of individual and group procedures, such as different kinds of tests.

Education 680. (formerly Education 580) Organization and Supervision of Student Teaching. Three hours. I.

Prerequisite: Teaching experience.
A course designed for teachers preparing to become supervising teachers in the elementary and secondary schools. Emphasis will be placed upon supervision of student teachers, supervision of instruction, and improvement of instruction. The course gives emphasis to the responsibility of the supervising teacher to administrators, to student teachers, and to the boys and girls. Intensive study will be made in the areas of teaching, classroom management, planning instruction, conferences, ethics, and evaluation of the student teaching program.

Education 681. (formerly Education 581) Leadership for Helping Teachers in Studying Children. Two hours. A.

Prerequisite: For those persons who plan to serve as leaders in an in-service education program designed to increase teachers' understanding of pupils.

The course is open to people who have the master's degree.
By using mimeographed records, the participants gain skill in relating factors and processes revealed in the records to the behavior of a child. Attention is given to methods of observation, writing an anecdotal record, selection of significant data, home visitation, and interpretation. Special emphasis is placed on plans for leading teachers in a systematic study designed to understand the behavior of pupils.

Education 682. (formerly Education 582) Inter-Institutional Seminar in Child Development. Three hours. A.

For graduate students who are interested in current research in child development. The daily all-day program generally held for two weeks in the summer includes lectures, films, large and small group discussions, and committee assignments. Emphasis is placed upon the study of current research findings in child development. Participants are encouraged to do research and writing which can be published in the Seminar's annual publication. Outstanding guest speakers, a well stocked library, recreational facilities, and staff members from several leading institutions are provided. Registration by permission from the Head of the Department of Education.

Education 683. (formerly Education 583) Analysis of Recent Research in Human Development. Three hours. A.

Prerequisite: Education 615.
Designed for graduate students who are interested in current efforts to learn more about the behavior of children, and to find ways of utilizing this knowledge in the educative process. Experiences consist of individual and group research into current and recent exploration and study of factors and processes which affect the development and learning of children. Evaluation of this research is through critical group discussion in seminar-like atmosphere.

Education 685. (formerly Education 585) Seminar for Supervising Teachers. Three hours. II

Prerequisite: Education 680, and experience as a supervising teacher.

This seminar is a follow-up of Education 680. It is designed for in-service supervising teachers to explore in depth problems and procedures relating to their work in supervision of student teaching. Critical study will be made of individual and group problems, with emphasis on improving supervisory skills.

## Library Science Department

Library Science 501. (formerly Library Science 401) Young People's Literature. Three hours. I, II.

Study and selection of books for the adolescent. Stresses reading interests, levels and needs of young people as well as books and some material supplemental to the school curriculum.

Library Science 521. (formerly Library Science 321) Reference, Three hours. I.

This course is designed to extend the student's knowledge of general and specialized reference works. It is intended to provide information for satisfactory use of library resources. Materials used will be formal reference books, non-fiction books which may have reference value, periodicals and pamphlets. Special emphasis will be placed on the selection of reference books and on the preparation of bibliographies.

Library Science 531. (formerly Library Science 331) Classification and Cataloging. Three hours. I, II.

Prerequisite: Library Science 311.
Principles of simplified classification and cataloging will be studied with author, title, and subject cards being made. Attention will be centered on actual classification and cataloging of school library books. Some instruction in the cataloging of audiovisual aids will be given. Skill in typing is necessary.

Library Science 541. (formerly Library Science 441) School Library Practice. Three hours. I, II.

Prerequisite: Library Science 301, 311, and 521 and others except as may be taken at the same time as this course.

Library practice in the school library designed to give the trainee practical experience in many phases of school library service, including desk work, teaching children the use of reference materials, and assisting in the preparation of books for circulation. Reading guidance, story telling, and the organization of unit materials are stressed.

Library Science 563. (formerly Library Science 463) Instructional Materials for the School Library. Three hours. II.

Evaluation, selection, preparation, use and handling of nonbook materials for the school library. Some preparation of free and inexpensive materials will be discussed.

Library Science 569. (formerly Library Science 369) AudioVisual Methods. Three hours. I.

A survey of various types of audio-visual aids; with instruction in the utilization of pictures, maps, graphs, slides, records, recorders, projectors, and other audio-visual materials.

Library Science 607. (formerly Library Science 507) Problems in Library Science. One to three hours. A.

Prerequisite: Approval of advisor and the chairman of the Department of Library Science.

This course is 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.

## Psychology Department

## Psychology 500. Social Psychology. Three hours. I, II.

Prerequisite: Psychology 211.
A study of social phenomena in terms of the original and acquired reaction systems of the individual. Special consideration given to group behavior, role, status, attitudes, prejudice, crowds, mob behavior, propaganda, and nationalism.

Psychology 504. Psychology of Individual Differences. Three hours. I, II.

Prerequisite: Psychology 211 and 302.
The study and application of the facts of human variability including differences and factors related to differences in such areas as age, sex, class, intelligence, and achievement.

Psychology 507. (formerly Psychology 503) Problems in Psychology. One to three hours. A.

Prerequisite: Psychology 211, 213, and approval of instructor.
Qualified students may outline and study a definite problem in some area 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.

Psychology 601. (formerly Psychology 501) Theories of Personality. Three hours. I.

Prerequisite: Psychology 211 and 401 or consent of instructor.
A study of personality beginning with theories of personality which include Freud, Rogers, Mowrer, Dollard and Miller, and Gestalt Psychology. Contrast and comparison of these theories will be made. A synthesis of these theories will be made by each individual, after which the inter-relationship between personality and environment will be studied. Emphasis will be placed on aggression and frustration, and how these affect the development of the personality.

Psychology 602. (formerly Psychology 502 Counseling Psychology. Three hours. II.

Prerequisite: Psychology 211 and 601.
Assumptions and facts fundamental to theories of counseling will be studied, along with such areas as factors of the interview setting, counseling techniques, resources in counseling, and the relationship of counseling to other school activities. An emphasis is placed upon the relationships of counseling theory to personality. Offers didactic experiences necessary for preparation to enter the counseling practicum.

Psychology 617. (formerly Education 517) Individual Intelligence Testing. Three hours. II.

Prerequisite: Psychology 211 and 302, or equivalent and consent of instructor. Designed to build proficiency in administering and understanding individual intelligence tests. Includes study of purposes of individual intelligence tests, their make-up, and directions for administering. Each student is required to administer tests to several children or adolescents and to interpret test findings.

# College of Applied Arts and Technology 

## John D. Rowlett, Dean

## Home Economics Department

Home Economics 501. (formerly Home Economics 401) The Nursery School. Three hours. A.

A study of the philosophy and objectives of the nursery school experience for children with emphasis on alay care for children of working mothers. The interaction of parents, children, and teachers will be an important consideration. This course is designed for those interested in directing programs in public day care centers of private nursery schools.

Home Economics 504. (formerly Home Economics 404) Current Trends in Child Development. Three hours. A.

Study of current concepts and trends in the study of child development. Includes recent research concerning problems in child growth and development, and methods of presenting child development to high school groups.

Home Economics 505. (formerly Home Economics 405) Seminar in Family Life. Three hours. A.

Prerequisite: Home Economics 307.
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 will be used in this course.

Home Economics 506. (formerly Home Economics 406) Newer Knowledge of Nutrition. Three hours. A.

Prerequisite: Home Economics 306.
Study of the latest research in nutrition and diets in relation to diseases.

Home Economics 507. (formerly Home Economics 407) Organization and Administration of the Nursery School. Three hours. A.

A study of the history of nursery education and the organization and administration of housing, equipment, records and parent cooperation. This course is designed for those interested in directing programs in public day care centers or private nursery schools or in college laboratory schools.

Home Economics 512. (formerly Home Economics 312) Creative Flat Pattern Design. Two hours. I.

Principles of pattern making based on flat pattern methods. Studio projects. Original design with emphasis upon appropriate line, color, and texture for the individual executed by means of flat pattern methods. Course is designed to develop versatility in the use of commercial patterns and skill in fittings. One lecture and two laboratory hours.

Home Economics 555. (formerly Home Economics 455) Advanced Costume and Design. Three hours. II.

Prerequisite: Art 117; Home Economies 203 and 206.

* The application of art principles in color and line, in designing and construction of garments.

Home Economics 556 a,b,c. (formerly Home Economics 456 $\mathrm{a}, \mathrm{b}, \mathrm{c}$ ) Special Problems in Home Economics. One hour. A.

The student chooses a problem and works under the supervision of the instructor in the field of the problem.

Home Economics 566. (formerly Home Economics 466) Advanced Methods in Teaching Home Economics Education. Three hours. I, II.

Prerequisite: Approval of head of the department.
This course provides an overview of student teaching including purpose and evaluation. An opportunity is provided for experiences in curriculum planning, use of instructional materials, preparation of a budget, record keeping, working with the Future Homemakers of America. Principles of housing are applied to recognition of desirable space and equipment for a home economics department.

## Industrial Education Department

Industrial Education 501. (formerly Industrial Arts 401) Special Problems in Industrial Arts. Three hours. I, II.

A course for exceptional students involving independent study and research related to problems of a theoretical and/or practical nature.

Industrial Education 511. (formerly Industrial Arts 411) Advanced Technical Problems in Graphic Arts. Two to 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.

Industrial Education 533. (formerly Industrial Arts 433) Workshop in Industrial Education. Four hours. A.

533a Design; 533b Graphic Arts; 533c Plastics; 533d Power Mechanics; 533e Electronics; 533f Wood Technology; 533g Metals; 533h Crafts.

Industrial Education 541. Advanced Technical Problems in Woodworking. Two to six hours. I, II.

Technical instruction in the woodworking field. Recent developments, advanced technical and experimental problems, and preparation of technical reports in woodworking.

Industrial Education 544. (formerly Industrial Arts 444) Machine Woodworking. Two hours. A.

Prerequisite: Industrial Education 242.
Special machine operations; repairing and servicing power woodworking machinery.

## Industrial Education 551. Advanced Technical Problems in

 Electricity-Electronics. Two to 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.

Industrial Education 563. (formerly Industrial Arts 363) Shop Planning and Equipment. Two hours. A.

Types of industrial arts laboratories; criteria to observe in planning; specifications, sources and procedures in purchasing equipment; selecting, purchasing, and dispensing of supplies.

Industrial Education 564. (formerly Industrial Arts 464) History and Philosophy of Industrial Education. Two hours. A.

The history of industrial education from its early beginning to the present; the contribution of leaders; movements in the development of industrial arts and vocational education; modern concepts of industrial arts; legislation for vocational education and the state plan.

Industrial Education 566. (formerly Industrial Arts 466) Teaching of Industrial Arts. Three hours. I, II.

The function and objectives of industrial arts; the industrial arts curriculum; methods of presentation; instructional aids; planning, equipping and organizing the laboratory; instructional materials; demonstration lessons; evaluation of student achievement.

Industrial Education 571. Advanced Technical Problems in Power Mechanics. Two to 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.

Industrial Education 581. Advanced Technical Problems in Metalworking. Two to six hours. I, II,

Technical instruction in the metalworking field. Recent developments, advanced technical and experimental problems and preparation of technical reports in metalworking.

## Industrial Education 591. Advanced Technical Problems in Drafting. Two to six hours. I, II.

Technical instruction in the drafting field. Recent developments, advanced technical and experimental problems, and preparation of technical reports in drafting.

Industrial Education 662. (formerly Industrial Arts 562) Philosophy of the Practical Arts and Vocational Education. Three hours. II.

Background, purpose, and relationship of the practical arts and vocational education; relationship of both to total programs of education; current philosophies of the practical arts and vocational education.

Industrial Education 664. (formerly Industrial Arts 564) Special Problems in Industrial Education. One to six hours. I, II.

Problems of a 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.

Industrial Education 665. (formerly Industrial Arts 565) 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.

Industrial Education 666. (formerly Industrial Arts 566) Seminar in Industrial Education. Three hours. I.

A course designed 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.

Industrial Education 667. (formerly Industrial Arts 567) Thesis Research in Industrial Education. Six hours. I, II.

Students preparing theses are expected to register for three hours of thesis research in each of two semesters.

Industrial Education 668. (formerly Industrial Arts 568) Advanced Design. Three hours. II.

An advanced course in design emphasizing problem-solving and experimentation with industrial education media.

# GRADUATE PROGRAM REQUEST FOR APPLICATION FOR ADMISSION 

Mr.
Mrs.
Name in full: Miss $\qquad$
Address: $\qquad$
(Number and Street)
(eity)
(zone no.)
(state)
Do you have a baccalaureate degree? yes. no.
Institution granting degree $\qquad$
Address $\qquad$
Do you have a teacher's certificate: yes no. $\qquad$
Type and State $\qquad$
Request for admission forms and/or information should be addressed to:
Dean of the Graduate School Eastern Kentucky University Richmond, Kentucky, 40476


[^0]:    PUBLISHED SEVEN TIMES A YEAR BY THE EASTERN KENTUCKY UNIVERSITY in January, February, March, April, July, August, and November, and entered at the Post Office in Richmond, Kentucky, as second-class matter.

[^1]:    The courses bearing the 500 's numbering are open to Juniors, Seniors, and Graduate Students. Those courses bearing the 600's numbering are open to Graduate students only.
    A By announcement in most cases
    I Course is offered during the Fall Semester
    II Course is offered during the Spring Semester

