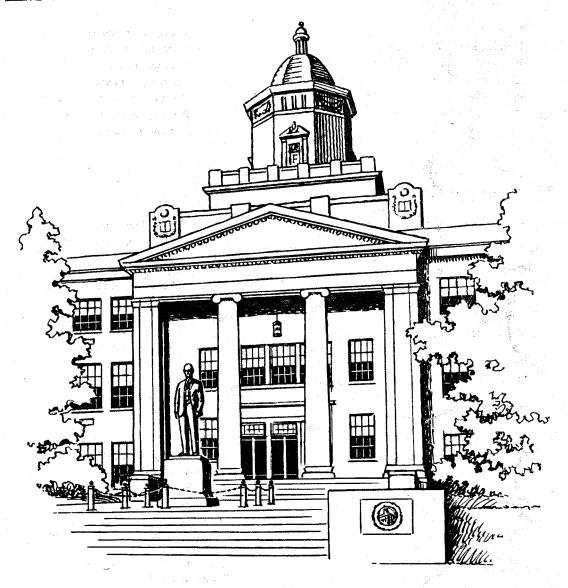
WESTERN KENTUCKY UNIVERSITY



BULLETIN
GRADUATE SCHOOL ISSUE

PERSONNEL OF THE COLLEGE

Board of Regents

Harry M. Sparks, Chairman	Frankfort, Kentucky
Douglas Keen, Vice Chairman	Scottsville, Kentucky
W. Gerald Edds	Calhoun, Kentucky
Chalmer P. Embry	Owensboro, Kentucky
J. T. Gilbert	Bowling Green, Kentucky
Maxey B. Harlin	Bowling Green, Kentucky
Hugh Poland	Guthrie, Kentucky

Administrative Staff

Kelly Thompson, M.A., LL.D.	President of the University
Raymond L. Cravens, Ph.D.	Vice President for Academic Affairs and Dean of the Faculties
Dero G. Downing, M.A., Ed.S.	Vice President for Administrative Affairs and Dean of Business Affairs
John D. Minton, Ph.D.	Dean, Graduate School
Paul G. Hatcher, Ph.D.	Dean, Potter College of Liberal Arts
William M. Jenkins, Ph.D.	Dean, Bowling Green College of Commerce
Tate C. Page, Ed. D.	Dean, College of Education
Marvin Russell, Ph.D.	Dean, Ogden College of Science and Technology
William R. Hourigan, Ph. D.	Associate Dean for Undergraduate Instruction
Rhea Lazarus, A.B., M.A.	Registrar
Charles A. Keown, M.S.	Dean of Student Affairs
Robert G. Cochran, M.A.	Dean of Public Affairs and Public Relations
Charles Clark, Ed.D.	Director, Extension and Field Services
Charles Martin, Ed.D	Director of Educational Leadership Programs
John Scarborough, Ed.D.	Director, Summer School and Community College
Sara Tyler, M.A.	
Lee Robertson, M.A.	
Harry Largen, B.S.	
Owen Lawson, M.A.	Physical Plant Administrator

WESTERN KENTUCKY UNIVERSITY

Bowling Green, Kentucky

Accredited by

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

MEMBER

Association of State Colleges and Universities
American Association of Colleges For Teacher Education
American Association of University Women
American Council on Education
Kentucky Association of Colleges, Secondary
and Elementary Schools

EDUCATION FOR



LEADERSHIP

WESTERN KENTUCKY UNIVERSITY BULLETIN GRADUATE SCHOOL ISSUE

Entered as second class matter at the Post Office at Bowling Green, Kentucky, 42101, under an act of August 24, 1912. Published quarterly by Western Kentucky. University, College Heights, Bowling Green, Kentucky 42101.

February 1967

Volume 33

Number 5

TABLE OF CONTENTS

GRADUATE FACULTY	3
DEVELOPMENT OF WESTERN	5
FEES FOR GRADUATE WORK	7
GRADUATE PROGRAMS	8
GRADUATE SCHOOL REGULATIONSAdmission	
Residence Requirements	
Steps in Graduate Program	
GRADUATE CURRICULA	14
Curriculum for High School Teachers	14
Curriculum for Elementary Teachers	15
Curriculum for Principals	
Curriculum for Guidance Counselors	18
Curriculum for Supervisors	19
Curriculum for Director of Pupil Personnel	20
Master of Arts in English	21
Master of Arts in History	22
Master of Arts in Engineering Physics	23
POST-MASTER'S PROGRAMS	24
JOINT DOCTORAL PROGRAM	27
COURSE DESCRIPTIONS	28

GRADUATE COUNCIL

John D. Minton Ph.D. Chairman	Dean, Graduate School
I Crossford Crosse Ph D	Professor of History
Charles E Mortin Ed D	Professor of Education
Unaries E. Martin, Ed.D.	Professor of Biology
Tala II Watson Ph D	Professor of Sociology
Devel D. Wardt Ed D.	
Donaid D. Wendt, Ed.D	Professor of Chemistry
Gordon wilson, Jr., Fil.D	Professor of English
Willison E. Wood, Fil.D	

GRADUATE FACULTY

Kelly Thompson, A.B., M.A., LL.D.	President
Parmond I Cravens Ph D	Vice President for Academic Affairs
	and Dean of the Lacatives
John D. Minton, Ph.D.	Dean, Graduate School
William M. Jorkins Jr. Ph.D.	Dean, Bowling Green College of Commerce
~ n n n	nean. College of Education
Marrie W Bussell Ph D	Dean. Orden College of Science and Technology
D 1 C II-1-1 Dh D	Dean, Potter Cottege of Liberal 22.00
regitte D II Dh D	Associate Dean for Unitergration in the little
20	110163301 01 110116 11001611
Marie Adams, M.A	Associate Professor of English
D II W Deller Dh D	Tolessor of Biology
Donald W. Balley, Fl.D	Professor of Education
TO DOLD DE D	Associate Professor of Professor
and the Date of the state of th	IIIIESSUI UI Littlettui
Billy W. Broach, Ed.D.	Professor of Agriculture
Leonard D. Brown, Ph.D.	Professor of Mathematics
Robert C. Bueker, Ph.D.	Associate Professor of Education
Emmett D. Burkeen, Ed.D.	Professor of History
James E. Calloway, Ph.D.	Professor of Music
Howard R. Carpenter, Ph.D.	Professor of Education
Charles Clark, Ed.D.	Professor of English
Kenneth W. Clarke, Ph.D.	Associate Professor of English
Mary W. Clarke, Ph.D.	Professor of Education
Mary I. Cole, Ph.D.	Professor of Education Professor of History
	Professor of History Associate Professor of Education
David F. Cunningham, Ed.D.	Professor of Geography
Floyd Cunningham, Ph.D.	Professor of Psuchologu
William H. Cunningham, Ed.D	Associate Professor of Geography
James L. Davis, Ph.D.	Professor of GeographyProfessor of PsychologyAssociate Professor of GeographyAssociate Professor of Education
	Associate Professor of Mathematics
Betty C. Detwiler, Ph.D.	Associate Professor of Economics
Wayne Dobson, Ph.D.	Professor of Government
Joseph F. Dolecki, Ph.D.	

4 Graduate Faculty

Elsis Datam Dh D	Durat or and Durat of Torre
Elsie Dotson, Ph.DOrin L. Gladman, Ed.D	Associate Professor of Education
Vera Grinstead, M.A.	
Henry N. Hardin, Ed.D.	Associate Professor of Library Science
William J. Harkins, Ph.D.	Associate Professor of Education
Tomas W. Wiele, Ed.D.	Associate Professor of Government
James W. Hicks, Ed.D.	Associate Professor of Education
Addie Suggs Hilliard, Ed.D.	Associate Professor of English
Robert I. Hislop, Ph.D.	Professor of Business Administration
Mildred Howard, Ph.D. Carlton Jackson, Ph.D.	Associate Professor of Engusn
William B. Koch, P.E.DAlbert W. Laird, Ph.D	Associate Professor of Physical Education
Andria I amount ID	Associate Professor of Psychology
Archie Laman, Ed.D.	Associate Professor of Education
John M. Lane, Ph.D.	Associate Professor of Education
Glenn Lange, M.A.	Associate Professor of Accounting
LeRoy Little, Ph.D.	
Charles Martin, Ed.D.	Professor of Education
Vernon Martin, Ph.D.	Professor of Government
George E. McCelvey, Ph.D.	Associate Professor of English
William McManon, Ph.D.	Associate Professor of English
C. P. McNally, Ph.D.	Professor of Chemistry
	Associate Professor of Foreign Languages
Russell H. Miller, Ed.D.	Professor of English
Earl Murphy, Ph.D.	Associate Professor of Education
	Professor of Industrial Arts
Ronald Nash, Ph.D.	Associate Professor of Philosophy
Edward J. Pease, Ph.D.	Associate Professor of Music
Darl Neil Peterie, Ph.D.	
Paul Power, Ed.D.	Associate Professor of Education
John Scarborough, Ed.D.	Professor of Education
H. E. Shadowen, Ph.D.	Professor of Biology
Hollie W. Sharpe, Ed.D.	Projessor of Office Administration
Verne K. Shelton, M.F.A.	
	Professor of Physics
	Associate Professor of Education
	Associate Professor of Office Administration
William H. Solley, P.E.D.	Professor of Physical Education
H. L. Stephens, Ph.D.	Professor of Biology
William H. Stroube, Ph.D.	Professor of Agriculture
R. Paul Terrell, Ph.D.	Professor of Geography
H. M. Thomason, Ph.D.	Professor of Government
Sara Tyler, M.A.	Professor of Library Science
John H. Watson, Ph.D.	Professor of Sociology
Martha F. Watson, Ph.D.	Associate Professor of Mathematics
Donald Wendt, Ed.D.	
Curtis C. Wilkins, Ph.D.	Associate Professor of Chemistry
Gordon Wilson, Jr., Ph.D.	Professor of Chemistry
Willson E. Wood, Ph.D.	Professor of English

Development of Western

Western Kentucky University was established by act of the 1906 Legislature of Kentucky. Prior to this, there had existed in Bowling Green the Southern Normal School and the Bowling Green Business University, whose president was Dr. Henry Hardin Cherry. On January 1, 1907, the Southern Normal School was transferred to the State, and Dr. Cherry became the first president of Western Kentucky Normal School. The state institution occupied the building and grounds of the Southern Normal School until 1911, when the State Normal School was transferred to College Heights, its present location.

In 1922 the Kentucky Legislature changed the name of the institution to Western Kentucky State Normal School and Teachers College and granted to the College the right to confer degrees on its graduates. In September of the same year the Executive Council approved a course of study four years above high school and authorized the conferring of the baccalaureate degree on its completion. In 1930 the name was changed to Western Kentucky State Teachers College, and in 1948 to Western Kentucky State College.

The years of 1964 and 1965 brought very rapid growth and progress during which Western Kentucky State College was divided into four separate Colleges and a Graduate School with a dean for each academic unit. This action laid the groundwork for still further growth and change. On Saturday, February 26, 1966, an Act of the Kentucky Legislature brought University status to Western. The name was changed accordingly to Western Kentucky University.

Western first began offering the Master of Arts Degree in 1931. This program was discontinued from 1936 to 1941 but was resumed in 1941 and has enjoyed continuous growth since. The granting of University status gives the Graduate School increased opportunity to both strengthen the present programs and to offer an even wider choice of program areas as faculty and resources are available.

Objectives of Graduate Study

To provide concentrated, advanced, professional training in the area of a student's field of specialization.

To stimulate and encourage the refinement and development in the student of the spirit of independent investigation in the chosen field of specialization.

To provide the student opportunity to construct on the previous undergraduate program a comprehensive and thorough understanding of a limited field of knowledge.

To provide some training and experience for the public school teacher in the field of educational research and to make contributions toward the solution of teaching and administrative problems in the schools of the State.

To provide a program of graduate studies leading to permanent certificates for all types of educational workers in public schools of the State.

Organization of The Graduate School

The graduate faculty consists of all persons appointed thereto in accordance with regulations established by the Board of Regents of the University. Recommendations for appointments to the graduate faculty are made by the Dean of the Graduate School to the Vice President of Academic Affairs from nominations received by the college deans after consultation with department heads.

The Dean of the Graduate School is charged with the administration of the policies regulating and relating to graduate studies. He makes recommendations regarding the requirements for advanced degrees. He advises students as to the general requirements for graduate school and appoints a graduate advisory committee for each graduate student. He is responsible for determining and certifying to the proper University official candidates who have fulfilled requirements for advanced degrees.

Graduate study is under the general direction of the Graduate Council of which the Dean of the Graduate School is chairman. The Graduate Council recommends and reviews policies pertinent to the operation of the Graduate School.

University Libraries

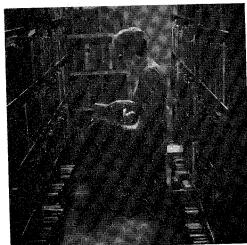
Five libraries are on the campus: the Margie Helm Library, the Kentucky Library, the Science Library, the Nelle Gooch Travelstead Music Library, and the Training School Library. The total

holdings of the library approximate 325,000 volumes.

The libraries are organized to foster the aims of the University by extending the work of the classroom through supplying desirable collateral readings, offering assistance to the faculty in their research studies, and providing a well-rounded collection of books for the cultural reading of students and faculty.

Margie Helm Library

The Helm Library, completed in 1965 and open for the 1965-66 school year, has a seating capacity of 950 and a book capacity of 350,000 volumes. It was named for Miss Margie Helm, Librarian and Director of Library Services from 1920 to 1965. The reference room, administrative and processing offices, conference room, rare book room, and browsing area are on the first floor. On the second are periodical and reserve areas, as well as art, listening, and microfilm rooms. A complete Law Library is also located on the second floor as a part of the reserve area. The ground level houses the Department of Library Science and the stack area.



The Kentucky Library

The Kentucky Library, in the east wing of the Kentucky Building, houses research materials related to many phases of Kentucky life and history. The library contains about 20,000 books, plus a large collection of manuscripts, newspapers, magazines, clippings, scrapbooks, and an excellent collection of Kentucky statutes, microfilms, sheet music, hymnals, and records.

The Kentucky Library is used not only by Western faculty and students but also by researchers from many other areas.

Science Library

The Library in the new Science Complex will have three times the area of the present Science Library to serve Departments of Biology, Chemistry, Physics, Mathematics, and Agriculture.

In this Library are books, journals, abstracting services, indexes including *Science Citation Index*, NASA documents, and microfilm with readers which support graduate programs.

Nelle Gooch Travelstead Music Library

The Travelstead Music Library, named for Mrs. Nelle Gooch Travelstead, a member of the Department of Music, 1914-1959, is located in the Music Hall. It provides a collection of reference books, recordings, scores, and textbooks for the use of music majors and minors as well as for others who need specialized materials.

The Training School Library

The Training School Library, which is located in the Training School Building, contains approximately 8,000 volumes of carefully selected materials and is administered by a trained librarian.

Fees For Graduate Work

	Resident of	
Hours	Kentucky	Out of State
1	\$ 12.00	\$ 30.00
2	\$ 24.00	\$ 60.00
3	\$ 36.00	\$ 90.00
4	\$ 48.00	\$120.00
5	\$ 60.00	\$150.00
. 6	\$ 77.00	\$185.00
7	\$ 89.00	\$215.00
- 8	\$101.00	\$245.00
9-12	\$120.00	\$290.00

Special Fees

Graduate Record Examination	\$ 3.00
Graduation Fee	20.00

Housing

Reservations for rooms in a University residence hall should be made with the Director of housing. Information concerning off-campus housing may be obtained through the same office.

Graduate Record Examination

The Graduate Record Examination is required of all students entering the Graduate School. It is used to supplement other evidence of preparation for graduate work. This examination will not replace other records of achievement as a basis for admission to Graduate School but will provide additional evidence concerning the qualifications of students desiring to undertake graduate work.

Courses For Graduate Study

Credit toward a graduate degree is given for the completion of courses designed for graduate students. Courses numbered 400-499 are open to graduate students only. Courses numbered 300-399 are designed for advanced undergraduate and graduate students and are acceptable for graduate credit provided they are included in the student's ap-

proved program of study. At least onehalf of the course work applicable to the degree must be in courses open only to graduate students.

The Graduate Programs

Western Kentucky University offers graduate curriculua leading to the Master of Arts Degree in Education, English, and History and the Master of Science Degree in Engineering Physics.

In the field of Education, students may elect to pursue one of the school-leadership curricula, the elementary education curriculum, or the secondary education curriculum. In the latter program the student may major in his teaching area.

I. The School Leadership Programs: These curricula prepare students for the positions of principal, superintendent, guidance counselor, supervisor, director of pupil personnel, and psychometrist.

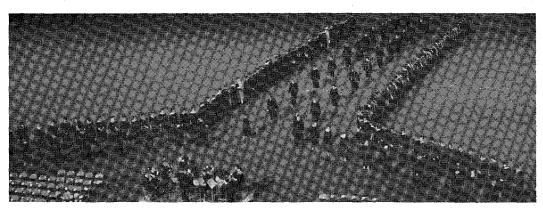
II. The Elementary Education Program: This program is designed to fulfill the requirements for the Standard Elementary Certificate in Kentucky. A minimum of 12 hours of credit must be taken outside the field of professional education.

III. The Secondary Education Program: Students pursuing this program may major in and earn a maximum of 21 hours in the areas of social science, science or science-mathematic area, English or Music; or they may major in education and minor in their particular teaching field. A student must earn a minimum of 12 semester hours in subject matter during the master's program, including at least 9 hours in one particular subject within an area.

IV. The Thirty-Hour Post-Master's Program: The Thirty-Hour program offers advancement to Rank I for certified teachers who complete a planned program. For the school leader and guidance counselor, it offers advanced certification and advancement to Rank I if residence requirements have been met.

V. The Master of Arts Degrees in English and in History provide the student an opportunity for advanced study in an area of specialization and afford opportunities for research and investigation in these areas.

VI. The Engineering Physics Program, leading to the Master of Science Degree, provides opportunities for education at the graduate level to local industry and government personnel who are employed in the technical fields of physical science and engineering.



level courses which are open to graduate students and applicable to a degree. No graduate credit will be given for courses numbered below 300. Students receiving graduate credit in courses numbered below 400 will be required to complete a special assignment in addition to the regular classroom work. The assignment will be of an investigative nature and should demonstrate the ability of the student to collect and organize data.

b. Graduate students may not enroll for more than 15 hours of work in a semester or 9 hours in a summer term of eight weeks. Students holding full-time positions will not be permitted to enroll for more than four hours of credit during any semester. The minimum graduate credit that may be counted as a semester of residence is 9 hours.

II. Transfer Credit

- c. With the approval of the Graduate Council, a maximum of six semester hours of course credit and nine weeks of residence credit earned at another institution may be used toward the Master's Degree at Western.
- d. No more than six semester hours of course credit and nine weeks of residence credit earned in extension courses taught by instructors of Western may be submitted for the Master's Degree.

Special Note: No graduate student may submit both six hours of transferred credit and six hours of credit earned in an extension center, but may submit three hours of transfer credit and three hours of extension credit.

- e. No credit earned through correspondence study may be used for the degree.
- f. The Master's Degree will not be conferred on any candidate with an

average scholastic standing of less than 3.0, or B, in all graduate work undertaken. No credit will be granted for work with D grades.

g. No credit will be allowed for excess undergraduate work or work done as a special post-graduate student.

h. All candidates for the Master of Arts Degree in Education shall be required to complete a satisfactory minor in non-professional subject matter courses. This minor shall be determined by requirements of the program the student intends to follow.

III./ Residence Requirements

The minimum residence required for the Master's Degree is 36 weeks. During the regular semester the minimum of 9 semester hours gives 18 weeks residence credit. In the summer session the minimum of 6 hours gives 9 weeks residence credit. Residence credit for part-time study at the graduate level is computed on the basis of one and onehalf weeks for each semester hour of credit and shall apply to students who carry less than the minimum full-time load. The maximum student load in a regular semester is 15 hours. The maximum summer session student load is 9 hours.

A graduate student pursuing a Master of Arts in Education and who does not have a minimum of 12 semester hours of undergraduate credit in professional education shall be required to complete not fewer than 45 weeks residence while completing course requirements for the Master of Arts Degree.

When a person has an undergraduate deficiency, the residence credit shall be reduced one week for each semester hour of undergraduate deficiency being removed.

One-Half of the course requirements and One-Half of the residence work shall be done as a full-time graduate student.

All course and residence requirements for the Master's Degree must be completed within a period of five consecutive years.

IV. Conditions for Continuation In The Program

A graduate student who fails to make a satisfactory academic record may be refused permission to continue in a degree program. Failure to maintain a point-hour ratio of 2.5 on all work taken during any semester or summer session may be regarded as sufficient reason for dismissal from a degree program.

A student may be dropped from a degree program if his cumulative average is below 3.0 for two consecutive semesters or summer sessions.

Examinations 5.

In addition to course examinations, all candidates for the Master's Degree must pass final examinations covering the thesis and major and minor fields of study. This examination may be either written or oral and shall be conducted by a special committee appointed by the Dean of the Graduate School. The final examinations must be preceded by the approval of the candidate's thesis by this Advisory Committee.

The Master's Degree shall be granted only upon the recommendation of the Examining Committee, and by vote of the Graduate Council, and shall be conferred only at the regular commencements of the Institution.

Program Options for the Master of Arts Degree

Requirements for the Master's Degree may be satisfied by one of the following plans.

> 一点 医动脉 "我好一点" 海绵或科维或特 Commence of the second of TO THE RESERVE AND AND AND ADMINISTRATION OF THE PARTY OF

PLAN I—WITH A THESIS

1. Course Requirements

a. All candidates for the Master's Degree under Plan I must present a minimum of 30 semester hours of graduate credit, 24 of which must be in course work. If a Master of Arts in Education is followed and certification is desired, at least 9 of the 24 hours exclusive of credit for research and thesis must be in professional education. The candidate must have not fewer than 29 semester hours of credit in professional education at the undergraduate level and/or graduate level.

The remainder of the course work required for the degree will be determined by the university in terms of the needs of the student, provided that it shall be in upper division and/or graduate courses.

2. Research and Thesis

Every graduate student completing requirements for the Master's Degree under Plan I must register for research in his major field during the minimum residence period of thirty-six weeks.

Research culminating in the writing of a satisfactory thesis upon some problem approved by the student's Graduate Advisory Committee (this will normally include chairmen of the departments involved) and the Graduate Council shall form a part of the requirements for the degree. This thesis should show the following characteristics: (a) to locate and define problems for study; (b) capacity to work independently on the problem approved; (c) a reasonably wide familiarity with the literature of the subject; (d) a practical working knowledge of research methods; and (e) conclusions justified by supporting data. During the preparation of the thesis, the student shall be under the direction of his Graduate Advisory Committee, which has been approved by the Dean of the Graduate School.

At least four weeks before the date upon which the degree is to be conferred, the complete thesis shall be submitted to the Thesis Advisory Committee for criticism.

At least two weeks before the date on which the degree is to be conferred the thesis in final form must be submitted for approval by the members of the Advisory Committee and the Dean of the Graduate School. Two copies of the approved thesis must be filed by the student with the Dean of the Graduate School.

On the recommendation of the student's Advisory Committee and with the approval of the Dean of the Graduate School, a student may be permitted to work on the thesis in absentia without credit.

The thesis must conform to certain standards as set up by the Graduate Council.

PLAN II—WITHOUT A THESIS

On the approval of the Graduate Council, graduate students may elect to do additional course work in lieu of writing a thesis. Under this plan candidates for the Master's Degree will:

- 1. Present a minimum of 30 hours of credit in required and elective courses.
- 2. Demonstrate their ability to do research through term papers, special reports, or other assignments to be determined by the student's committee and approved by the Dean of the Graduate School.
- 3. Satisfy all other course requirements for the Master's Degree as outlined under Plan I.

Subsequent Steps in the Student's Graduate Program

There are several major steps which the graduate student must follow during his Master's Degree program. At various stages the student's work is evaluated, and he is permitted to advance to the next step by his committee. Failure to follow these procedural regulations may result in a delay in the completion of degree requirements. These steps are as follows:

I. Admission to Graduate Study and and Filing of Declaration of Intent—

Application for admission is filed with the Dean of the Graduate School. He will effect the admission upon receipt of the student's undergraduate transcript. The Declaration of Intent is filed with the Dean of the Graduate School, who assigns the student's graduate committee. The filing of the Declaration of Intent does not obligate the University to admit a student to a particular degree program. The University reserves the right to pursue selective procedures in the admission of students to its programs.

II. Filing the Graduate Degree Program and Securing Admission to Full Graduate Standing—

(To be filed with the Dean of the Graduate School during the first term of graduate study.) These two matters are concomitant in a student's graduate program. The student's committee evaluates the student's undergraduate record to determine his eligibility for full graduate standing. The satisfactory correction of any deficiencies may be made a condition for admission to full graduate standing. The complete graduate

degree program is then outlined, approved by the student's committee, and filed with the Dean of the Graduate

III. Admission to Candidacy

Admission to candidacy is a serious step in the student's graduate program. At this time the student's committee reviews his qualifications and determines whether all conditions attendant to the student's full graduate standing have been fulfilled.

A student will be admitted to candidacy after having met the following conditions:

- A. Attained unconditional graduate standing.
- Completed twelve semester hours of work with a "B" or better average, nine of which must be completed in residence.
- C. Received the recommendation of his Advisory Committee.
- D. Been approved by the Graduate Council after proper certification by the Graduate Dean.

IV. Application for Comprehensive Examination –

All candidates for the Master's Degree must pass either an oral or written comprehensive examination fields presented toward the fulfillment of requirements. Application for scheduling of the comprehensive examination should be made with the Dean of the Graduate School not later than eight weeks before the date on which the degree is expected.

V. Application for the Degree -

Application for the Master's Degree must be filed with the Registrar of the University at least eight weeks before the date on which the degree is to be conferred. This should be done after consultation with the Graduate Dean to verify that all conditions have been met. by this time the graduation fee must be paid at the Business Office.

VI. Submission of Completed Thesis —

Students following Plan I as outlined above must submit their completed thesis to their graduate committee not later than four weeks before the date on which the Master's Degree is to be con-

The thesis in final form must be submitted to the student's committee and the Dean of the Graduate School at least two weeks before the date on which the degree is to be conferred. Two copies of the approved thesis must be filed by the student with the Dean of the Graduate School. Additional copies may be required by the department concerned.

VII. Ordering of Cap and Gown —

Arrangements should be made with the College Heights Bookstore for a cap and gown at the beginning of the semester in which the degree is to be conferred.



Graduate Curricula

Curriculum for High School Teachers

Leading to the Master of Arts Degree and a 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 High School Certificate shall be based upon the following:

- 1. 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.
- 2. 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
- 3. At least nine semester hours of the required work shall be in professional education courses designed to develop the recommended competencies. These courses will be chosen according to the student's needs after consultation with the student's graduate advisor in education.

At least 12 of the 30 semester hours required for the degree shall be non-professional subject matter courses. These courses must be selected 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.

When Western does not offer graduate work in a particular field, students may be permitted to earn their graduate minor and the Standard Secondary Certificate in a distributed general education program.

In the following areas the student may elect to major in one of these subject fields:

- 1. Social Science Area.
- 2. Science or Science-Mathematics Area.
- 3. English or English and Allied Language Arts Area.
- 4. Music Education.

If the student majors in an area other than education, a minimum of nine hours must be earned in one of the subjects included in the area. The maximum number of hours which may be taken in these major areas is 21 hours.

Curriculum for Elementary Teachers

Leading to the Master of Arts Degree and 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 leading to the Standard Elementary Certificate shall be based upon the following:

- 1. 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.
- 2. 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.
- 3. At least 12 semester hours of the required work shall be in professional education. These courses should be chosen from those designed to develop the recommended competencies of an elementary teacher. These courses will be chosen according to the student's

needs after consultation with the student's graduate advisor in education.

4. 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 student in elementary education may take a distributed subject matter graduate minor which may include courses in as many as three different subject fields.

School Leadership Programs

The general purpose of the school leadership programs is to give qualified personnel the opportunity to acquire advanced knowledge, understanding, and skill in fields of their interests. The substantive knowledge to be sought, the kinds of understanding to be gained, and the skills to be developed will vary from field to field; but all programs have the common objective of providing advanced students with the knowledge judged to be essential for continuing intellectual development and the skills for finding new knowledge.

The student who desires to follow a leadership program should become familiar with the requirements of the curriculum desired. It should be emphasized that there are two distinct phases of these programs, the pre-admission phase and the post-admission phase. A

student must complete at least twelve hours and meet other requirements before seeking admission to a special program. This is known as the pre-admission phase. Upon completion of the pre-admission courses and with the submission of supporting data the student may formally apply for admission to a leadership program in Education. Formal acceptance of his application by the Director of Leadership Programs places the

candidate in the post-admission phase. Western offers the School-Leadership curricula in the following areas:

1. The Principal

2. Guidance and Counseling

3. The Supervisor

4. Director of Pupil Personnel

*5. The Superintendent (Standard Leadership 30-hour Post-MA)

*For Standard Leadership Program see page

Curriculum for Principals

Leading to the Master of Arts Degree and Provisional Principal Certificate

I. Pre-Admission Course Requirements

A.	Professional Education Requirements Students shall complete two of the following three courses:			
	- ,			
	Education 486-History and Philosophy			
	Education 470 The Curriculum	6	sem.	hrs.
	Education 4384Research Methods			
В.	Subject-Matter-Minor Requirements			
	Students shall complete a minimum of six semester hours of related subject matter courses prior to admission to the program for			
	principals	6	sem.	hrs.
TO	TAL	12	sèm.	hrs.
			DOLLER	

II. Requirements for Admission to the Principalship Program

Admission to the principalship program at this point will be based on the recommendation of a selection committee. The recommendations will be based on the following:

1. *Records of three years' satisfactory experience in public or private schools.

^{*}Prerequisite: Completion of three years' teaching experience. In the event that this prerequisite cannot be met the student may be permitted to complete a specified 12 hours of subject matter and, upon completion of the Master's Degree, be recommended for a standard teaching certificate. In this event, the candidate may complete the leadership program requirements during the second year of graduate work.

- 2. Recommendations from public school officials where the experience was obtained.
- 3. Recommendations from graduate faculty members with whom the candidate has had courses.
- 4. Standardized test scores indicating achievement and a potential for growth.
- 5. Conference with candidate selection committee.
- 6. Satisfactory scholastic record.

 (Graduate students transferring to Western must be recommended by the institution attended.)

*The candidate may be permitted by the selection committee to pursue this program and gain public school teaching experience concurrently, but under no circumstances may this program be completed prior to three years' public school experience.

III. Post-Admission Course Requirements

Upon the student's admission to the principalship program, the schedule below will be followed. Completion of the program leads to the Master's Degree and recommendation for certification.

A. Professional Education Requirements Education 450—Fundamentals of School	3 sem. hr	• • •
Administration	o sem. m	э.
Education 466—Principles of Supervision		
or	3 sem. hr	s.
Education 462—Elementary School Supervision		
*Education 451—Elementary School Organization and Administration		
or *Education 452—Secondary School Organization . and Administration	3 sem. hi	fs.
**Education 370—The Elementary Curriculum	3 sem. h	rs.
B. Subject-Matter-Minor Requirements and Electives		
Guided related subject matter courses other than professional ed-		
ucation	3-6 sem. h	rs.
Guided Elective	3 sem. h	rs.
TOTAL (After Admission)	18 sem. h	rs.
TOTAL SEMESTER HOURS	30 sem. h	
TOTAL SEMESTER HOORS	30 50244. 11	

^{*} See footnote on preceding page. **Unless taken as an undergraduate.

The Guidance Counselor Curriculum

Leading to the Master of Arts Degree and Provisional Certificate for Guidance Counselors

I. Pre-Admission Course Requirements

A. Professional Education Requirements
Students shall complete two of the following three courses prior to admission to
the program for guidance counselors.

Education 486-History and Philosophy) .		
Education 470—The Curriculum	}	6 sem.	hrs.
Education 438—Research Methods			

B. Subject-Matter-Minor Requirements

Students shall complete a minimum of six semester hours of related subject matter courses prior to admission to the program for guidance counsselors _______ 6 sem. hrs.

TOTAL _____ 12 sem. hrs.

II. Requirements for Admission to the Guidance Counselor Program

Requirements for admission to this program are identical with those for the Principalship Program outlined on page

The candidate may pursue the guidance program and gain public school experience concurrently. One may secure the Master's Degree and complete the requirements for a standard teaching certificate prior to completion of three years experience in a public school. If this is done, Education 497 and 499 will become part of the post-master's program.

III. Post-Admission Course Requirements

Upon the student's admission to the Guidance Program, the schedule below will be followed.

A. Professional Education Requirements:

<u> </u>			
Education 491—Guidance & Counseling in Education	3	sem.	hrs.
Education 492—Testing Techniques & Applications			
Education 494—Educ. & Occupational Inform.	3	sem.	hrs.
*Education 497—Counseling Methods and Procedures			

^{*}Psychology 400 recommended as a prerequisite.

^{**}Completion of a course in psychology of exceptional children is required for certification as School Psychometrist.

Education 499—Supervised Practices in Guidance	_ 3 sem. hrs.
B. Subject-Matter-Minor Requirements:**	
Guided related subject matter courses other than professional ed-	•
ucation	_ 3 sem. hrs.
TOTAL (After Admission)	_ 18 sem. hrs.
TOTAL SEMESTER HOURS	30 sem. hrs.
Curriculum for Supervisors	
Leading to the Master of Arts Degree and	
Provisional Certificate for Supervisors	
I. Pre-Admission Course Requirements	
A. Professional Education Requirements	
Students shall complete two of the following three courses.	
Education 486—History and Philosophy	
Education 470—The Curriculum	6 sem. hrs.
Education 438—Research Methods	
B. Subject-Matter-Minor Requirements Students shall complete a minimum of six semester hours of matter courses prior to admission to the program for supervisors	_ 6 sem. nrs.
TOTAL	12 sem. hrs.
II. Requirements for Admission to the Supervisors Program	
Requirements for admission to this program are identical with thos	e for the Prin-
cipalship Program outlined on page	
III. Post-Admission Course Requirements	
Upon the student's admission to the supervisors program the sched	lule below will
be followed. Completion of the program leads to the Master's Deg	ree and recom-
mendation for certification.	
A. Professional Education Requirements:	
Education 450-Fundamentals of School Administration	_ 3 sem. hrs.
Education 466—Principles of Supervision	3 sem. hrs.
Education 462—Supervising Elem. School Subjects	_ 3 sem. nrs.
*Education 370-Elementary School Curriculum	3 sem. hrs.
Education 491—Guidance & Counseling in Education	_ 3 sem. nrs.
B. Subject-Matter-Minor Requirements:	
Guided related subject matter courses other than professiona	il
education	_ 3-b sem. nrs.
TOTAL (After Admission)	18 sem. nrs.
TOTAL SEMESTER HOURS	_ oo sem. mrs.

^{*} Unless taken as an undergraduate.

NOTE: Students desiring to become supervisors of art or music may take their ninehour minor in art or music and thereby gain competency for the supervision of these subjects. Kentucky no longer issues specialized certificates in supervision.

Curriculum for Personnel Director

Leading to the Master of Arts Degree and Provisional Certificate for Director of Pupil Personnel

I.	Pre-Admission Course Requirements A. Professional Education Requirements Students shall complete two of the following three courses.
	Education 486-History and Philosophy
	Education 470—The Curriculum 6 sem. hrs.
	Education 438—Research Methods
	B. Subject-Matter-Minor Requirements Students shall complete a minimum of six semester hours of related subject matter courses prior to admission to the program for supervisors _ 6 sem. hrs. TOTAL
II.	Requirements for Admission to the Personnel Directors Program Requirements for admission to this program are identical with those for the Principalship Program outlined on page 16.
III.	Post-Admission Course Requirements Upon the student's admission to the personnel directors program, the schedule below will be followed. Completion of the program leads to the Master's Degree and recommendation for certification.
TO	A. Professional Education Requirements: Education 450—Fundamentals of School Administration 3 sem. hrs. Education 454—Accounting for Pupil Personnel 3 sem. hrs. *Education 370—Elementary School Curriculum 3 sem. hrs. Education 466—Principles of Supervision 3 sem. hrs. Education 491—Guidance and Counseling in Education 3 sem. hrs. B. Subject-Matter-Minor Requirements: **Guided related subject matter courses other than professional education 3-6 sem. hrs. TOTAL (After Admission) 12 sem. hrs. TOTAL (SEMESTER HOURS 30 sem. hrs.
*U **Si	nless taken as an undergraduate. trongly recommended for the minor requirements: Psychology 318—Psychology of Exceptional Children 3 sem. hrs. Psychology 319—Abnormal Psychology 3 sem. hrs. Psychology 320—Personality Adjustments and Mental Hygiene 3 sem. hrs.

The Master of Arts Degree in English

I. Purpose

This program is designed for students who are preparing to teach in the secondary schools, in junior colleges, or for those who expect to continue graduate work toward an advanced degree at another institution.

II. Admissions Standards

In order to pursue this program, a student must be eligible for admission to the Graduate School in good standing. In addition, a candidate must submit a transcript showing a minimum of thirty hours of undergraduate English with an average point standing of not less than 3.0.

III. Curriculum

To complete this program a student must do a minimum of twenty-four se-

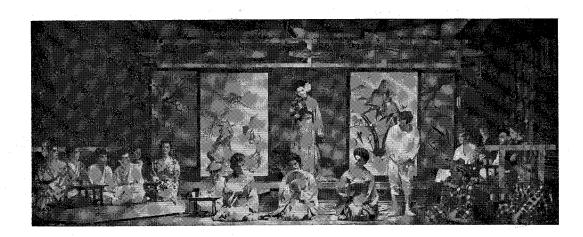
mester hours of classwork, nine of which may be in a related field or fields such as dramatics, English history, foreign literature, mass media, philosophy, and speech.

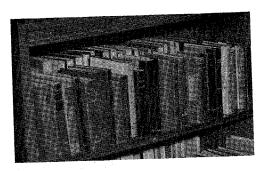
A thesis on a topic approved by the student's advisor and the head of the English Department under the direction of a member of the graduate staff must be completed. This thesis will carry six semester hours of credit, making the minimum for the degree thirty semester hours.

The ability to use a modern foreign language must be demonstrated. The language requirements must be satisfied by the Language Department as specified by the rules of the Graduate School.

A final examination over courses, thesis, and related materials must be satisfactorily passed.

All residence and course requirements as specified by the Graduate School must be completed.





The Master of Arts Degree in History

I. Purpose

This program is designed to prepare students for the teaching of history on the junior or senior college level; to provide the initial stage on the graduate level for those people who intend to pursue a doctoral degree; and for the preparation of secondary teachers who desire such a program while meeting certification requirements.

II. Admissions Standards

In order to pursue this program a student must be eligible for admission to the Graduate School in good standing. Evidence of good undergraduate preparation in the field of history must be submitted. In order to be accepted to the program a student must present a major or minor in history with approximately a **B** average in this field.

III. Curriculum

Unity of purpose in planning the program is a necessity. A student who has an undergraduate major in history will be permitted to take one-third of his graduate work in a related field in courses approved by his Graduate Committee. A student who presents an un-

dergraduate minor in history must complete the Master's program in the field of history.

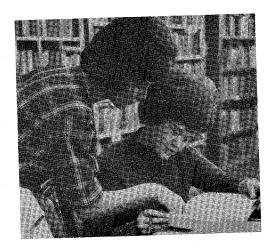
At least one seminar type course, which includes historiography, training in methods of graduate study, and instruction in history, must be completed.

A minimum of twenty-four hours acceptable course work must be completed. In addition, an acceptable thesis equivalent to six graduate hours is required. This thesis will be under the supervision of the chairman of the student's Graduate Committee. It must conform to basic rules of historical research and must indicate evidence of the use of primary resources.

The ability to use a modern foreign language must be demonstrated. The language requirement must be satisfied by the Language Department as specified by the rules of the graduate school.

A final examination over courses, thesis, and related materials must be satisfactorily passed.

All residence and minimum course requirements as specified by the Graduate School must be completed.



The Master of Science Degree in Engineering Physics

I. Purpose

The primary purpose of this program is to provide additional formal academic training to local industry and government personnel so that they can maintain a degree of competence commensurate with the needs for creativity and productivity.

II. Admissions Standards

The student should be a graduate of a fully accredited institution and should have a major in one of the fields of physical science or engineering. Promising students from small colleges will also be accepted; however, they may expect to be required to take some courses of a transitional nature between their incomplete undergraduate preparation and the level of the regular first-year graduate courses. All students must take the aptitude portion of the Graduate Record Examination before the end of their first semester of graduate study.

III. Course Requirements

Twenty-four semester hours of course work and six semester hours of thesis research are required. Normally, fifteen to eighteen semester hours will be taken in physics, and six to nine semester hours in a minor will be permitted. There is no language requirement.

IV. Research

The student's graduate committee will be assigned upon completion of fifteen semester hours of course work and after selection of a thesis topic. A

thesis reporting the results of the student's research must be submitted in accordance with the regulations of the graduate School. Copies of the thesis must be presented to the Dean of the Graduate School, the department head, and members of the student's graduate committee.

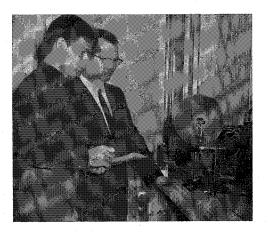
V. Grades

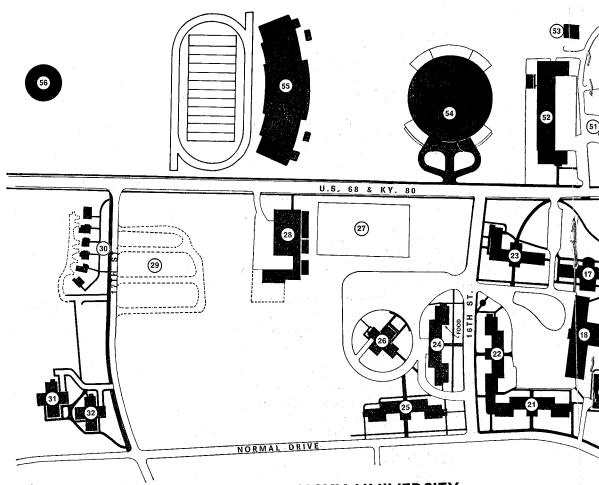
A 3.0 or (B) on all course work for the MS, not including thesis, must be maintained. No credit will be granted for grades of D or below.

VI. Final Examination

A final examination (oral and/or written) is given to all candidates. Such an examination will include defense of the thesis and may include other subjects.

The general procedures concerning admission to the graduate school admission to candidacy, residence, time limit for the degree, transfer of credit, and thesis format as outlined by the Graduate School apply to this program.





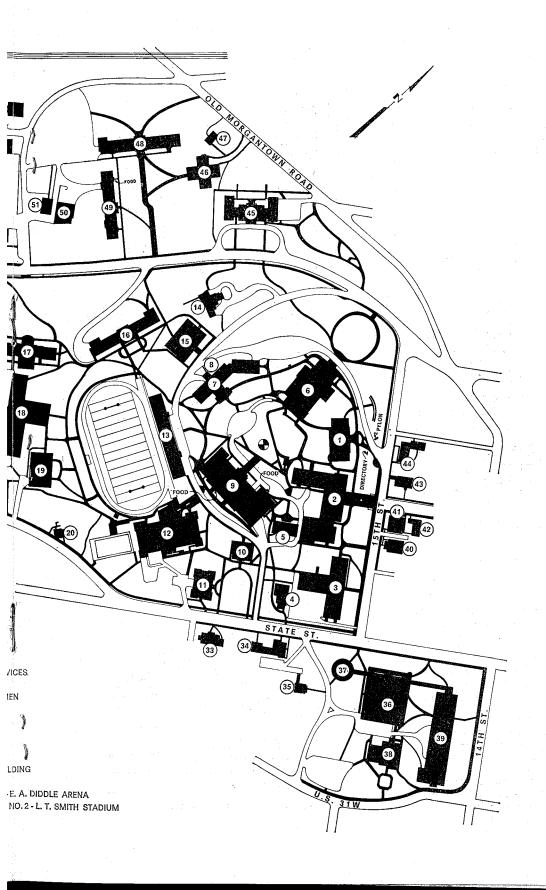
WESTERN KENTUCKY UNIVERSITY

COLLEGE HEIGHTS BOWLING GREEN, KENTUCKY

- 1 CLASSROOM BUILDING
- 2 HENRY HARDIN CHERRY HALL
- 3 WESTERN TRAINING SCHOOL
- 4 SMALL DORMITORY FOR WOMEN
- 5 FACULTY HOUSE
- 6 VAN METER AUDITORIUM & ADMINISTRATION BLDG. 25 SOUTH HALL MEN
- 7 POTTER HALL WOMEN
- 8 SECURITY HEADQUARTERS
- 9 PAUL L. GARRETT STUDENT CENTER
- 10 HOME ECONOMICS BUILDING
- 11 INDUSTRIAL ARTS BUILDING
- 12 MARGIE HELM LIBRARY
- 13 STADIUM
- 14 ALUMNI CENTER
- 15 LAWRENCE W. WETHERBY ADMINISTRATION BLDG. 34 HOME MANAGEMENT HOUSE
- 16 WHITE STONE HALL WOMEN
- 17 McLEAN HALL WOMEN
- 18 FINLEY C. GRISE HALL
- 19 MUSIC BUILDING

- 20 GUEST HOUSE
- 21 EAST HALL WOMEN
- 22 NORTH HALL WOMEN
- 23 REGENTS HALL WOMEN
- 24 WEST HALL MEN
- 26 CENTRAL HALL MEN
- 27 TENNIS COURTS
- 28 WESTERN TRADE SCHOOL
- 29 TRAILER PARK
- 30 FACULTY HOUSING
- 31 BARNES-CAMPBELL HALL MEN
- 32 BEMIS LAWRENCE HALL MEN
- 33 PRESIDENT'S HOME (TEMPORARY)
- 35 FACULTY RESIDENCE
- 36 KELLY THOMPSON COMPLEX FOR SCIENCE 55 ACADEMIC-ATHLETIC BLDG. NO. 2
- 37 HARDIN PLANETARIUM
- 38 SNELL HALL

- 39 THOMPSON SCIENCE HALL
- 40 SEMINAR CENTER #2
- 41 SEMINAR CENTER #1
- 42 SEMINAR CENTER #3
- 43 ROCK HOUSE
- 44 EXTENSION AND FIELD SERVICES
- 45 KENTUCKY BUILDING
- 46 RODES-HARLIN HALL WOMEN
- 47 LOG CABIN
- 48 STATE HALL WOMEN
- 49 TERRACE HALL WOMEN
- 50 HEATING PLANT
- 51 STUDENT LAUNDERETTE
- 52 MAINTENANCE SERVICE BUILDING
- 53 ELECTRIC SUB-STATION
- 54 ACADEMIC-ATHLETIC BLDG.-E. A.
- 56 ATHLETICS COMPLEX



Thirty-Hour Post-Master's Program

Western Kentucky University offers the following thirty-hour post-master's programs. These programs are under the authorization of the Kentucky State Board of Education.

- I. Program leading to Rank I qualification for teachers.
- II. Standard Leadership Certificate.
- III. Standard Guidance Certificate.

General Guidelines for 30-Semester-Hour Post-Master's Program

The guidelines listed below apply to all graduate students who are beginning the 30-semester-hour post-master's program. These guidelines have been adopted by the State Board of Education.

Students who desire to follow this program should contact the Dean of the Graduate School for advisement.

Students beginning the 30-semesterhour post-master's program will be required to take the Graduate Record Examination.

- 1. The 30-hour program shall require 36 weeks in residence.
- 2. A maximum of six semester hours of the 30 may be taken in another college or university. Eighteen semester hours of the 30 shall be earned in residence in the institution which makes the recommendation to the State Department of Education for Rank I. A maximum of six semester hours may be earned off-campus through the institution which makes the recommendation for Rank I.

- 3. All of the course work shall be in courses which carry graduate credit, but a minimum of 15 semester hours shall be earned in courses open only to graduate students
- 4. One-half of the course work in the 30-semester-hour program shall be earned as a full-time student (18 weeks).
- 5. The student shall have a standing of "B" on the 30 semester hours, and no credit in a course lower than "C" shall be accepted.
- 6. Students pursuing the program for teachers must earn a minimum of 12 of the 30 post-Master's hours in academic work. A minimum of 24 semester hours in academic work (24 out of a total of 60 semester hours) shall be included in a combination of the Master's Degree program and the 30-semester-hour program. The minimum of 24 semester hours of academic work shall be in the candidate's major, or minor, or area of preparation, or in supporting courses from other disciplines as approved by the institution.
- 7. Those who qualify for Rank I by following the 30-semester-hour program for school leaders shall also complete requirements for the Standard Elementary or Standard High School Certificate by the time the 30 semester hours are completed. As a general rule, Western will require one-third (21 hours) of the total 60 hours earned at the Master's Degree and 30-hour post-Master's level to be taken in subject matter fields other than professional education for those candidates pursuing the Standard Leadership and Standard Guidance Certificates.

8. The Dean of the Graduate School will certify to the State Department of Education when an approved 30-semester-hour program has been completed.

I. 30-Semester-Hour Post-Master's Graduate Program for Teachers

Students pursuing the 30-hour post-Master's program for teachers shall be required to fulfill all of the above requirements stipulated by the State Board of Education for this advanced graduate program.

Students should contact the Dean of the Graduate School for assignment of a graduate advisor for this program. This graduate advisor will work with the student in planning the over-all program.

II. 30-Semester-Hour Post-Master's Program for School Leaders

The holder of a provisional certificate for principalship, supervision, or superintendency may be issued the Standard Certificate for School Leaders (all three) upon the following conditions:

- 1. The completion of a planned program of at least 30 semester hours of work above the Master's Degree.
- 2. *Four years of successful experience as a school leader. In addition the candidate must meet the following requirements:
- Recommendations from public school officials where the experience was obtained.
- 2. Recommendations from graduate faculty members with whom the candidate has had courses.

- 3. Standardized test scores indicating achievement and a potential for growth in the field of guidance.
- 4. Conference with the director of leadership programs.
- 5. Satisfactory scholastic record. (Graduate students transferring to Western must be recommended by the institution attended.

The Standard Certificate for School Leaders shall be valid for continuous service provided it is not inactive for longer than a four-year period.

* The candidate may be permitted by the director of leadership programs to pursue the leadership program and gain public-school teaching experience concurrently, but under no circumstances may this program be completed prior to the four years' public school experience.

Program for Standard Leadership Certificate

- A. Professional Education Requirements:
 Students pursuing the Leadership
 Program shall be required to take
 eighteen to twenty-one semester
 hours of professional courses chosen
 from the following. The student's
 graduate committee will guide the
 selection of these courses.
 - ***Education 450—Fundamentals of School Administration_3 sem. hrs. Education 451—Elementary School Organization and Administration _____ or ___ 3 sem. hrs.

Education 452—Secondary
School Organization and
Administration _____3 sem. hrs.

Education 462—Supervision of Elementary School

Subjects _____3 sem. hrs.

*** Required for standard Leadership

***Education 466—Principles
of Supervision
***Education 457—School
Law3 sem. hrs.
Education 454—Accounting
for Pupil Personnel3 sem. hrs.
for Pupil Personnel3 sem. hrs. ***Education 456—School
Finance3 sem. hrs.
Education 458—School
Building3 sem. hrs.
Education 482—School and
Community Relations3 sem. hrs
***Education 491—Guidance &
Counseling in Education_3 sem. hrs.
Education 492—Testing Tech-
niques & Applications_3 sem. hrs.
Education 440—Education
Statistics3 sem. hrs
Education 432—Research in
Administration3 sem. hrs
Total in Education18-21 sem. hrs
B. Subject-Matter-Minor Requirements
Related subject matter field—to tota
minimum of twenty-one hours of the
sixty hours earned in the two years
of graduate work.
9-12 sem. hrs
Total 30 sem. hrs

III. Program for Standard Guidance Certificate

The Standard Certificate for Guidance Counselors shall be based upon the completion of the curriculum for provisional certification for guidance counselors and the completion of thirty additional semester hours of a planned program for guidance counselors.

The Standard Certificate for Guidance Counselors shall be a "continuing" certificate.

A. Professional Education Requirements

Education 493—Group Procedures in Counseling __3 sem. hrs.

Education 495—Community
Resources for Guidance__3 sem. hrs.

Education 440—Statistics or
recommended substitute_3 sem. hrs.

Education 434—Research in
Guidance and
Counseling ______3 sem. hrs.

Elective in Education____3 sem. hrs.

B. Subject-Matter-Minor Requirements

*Related subject matter field ______9-15 sem. hrs.

Total _____ 30 sem. hrs.

* Only nine (9) semester hours in related subject matter courses if a standard teaching certificate was taken at the Master's Degree level. The total 21 hours in distributed related fields and the additional hours in professional education will be selected upon the recommendations of the major professor for the guidance program, the department head, and the approval of the Dean of the Graduate School.



The Joint Program Between Western Kentucky University and the University of Kentucky Leading to the Doctoral Degree

An outstanding graduate student at Western Kentucky University who is nearing the completion of the Master's Degree in Education (or who has completed a Master's Degree) may petition (be selected) to enter the joint program leading to the Ed.D. or Ph.D. in Education from the University of Kentucky.

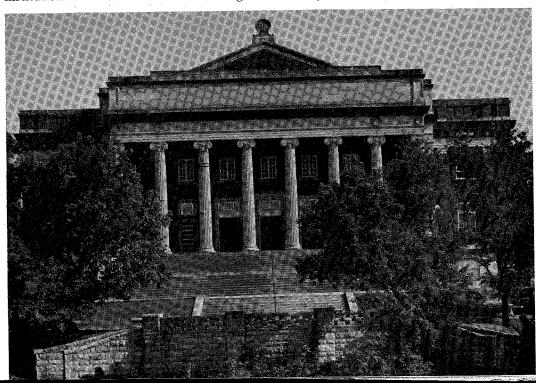
To be eligible for admission to this program, in addition to having met the entrance requirements at Western, the student must meet the entrance requirements of the Graduate School of the University of Kentucky and the usual standards for admission to the doctoral program established by its College of Education.

A prospective candidate must file application in duplicate with one of the institutions. The institution receiving the initial applications will retain one copy for members of its special admissions committee and send the second copy to the Graduate Office of the other institution. The applicant's qualifications will be evaluated by a joint screening committee representing both institutions.

For each student admitted to the program a special advisory committee, known as the Special Doctoral Committee, will be appointed. This committee will represent both participating institutions.

Normally the student will continue in residence at Western Kentucky University for one school year (maximum 30 credits) after being admitted to the joint program. Variations as to period of residence at each institution may be approved by the student's committee in order that he may be better prepared to pass qualifying examinations.

Students desiring further information on this program should contact the Dean of the Graduate School, Western Kentucky University.



Course Descriptions

Bowling Green College Of Commerce

Graduate Courses

Accounting

418. Investigations in Accounting. Three

Designed primarily for secondary education teachers of bookkeeping. Provides an updating of terminology and practices in accounting.

Courses which may be taken for graduate credit.

310. Elementary Cost Accounting. Three hours.

Prerequisite: Accounting 119.

311. Tax Accounting. Three hours. Prerequisite: Accounting 119.

320. Managerial Cost Analysis. Three hours.

Prerequisite: Accounting 310.

321. Advanced Tax Accounting. Three hours.

Prerequisite: Accounting 311.

322. Advanced Accounting. Three hours. Prerequisite: Accounting 219.

323. Advanced Accounting Theory. Three

Prerequisite: Accounting 219.

331. Auditing. Three hours. Prerequisite: Accounting 219.

341. Governmental and Administration. Three hours.

Prerequisite: Accounting 119.

350. C.P.A. Problems. Three hours. Prerequisite: Accounting 322 or 323.

Graduate Courses

Business Administration

400. Survey of Distribution. Three hours. A survey embracing all business activities involved in moving goods from production to consumption. Institutions, functions, regulations, costs, efficiency, trends and contemporary marketing problems are appraised. Emphasis is devoted to developing a feeling for the role of marketing in the American economy.

440. Modern Data Processing. hours.

A survey of the principles, techniques, and equipment of data processing as used today in business and government. An introduction to computer programming is included.

Courses which may be taken for graduate credit.

Finance

320. Financing Business. Three hours.

330. Investments. Three hours.

340. Cases in Financial Management. Three hours.

342. Securities Analysis. Three hours.

345. Financial Institutions. Three hours.

Management

310. Principles of Management. Three hours.

311. Personnel Management. Threehours.

312. Production Management. Three hours.

325. Quantitative Analysis. Three hours.

350. Public Relations. Three hours.

380. Comparative Management. Three hours.

Marketing

310. Retail Management. Three hours.

330. Introduction to Marketing Research. Three hours.

331. Advanced Marketing Management. Three hours.

Real Estate

370. Principles of Real Estate. Three

371. Real Estate Marketing. Three hours.

372. Real Estate Finance. Three hours.

373. Real Estate Law. Three hours.
374. Real Estate Appraisals. Three hours.

375. Real Estate Advanced Appraisals. Three hours.

Insurance

390. Seminar in Insurance. Three hours.

Law

318. Labor Law. Three hours.

Graduate Courses

Economics

401. A Survey of Public Finance Theory. Three hours. Prerequisite: Economics 301 and graduate standing. A comprehensive study of the basic theory of alternative sources of public revenues; a study of the theoretical aspects of the impact, incidence, and effects of various types of taxation. A part of this course will be devoted to fiscal policy theory.

470. Studies in Economic Growth. Three hours.

Prerequisite: A minor in economics or its equivalent. A study of the significant factors associated with economic growth and development. The relationship between public and private contributions to economic growth. This course will include a study of various types of formal growth models.

498. Directed Studies. Three hours. Prerequisite: Permission of instructor. Intensive investigation of specified economic topics.

499. Economic Research and Report Writing. Three hours.

Involves research and evaluation of primary statistical data and training in techniques of formal research reporting.

Courses which may be taken for graduate credit.

301. Public Finance. Three hours. Prerequisite: Economics 191.

305. Labor Economics. Three hours. Prerequisite: Economics 191.

306. Statistical Analysis For Economics and Business. Three hours. Prerequisite: Economics 206.

308. State and Local Taxation. Three hours.

310. Commercial Bank Management. Three hours.

340. Intermediate **Economic** Analysis. Three hours.

Prerequisite: Economics 191.

350. Central Banking Theory and Monetary Policy. Three hours. Prerequisite: Economics 250.

360. Business Cycles. Three hours. Prerequisite: Economics 191.

364. Introduction to Mathematical Economics. Three hours.

Prerequisite: Major, minor, or permission of instructor.

365. Introduction to Econometrics. Three

Prerequisites: 206 and permission of instructor.

370. Economic Growth. Three hours. Prerequisite: Economics 191.

380. International Trade. Three hours. Prerequisite: Economics 191.

390. Economic Thought to 1870. Three hours.

Prerequisite: Major, minor, or permission of instructor.

391. Economic Thought Since 1870. Three hours.

Prerequisite: Major, minor, or permission of instructor.

398. Macro-Economic Theory.

Prerequisite: Major, minor, or permission of instructor.

Government Graduate Courses

410. Problems in National Government. Three hours.

A general survey of the national government. The course is designed for graduate students having a limited background of study in political science subjects.

420. Investigations in State and Local Government. Three hours.

Research, reports and discussion relative to selected aspects of state and local gov-

430. The Constitution and Civil Rights. Three hours.

Recent developments in legislative enactments and judicial decisions affecting individual liberties.

450, 451. Thesis Writing. Three hours each.

460. Directed Study. Three hours. Faculty guidance of student research and study of one or more selected fields of political science. Conducted on an individual student-faculty member basis.

Courses which may be taken for graduate credit.

- **310. U. S. Foreign Policy.** Three hours. Prerequisite: Government 110 or permission of the instructor.
- **311.** Constitutional Law I. Three hours. Prerequisite: Government 110 or permission of the instructor.
- **312.** Constitutional Law II. Three hours. Prerequisite: Government 110 or permission of the instructor.
- **313.** Jurisprudence. Three hours. Prerequisite: Government 110 or 140 or permission of the instructor.
- **325. Municipal Government.** Three hours. Prerequisite: Government 121 or 122 or permission of the instructor.
- **332.** Early Political Theory. Three hours. Prerequisite: Government 110 or permission of the instructor.
- 333. Modern Political Theory. Three hours.

Prerequisite: Government 332 or permission of the instructor.

334. Contemporary Political Thought. Three hours.

Prerequisite: Government 333 or permission of the instructor.

335. American Political Thought. Three hours.

Prerequisite: Government 110 or permission of the instructor.

340. Public Personnel Administration. Three hours.

Prerequisite: Government 240 or permission of the instructor.

353. Soviet Foreign Policy. Three hours. Prerequisite: Either Government 251, 252, or 310, or permission of the instructor.

354. International Law. Three hours. Prerequisite: Government 110 or 140 plus 3 additional hours in Government or permission of the instructor.

355. International Organization. Three hours.

Prerequisite: Government 110 and Government 252 or permission of the instructor.

356. Far Eastern Governments. Three hours.

Prerequisite: Government 110 or 140 or permission of the instructor.

Graduate Courses Office Administration

425. Modern Stenographic Techniques. Three hours.

Coverage of touch shorthand theory principles, dictation speed development, and teaching methods of the system.

Courses which may be taken for graduate credit.

- **351. Report Writing.** Three hours. Prerequisites: Office Administration 100 and English 107.
- **352. Credits and Collection.** Three hours. Prerequisite: Accounting 119.
- **360. Office Management.** Three hours. Prerequisite: Senior standing.
- **370.** Records Management. Three hours. Prerequisites: Senior standing and Office Administration 121.

Graduate Courses Sociology

400. Studies in Delinquency and Crime. Three hours.

Prerequisite: Sociology 100, senior or graduate standing, and permission of the instructor.

A study of general conditions relating to crime and delinquency.

420. Studies in Family Relations. Three hours.

Prerequisite: Sociology 100, senior or graduate standing, and permission of the instructor.

An analysis of the family institution; the impact of modern culture on the family.

440. Studies on Anthropology. Three hours.

Prerequisite: Sociology 100, senior or graduate standing, and permission of the instructor.

Covers to some extent both physical and cultural anthropology; analyzes ways of life in various modern day primitive societies.

465. Studies in the Community. Three hours

Prerequisite: Sociology 100, senior or graduate standing, and permission of the

Ecological and social concepts of the community; the structure and function of the community.

470. Studies of Social Systems. Three hours.

Prerequisite: Sociology 100, senior or graduate standing, and permission of the instructor.

Use of organizational theory and its application to social systems.

Courses which may be taken for graduate credit.

300. Deviant Behavior. Three hours. Prerequisite: six hours of Sociology.

320. The Family. Three hours. Prerequisite: six hours of sociology.

340. Cultural Anthropology. Three hours.

Prerequisite: six hours of sociology.

College of Education

Graduate Courses Education

413. Clinical Diagnosis of Reading Disabilities. Three hours.

A study of the nature and causes of reading disabilities and investigation of general and specific principles and approaches to diagnosis. Through actual case studies students will use both group and individual tests in diagnosis. The interpretation of these tests and recommendations for remediation will be developed.

414. Correction of Reading Difficulties (**Practicum**). Three hours.

The three primary areas of study in this course are: Development of instructional techniques for use with individuals or groups involved in remedial reading instruction; Investigations into materials and procedures for remedial reading instruction; Participation in clinical experiences with remedial students.

415. Advanced Materials and Methods in Modern Mathematics for Elementary Teachers. Three hours.

Mathematics for grades kindergarten through grade eight is taught with an attempt to blend the conceptual, the computational and application aspects of mathematics. Emphasis is placed on the structural aspects of mathematics and an attempt is made to show the "why" of arithmetic computation. An extension of Education 215.

420. Materials and Methods of Teaching Secretarial Subjects. Three hours.

Materials, methods, techniques. devices for teaching typewriting, shorthand, and related skilled subjects. Required of graduate students majoring in business education.

421. Materials and Methods of Teaching Bookkeeping and Basic Business. Three hours.

Purposes, materials, methods, and techniques for teaching bookkeeping and basic business. Required of graduate students majoring in business education.

422. Principles of Business Education. Three hours.

Advanced study of principles, practices, and problems in business education with special reference to the needs and trends in this field. Topics emphasized include standards; guidance; job placement and follow-up; equipment; supervision; and business curricula of the secondary school, the private business school, the junior college, and the collegiate school of business.

425. Administration and Supervision in **Rusiness Education.** Three hours.

Study of the roles and functions of administration and supervision in business education on the high school level, city level, and state level, and in colleges and universities.

426a, b, c. Current Problems in Business **Education.** Two to six hours.

Course to be taught either as independent study, workshops, or in regularly organized classes. Current problems in business education and significant research related to such problems will form the basis of this course.

430a, b, c. Research in Curriculum and Instruction. One to three hours.

Research in instructional problems in reading, mathematics, science, social studies, and English. Research in the area of the elementary and secondary curriculum.

432a, b, c. Research in Administration and Supervision. One to three hours.

Special research projects in administration and supervision.

434a, b. c. Research in Guidance and Counseling. One to three hours.

Research problems relating to the organization and administration of the guidance program.

- 436a, b, c. Thesis Research. One to three hours.
 - 436. Research and Experimentation Affecting the Elementary School. Three hours.
 - 438. Research Methods. Four hours.

Application of scientific method to educational research including theory of research, experimental design, techniques in data gathering and the interpretation of results. To include research reporting and bibliographical techniques.

- **440. Educational Statistics.** Three hours. Graphic and tabular arrangement of data; measures of central tendency; measures of relationship.
- 441. Classroom Test Construction. Three hours.

Construction and use of classroom tests; application of testing programs to research problems in classroom teaching.

443. Mental and Aptitude Testing. Three hours.

Administration and interpretation of standard mental and aptitude tests as tools of educational and occupational guidance.

450. Fundamentals of School Administration. Three hours.

Advanced treatment of fundamental principles of administration; the board of education; the superintendent; budgets; salary schedules; relation with the public.

451. Elementary School Organization and Administration. Three hours.

Problems of organization and administration of elementary schools with special emphasis on the programs of instruction; classification, promotion, and guidance of pupils; custodial services; and relationships with patrons and community.

452. Secondary School Organization and Administration. Three hours.

Problems of organization and administration of secondary schools with special emphasis on programs of instruction; classification, promotion, and guidance of pupils; relation of principal to non-professional personnel; and relationship with patrons and community.

454. Accounting for Pupil Personnel. Three hours.

Problems of personnel accounting with special attention to work of director of pupil personnel, and to records and reports incident to the Minimum Foundation Program.

- **456.** Public School Finance. Three hours. Local school finances; school budgets; accounting for school's money. Unit costs and cost accounting; accounting for school property; insurance; business procedure and office practice.
- 457. School Law. Three hours.

Critical study of existing school code; judicial decision; administrative problems and the school code.

458. School Plant Administration. Three hours.

Educational needs and school building planning; architect service; standards of construction; types of buildings; building surveys.

461. Evaluating the Elementary School. Three hours.

A study of the techniques of evaluation of the elementary school. Special emphasis will be given to approaches to evaluating the school for accreditation purposes as well as for general school improvement programs. This course is designed specifically for those preparing for administrative and/or instructional leadership roles.

462. Supervision of Elementary School Subjects. Three hours.

Application of principles of supervision to problems of instruction in the elementary grades.

466. Principles of Supervision. Three hours.

The instructional side of school administration; organization, problems, principles, and techniques of improving teachers in service.

468. The Organization and Supervision of Student Teaching. Three hours.

Designed to acquaint teachers with the philosophy, theory, and practices which are essential in an effective student teaching program. Attention is given to both State and NCATE standards for teacher professional education, personal and relationships, common problems of student teachers and evaluation of student teachers.

470. The Curriculum. Three hours.

The philosophy, the principles, the problems, and the practices of curriculum making.

482. School-Community Relations. Three hours.

A study of the background, need, and techniques of acquiring a wholesome working relationship with the laymen. Special emphasis is placed on lay involvement in school programs.

486. History and Philosophy of Education. Three hours.

Survey of the historical roots of dominant philosophies of education.

491. Guidance and Counseling in Education. Three hours.

Provides a comprehensive knowledge of the philosophy of guidance and counseling as a part of the over-all school program as it relates to administration, supervision, and teaching.

and Appli-492. Testing Techniques cations. Three hours.

Acquaintance with the correct methods of administering and scoring tests in the fields of abilities, achievement, interests, personality, attitudes, and certain special aptitude tests.

493. Group Guidance Activities. Three hours.

A review of the literature and a study of the purposes, objectives, problems, and techniques of group guidance.

494. Educational and Occupational Information. Three hours.

A study of the sources, types, and uses of educational and occupational information applicable in the counseling situations.

495. Utilization of Community Resources in Guidance. Three hours.

This course provides for individual community surveys of all resources which may be used in the processes and procedures of guidance and counseling to assist students in the proper choice of educational programs to qualify them for careers of their own selection. Based upon surveys actually made, ways and means of utilization of resources surveyed are discussed and applied where practicable.

497. Counseling Methods and Procedures. Three hours.

Detailed study and investigation of the various methods and procedures followed in individual and group counseling.

499. Principles and Practices in Guidance -Practicum. Three hours.

A laboratory course in the actual guidance and counseling procedures and practices.

Courses which may be taken for graduate credit.

313. Improvement in Reading Skills. Three hours.

322. Audio Visual Materials and Methods. Three hours.

Curriculum. School 370. Elementary Three hours.

372. The Core Curriculum. Three hours.

Graduate Courses Industrial Arts

410. Investigations in Industrial Arts. Three hours.

Designed for qualified individual graduate students wishing to study current problems and/or issues in the area of industrial education under the direction of a graduate faculty member. The student will be required to identify, plan, and complete a minor research paper.

420. Philosophy of Industrial Education. Three hours.

To acquaint the student with the development of industrial education in Europe and America. Emphasis placed on influences, experiments, and current trends leading to modern practices in industrial arts, vocational education, and technical education.

The following are designed as problem courses for independent study for the graduate student who desires to pursue a specific area.

- 430. Advanced Drafting. Three hours.
- 432. Industrial Design. Three hours.
- 434. Industrial Electricity and Electronics. Three hours,
- 436. Wood Technology. Three hours.
- 438. Graphic Arts. Three hours.
- 440. Advanced Machine Shop. Three hours.
- 442. Power and Auto Mechanics. Three hours.
- 444. Metal Technology. Three hours.
- 446. Problems in Crafts. Three hours.
- 448. Ceramics and Plastics. Three hours.
- 450. General Shop. Three hours.

Courses which may be taken for graduate credit.

- 310. Industrial Arts Problems. Three hours.
- **320.** Industrial Education Curriculum. Three hours.
- 365. Industrial Arts for Elementary Teachers. Three hours.

Graduate Courses Physical Education

402. Educational Philosophies of Athletics. Three hours.

A discussion of current athletic doctrines and controversies, in the light of their historic background and their philosophical implications.

410. Supervision and Program Construction in Physical Education. Three hours. Principles underlying the construction of a physical education program; practice in observing and evaluating procedures.

419. Investigations in Physical Education. Three hours.

Prerequisite: Education 438.

For minors in physical education and supervisors and principals; problems of organization and administration of physical education programs.

441. Facilities, Construction and Equipment. Three hours.

Principles and standards for maintaining facilities and planning construction; purchase and care of equipment.

443. Problems in the Administration of Athletics. Three hours.

For athletic directors, supervisors, and athletic coaches. A study of representative athletic-administration procedures for colleges and public school systems. Business management is also stressed.

450. Nature and Basis of Motor Performance. Three hours.

Analysis of principles related to physical performances, with emphasis on research from which these principles are derived.

451. Analysis and Interpretation of Physical Education Data. Three hours.

Practical techniques for analyzing physical education data; includes study of percentiles and other scale scores, tests of the Null Hypothesis, and Correlation Theory.

452. Principal Bases of Physical Education. Three hours.

Investigation of fundamental physiological principles of physical education in athletics; examination of the research literature from which these principles are derived.

Courses which may be taken for graduate credit.

351. Physical Diagnosis and Corrective Physical Education. Three hours.

355. Administration of Health and Physical Education. Three hours.

360. Tests and Measurements in Physical Education. Three hours.

Graduate Courses Psychology

Development. Three 400. Personality hours.

A survey of basic psychological principles underlying the study of personality in relation to a social environment. Among the topics discussed are: theories of personality, the process of socialization of the individual, factors influencing adjustment to social environment.

402. Advanced Educational Psychology. Three hours.

Prerequisite: Psychology 102, 202. Psychology of learning. different psychological theories; psychological methods and techniques; experimental literature.

443. Mental and Aptitude Testing. Three hours.

interpretation Administration and standard mental and aptitude tests as tools of educational and occupational guidance.

Courses which may be taken for graduate credit.

303. Experimental Psychology. Three hours.

Three 306. Physiological Psychology. hours.

307. Social Psychology. Three hours. Prerequisite: Psychology 102.

309. Psychology of the Gifted. Three hours.

310. Systems of Psychology. Three hours.

Three 315. Differential Psychology. hours.

316. Psychological Tests and Measurements. Three hours.

318. Psychology of Exceptional Children. Three hours.

319. Abnormal Psychology. Three hours. Prerequisite: Psychology 102.

320. Personality Adjustments and Mental Hygiene. Three hours. Prerequisite: Psychology 102.

322. Learning Theory. Three hours. 368. Psychology of the Mentally Retarded. Three hours.

Ogden College of Science and **Technology**

Biology **Graduate Courses**

416. Investigations in Biology. Three hours.

Prerequisite: Biology 150 and consent of the supervisor of the special study. Special supervised study of research literature and/or research (credit only toward the Master's in Education Degree).

427. Advanced Genetics. Four hours. Prerequisite: Biology 227.

A study of advanced Mendelian principles and post-Mendelian Genetics; emphasis on recently developing areas of research.

440. Principles and Concepts of Biology. Three hours.

A study of the principles and concepts of biology with emphasis on physiological aspects of both plants and animals (NSF course).

441. Microbiology. Three hours.

A basic study of microbiology for teachers; includes a study of bacteria and singlecelled animals and plants (NSF course).

442. Vertebrate Zoology. Three hours.

A study of the structure, taxonomy, embryology, histology, physiology, and evolution of vertebrate groups (NSF course).

491. Aquatic Biology. Four hours.

Prerequisite: Sixteen hours of Biology. A study of the phytoplankton and zooplankton of lakes, oceans, and streams.

499a, b, c. Thesis Research. Two hours each.

Prerequisite: Consent of the student's graduate advisor.

A course in which the graduate student is directly engaged in work leading toward completion of the Thesis requirement for the Master's Degree. The course consists of individual direction of the student in his research by his graduate advisor. Undergraduate courses which may be taken for graduate credit.

300. Plant Physiology. Three hours.

Prerequisite: Biology 151.

302. Pathogenic Microbiology. Three hours.

Prerequisite: Biology 210 and 211.

307. Herpetology. Four hours. Prerequisite: Biology 152.

310. Cytology. Three hours. Prerequisite: Biology 151 and 152.

315. General Ecology. Three hours.

Prerequisite: Biology 151 and 152.

316. Plant Taxonomy. Four hours.

Prerequisite: Biology 151.

318. Mycology. Three hours.

Prerequisite: Biology 151.

320. General Entomology. Three hours. Prerequisite: Biology 152.

346. Biochemistry. Three hours.

350. Special Problems. Two and four hours.

Prerequisite: Biology 150 and consent of research project director.

360. Parasitology. Four hours.

Prerequisite: Biology 152.

381. Protozoology. Four hours.

Prerequisite: Biology 152. 399. Seminar. One hour.

Chemistry Graduates Courses

400. Modern Approaches to High School Chemistry. Three hours.

Fundamental principles, theories, and laws. Comparison of The Chemical Bond Approach, The Chemical Education Material Study, The Classical and other Approaches, and the Relation to P.S.S.C. Physics and other similar programs. Lecture and laboratroy. (NSF)

401. Fundamentals of Organic and Bio-Chemistry for High School Teachers. Three hours.

Modern concepts of organic structure and reactivity. Some basic principles of biochemistry. (NSF)

402. Fundamentals of Analytical Techniques and Instrumentation for High School Teachers. Three hours.

Modern analytical chemistry with emphasis on instrumental methods. (NSF)

460. Investigations in Chemistry. One to three hours.

A critical and comprehensive study of chemical literature dealing with a special topic of interest to the student, including reports and proposals for further research.

Undergraduate courses which may be taken for graduate credit.

315. Physical Chemistry. Four hours. Prerequisites: Chemistry 115 and 215, Mathematics 227, and Physics 211.
316. Physical Chemistry. Four hours. Prerequisites: Chemistry 315 and Mathematics 228.

320. Inorganic Chemistry. Three hours. Prerequisite: Chemistry 316 or concurrently with Chemistry 316.

321. Inorganic Laboratory. Two hours. Prerequisite: Chemistry 320 or concurrently with Chemistry 320.

325. Analytical Chemistry. Four hours. Prerequisite: Chemistry 316 or concurrently with Chemistry 316.

330. Advanced Quantitative Analysis. Two hours.

Prerequisite: Chemistry 210 or Chemistry

325.331. Advanced Quantitative Laboratory.Two hours.

Prerequisite: Chemistry 210 or Chemistry 325

340. Advanced Organic Chemistry. Two

Prerequisite: Chemistry 216.

341. Advanced Organic Laboratory. Two hours.

Prerequisite: Chemistry 216.

342. Chemical Research Problems. Two hours.

Prerequisite: Chemistry 316.

345. Polymer Chemistry. Two hours. Prerequisite: Chemistry 216.

346. Biochemistry. Three hours. Prerequisite: Chemistry 216 and Biology 221

350. Advanced Physical Chemistry. Two hours.

Prerequisite: Chemistry 316.

Graduate Courses Geography

400a, b. Geographical Studies in Research. Two hours each.

Geographical research methods (cartographic, statistical, library, field). An individual problem in research is attempted.

401. Investigations in Geography. Two hours.

The literature dealing with teaching geography and with philosophy of geography. Seminar organization.

403. World Political Problems. Two hours.

Geographical factors affecting foreign relations. Special emphasis is placed upon problem areas and selected great powers. Seminar or lecture, depending upon preparation of the class.

405. Biogeography. Three hours.

Emphasis is upon phytogeography: plant ecology, plant indicators, morphology of plant communities, formations and associations in relation to climatic regions, soil types, and native animals. Lecture, library, and field laboratory.

Undergraduate courses which may be taken for graduate credit.

311a, b. Introductory to Earth Science. Three hours each.

321. Introductory to Meteorology. Three hours.

322. Climatology. Three hours.

325. Political Geography. Three hours.

351. Historical Geography of the United States. Three hours.

353. Geography of the Soviet Empire. Three hours.

362. Geography of South America. Three hours.

364. Geography of Europe. Three hours.

365. Geography of Asia. Three hours.

366. Geography of Africa. Three hours.

371. Conservation of Natural Resources. Three hours.

380. Urban Geography. Three hours.

Graduate Courses

Mathematics

401. Descriptive Statistics. Three hours. The analysis of data of means of frequency distributions and statistics which describe them. Other topics studied are charts and graphs; introduction to probability; central tendency, dispersion, and skewness; the normal distribution; and correlation and regression. (NSF)

402. Foundations of Mathematics. Three hours.

An attempt to provide a unified approach to the logical structure of mathematics and to develop a philosophical point of view toward mathematical knowledge. Emphasis is placed on the following: sets, operations, axiomatic method, and nature of a mathematical proof. (NSF)

403. Introduction Analysis. Three to hours.

A unified treatment of pre-calculus college-level mathematics and introduction to calculus-type thinking for those whose formal training does not include a course in the calculus. Introduction is given to modern mathematical language and abstract terminology. (NSF)

440. Advanced Engineering Mathematics I. Three hours.

Matrices, functions of several variables, advanced topics of ordinary differential equations.

441. Advanced Engineering Mathematics II. Three hours.

Fourier series, Laplace transforms, and selected topics from vector analysis and partial differential equations.

442. Advanced Engineering Mathematics III. Three hours.

Elements of functions of a complex variable. Topics selected from complex number systems, infinite series, elementary functions, differentiation and integration, Taylor and Laurent series, conformal mapping, theory of residues.

Courses which may be taken for graduate credit.

- **303.** Geometry For Elementary Teachers. (Elementary Teachers Only) Three hours.
- 315. Theory of Numbers. Three hours.
- 317. Introduction to Algebraic Systems I. Three hours.
- 318. Linear Algebra and Matrix Theory. Three hours.
- 323. Geometry I. Three hours.
- 324. Geometry II. Three hours.
- 327. Introduction to Algebraic Systems II. Three hours.
- 329. Probability and Statistics I. Three hours.
- 330. Probability and Statistics II. Three hours.
- 331. Differential Equations. Three hours.
- 332. Intermediate Analysis I. Three hours.
- **333. Partial Differential Equations.** Three hours.
- 335. Vector Analysis. Three hours.
- **336.** Foundations of Mathematics. Three hours.
- **339.** Introduction to Topology. Three hours.
- **342.** Intermediate Analysis II. Three hours.

Graduate Courses

Physics

400. Modern Developments in Physics. Three hours.

This course will provide a qualitative study of the development of physics since 1890, to bring up to date those teachers who have been in the field for some time. (NSF) Not applicable for credit toward fulfilling the requirements for the MS in Engineering Physics.

401. Selected Topics in Modern Physics. Three hours.

A course designed to acquaint the student with recent advances in selected areas of pure and applied physics. (NSF) Not applicable toward fulfilling the requirements for the MS in Engineering Physics.

402. Classical Developments in Physics. Three hours.

This course will emphasize a study of the fundamental principles of physics that were discovered prior to 1890. A historical point of view will be followed. (NSF) Not applicable toward fulfilling the requirements for the MS in Engineering Physics.

451. Principles of Modern Physics. Three hours.

A course designed to acquaint practicing engineers and scientists with selected topics in modern physics at the graduate level, including Particle Dynamics, Special Theory of Relativity, Molecular Theory of Gases, Fundamentals of Plasma Physics, Quantum Effects, and Basic Concepts of Quantum Mechanics.

452. Advanced Quantum Mechanics. Three hours.

A course designed to treat quantum theory of the atom, atomic and molecular spectra and wave mechanics at the graduate level.

455. Communications Theory. Three hours.

A comprehensive introduction of the use of statistical methods in the design of communications systems. Subjects included: spectrum analysis, Fourier and Laplace transforms, modulation theory and information theory.

460. Investigations in Physics. Three hours.

A literature search and study relating to a special topic of interest to the student with potential benefit to the teaching of physics.

Not applicable for credit toward fulfilling the requirements for the MS in Enginnering Physics.

461. Atomic and Molecular Physics. Three hours.

An advanced study of atomic and molecular physics emphasizing quantum mechanical energy states and related optical spectra. Includes wave mechanical rules for combining the momenta and magnetic moments to account for fine structure, the Stark and Zeeman effects, and correlation of spectra with atomic and molecular energy states.

466. Advanced Solid State Physics. Three hours.

A comprehensive study of solid state theory emphasizing the quantum mechanical aspects. The behavior of electrons in solids is given special emphasis.

- **481. Independent Study.** Three hours. An assignment of independent study to acquaint the student in depth with an area of specialization under the direction of a member of the graduate faculty.
- **491, 492. Thesis.** Three hours. Courses which may be taken for graduate credit.
- **330. Thermodynamics.** Three hours. Prerequisites: Analytical Mechanics and Differential Equations.
- **340. Optics.** Three hours. Prerequisites: University Physics 1 & 2 or College Physics 1 & 2, and one year of calculus.
- 304. Experimental Physics 4. Optics. One hour.
 Co-requisite: Optics, or consent of the instructor.
- **350. Theoretical Mechanics.** Three hours. Prerequisite: Analytical Mechanics and Differential Equations.
- **360. Solid State Physics.** Three hours. Prerequisite: Foundation of Quantum Physics.
- 306. Experimental Physics 5. Solid State. One hour.

Co-requisite: Solid State Physics or consent of the instructor.

- **370. Nuclear Physics.** Three hours. Prerequisite: Foundations of Quantum Physics.
- 307. Experimental Physics 6. Nuclear. One hour.

Co-requisite: Nuclear Physics or consent of the instructor.

- **380. Quantum Mechanics.** Three hours. Prerequisite: Foundations of Quantum Physics and consent of the instructor.
- 390. Selected Topics in Physics. One-three hours.
- Prerequisite: Permission of the instructor.
- 309. Experimental Physics 7. Research Techniques. Two hours.
- Prerequisite: Two years of college Physics. **314. Geo-Astrophysics.** Three hours. Prerequisite: Two years of college physics.

Potter College of Liberal Arts

Graduate Courses

Art

- **406. Ceramics.** Three hours. Prerequisites: 106, 206, and 306. An intensive study of the medium with individual problems; studio.
- 408. Sculpture. Three hours.
 Prerequisite: 108, 208, 308.
 Research problems in selected materials; clay, brass, welded steel, stone, plaster, and terrazzo, studio.
- 409. Painting. Three hours.

 Prerequisite: 109, 208, 309.

 Research problems in selected materials: encaustic, fresco, gouache, egg tempera, acrylic, studio.
- 412A. Investigations in Art Education. Three hours.

A study of investigative literature dealing with the problems of teaching art in the public schools.

412B. Investigations in Art Education. Three hours.

Problems involved in research.

- 417. Graphics. Three hours.

 Prerequisite: 117, 217, 317.

 Research problems in selected materials: relief, planographic, intaglio, and serigraph studio.
- 418. Weaving. Three hours. Individual problems involving creative design in weaving. Selected research problems. Prerequisite: 118, 218, 318. studio.
- 421. Art History: Architecture and Sculpture. Three hours.

Prerequisite: 321. Supervised study of selected problems in this field.

423. Art History: Painting. Three hours. Prerequisite: 323. Supervised study of selected problems in this field.

Undergraduate courses which may be taken for graduate credit.

302. Art Education in the Junior and Senior High School. Three hours.

306. Ceramics. Three hours.

308. Sculpture. Three hours.

309. Painting. Three hours.

317. Graphics. Three hours.

321. Art History: Architecture and Sculpture. Three hours.

323. Art History: Painting. Three hours.

Graduate Courses

English

400. Problems in Dramatic Production. Three hours.

In this course each student pursues his special interest. In his study of theatre, he is given actual experience in the coordinating of the varied problems of

theatre production.

403. Literary Criticism. Three hours. A survey of principles and methods and schools of criticism with considerable detailed study of several outstanding critics.

404. The Seventeenth Century. Three

The concentrated study of the seventeenth century literature, forms, and developments

405. Wordsworth and Keats. Three hours.

A study of the major works of these two writers and an evaluation of their contributions to the Romantic Movement.

406. American Symbolism and Romanticism. Three hours.

A detailed study of the use of symbolism and romanticism in the works of a few writers in American literature.

408. Studies in Shakespeare. Three hours.

Selected comedies and histories studied in depth. Attention given to individual research in literary criticism.

414. The Eighteenth Century. Three hours.

The concentrated study of the eighteenth century literature, forms, and developments.

415. The English Novel. Three hours. The technique and history of the novel. Several representative novels studied.

416. The American Novel. Three hours. The American novel from Cooper to the present. History, general development, and technique are studied.

418. Investigations in English. Two or three hours.

An intensive review of articles in professional journals dealing with certain problems relative to the teaching of English.

419. Problems in English. Two or three hours.

Supervised research on literary or linguistic problems.

421. Anglo-American Folksongs. Three hours.

An historical and critical study of traditional ballads and songs in Great Britain and the United States from the Middle Ages to the present.

422. Folklore in Literature. Three hours. Readings in world literature from the Bible to the modern novel to discern the various aspects of folklore reflected there and to determine the degree to which unwritten literature has affected origins and development of written literature.

424. Early English Literature. Three hours.

A generous sampling of non-Chaucerian English literature from Bede to Malory, chiefly in modern translation. Some attention will be given to the language of the period.

425. Seminar in Speech. Three hours. Guided research in speech problems for graduate students who are working with speech in the secondary school.

428. Contemporary Poetry. Three hours. A study in depth of several major figures and brief treatment of other major figures. Some inquiry into the conflict between modern schools of poetic analysis.

429. Contemporary Fiction. Three hours. A study of selected major figures and their works. Consideration of movements, influences, and developments since 1900.

430. Linguistics. Three hours.

History and development of modern drama and linguistic principles. A review of current professional writers and an introduction to the various "new" grammars.

- 450. Thesis Research. Six hours. Undergraduate courses which may be taken for graduate credit.
- 301. Advanced Composition. Three hours.304. The Seventeenth Century. Three
- hours. 305. Romantic Movement. Three hours.
- 307. Chaucer. Three hours.
- 308. Modern American Literature. Three hours.
- 309. Kentucky Literature. Three hours.
- 311. Editorial and Feature Writing. Three hours.
- Prerequisite: Six hours of Journalism.
- 314. The Eighteenth Century. Three hours.
- 316. The American Novel. Three hours.
- 317. English Renaissance. Three hours.
- 318. Elizabethan Drama. Three hours.
- **321.** Anglo-American Folksongs. Three hours.
- 326. Tennyson and Browning. Three hours.
- 327. Play Directing. Three hours.
- 331. Modern Drama. Three hours.
- 341a. Problems in Mass Media—Newspaper Production. Three hours.

 Prerequisite: Six hours of Journalism.
- 341b. Problems in Mass Media—Radio and Television Programming. Three
- hours. Prerequisite: One course or experience in radio or television work.
- 341c. Problems in Mass Media—Management. Three hours.
- Prerequisite: Nine hours of mass media or equivalent experience.
- **346. Television Directing.** Three hours. Prerequisite: Six hours or experience in radio or television work.
- **355a. Problems in Speech.** Three hours. Prerequisite: Nine hours of speech.
- 355b. Problems in Speech—Television. Three hours.
- Prerequisite: Nine hours in mass media.

Foreign Languages

Courses which may be taken for graduate credit.

French

- 300. Teaching of Foreign Languages. Three hours.
- Prerequisite: French 205 or equivalent.

- 302. Survey of French Literature, I.
- Three hours. Prerequisite: French 205 or equivalent.
- 303. Survey of French Literature, II.
- Three hours. Prerequisite: French 205 or equivalent.
- 304. Nineteenth Century French Litera-
- **ture.** Three hours. Prerequisite: French 205 or equivalent.
- 307. Advanced Composition and Gram-
- mar. Three hours. Prerequisite: French 205 or equivalent.
- 308. Advanced Conservation. Three hours
- Prerequisite: French 205 or equivalent.
- 310. Twentieth Century French Novel. Three hours.
- Prerequisite: French 303 or equivalent.
- 311. Twentieth Century French Drama. Three hours.
- Prerequisite: French 303 or equivalent.
- 320. Phonetics. Three hours.
- Prerequisite: French 205 or equivalent.
- 331-332-333. Seminar in French Literature. One-two-three hours.
- Prerequisite: Senior or graduate standing and permission of the instructor.
- 341-342-343. Seminar in French Literature and Language. One-two-three hours. Prerequisite: Senior or graduate standing and permission of the instructor.
- 370. Renaissance French Literature. Three hours.
- Prerequisite: French 302 or permission of the instructor.

German

- Courses which may be taken for graduate credit.
- 300. Teaching of Foreign Language. Three hours.
- Prerequisite: German 200 or equivalent.
- 304. German Literature of the Nineteenth Century. Three hours.
- Prerequisite: German 200 or equivalent.
- 305. German Literature of the Twentieth Century. Three hours.
- Prerequisite: German 200 or equivalent.
- 306. Advanced Composition and Conversation. Three hours.
- Prerequisite: German 200 or equivalent.
- 307. German Literature of the Classical Period. Three hours.
- Prerequisite: German 200 or equivalent.

308. Survey of the German Lyric. Three hours.

Prerequisite: German 200 or equivalent, or approval of the instructor.

309. History of the German Language. Three hours.

Prerequisite: German 200 or equivalent, or approval of the instructor.

331-332-333. Seminar in German Literature. One-two-three hours.

Prerequisite: Senior or graduate standing and permission of the instructor.

341-342-343. Seminar in German Literature and Language. One-two-three hours. Prerequisite: Senior or graduate standing and permission of the instructor.

Greek

Courses which may be taken for graduate credit.

350. Seminar in Literature. Three hours. Prerequisite: Greek 250 or equivalent, or permission of the instructor.

351. Seminar in Language. Three hours. Prerequisite: Greek 251 or equivalent, or permission of the instructor.

Latin

Courses which may be taken for graduate credit.

300. Roman Authors of the Republic. Three hours.

Prerequisite: Six to twelve hours of Latin beyond 102.

301. Roman Authors of the Empire. Three hours.

Prerequisite: Six to twelve hours of Latin beyond 102.

306. Teaching of Foreign Language. Three hours.

Prerequisite: Six to twelve hours of Latin beyond 102.

350. Seminar in Literature. Three hours. Prerequisite: Latin 250 or equivalent, or permission of the instructor.

351. Seminar in Language. Three hours. Prerequisite: Latin 251 or equivalent, or permission of the instructor.

Russian

Courses which may be taken for graduate credit.

309. Advanced Conversation. Three hours.

Prerequisite: Russian 103 or equivalent.

301. Advanced Composition. Three hours. Prerequisite: Russian 103 or equivalent.
310. Nineteenth Century Russian Literature. Three hours.
Prerequisite: Russian 103 or equivalent.

311. Soviet Literature. Three hours. Prerequisite: Russian 103 or equivalent.

Spanish

Courses which may be taken for graduate credit.

300. Teaching of Foreign Language. Three hours.

Prerequisite: Spanish 200 or equivalent. 305. Literature of Spanish America. Three hours.

Prerequisite: Spanish 200 or equivalent.

306. Literature of Spain, I. Three

hours.
Prerequisite: Spanish 200 or equivalent.

307. Literature of Spain, II. Three hours.

Prerequisite: Spanish 200 or equivalent. 308. Advanced Composition and Conversation. Three hours.

Prerequisite: Spanish 200 or equivalent. 309. Background of Modern Spanish. Three hours.

Prerequisite: Spanish 103 or equivalent, and permission of the instructor.

331-332-333. Seminar in Hispanic Literature. One-two-three hours.

Prerequisite: Senior or graduate standing, and permission of the instructor.

341-342-343. Seminar in Hispanic Literature and Language. One-two-three hours. Prerequisite: Senior or graduate standing, and permission of the instructor.

380. Golden Age Prose. Three hours. Prerequisite: Spanish 306, or permission of the instructor.

381. Golden Age Poetry and Drama. Three hours.
Prerequisite: Spanish 307, or permission of the instructor.

Graduate Courses

History

400. Cultural and Social Aspects of American Life. Three hours.

Open only to graduate students in Elementary Education.

413. Nineteenth Century Britain. Three hours.

A detailed study of Britain during the nineteenth century with emphasis upon domestic development: liberal reform, industrialism and the rise of labor.

417. The United States and Latin America. Three hours.

Special emphasis on the development of Pan Americanism.

421. The United States, 1901-1945. Three hours.

Emphasizing the Progressive era, World War I, failure of the peace, the great depression, and the New Deal.

425. Social and Intellectual History of the United States. Three hours.

A study giving detailed descriptions and interpretations of the social and intellectual movements during the nineteenth century.

426. Social and Intellectual History of Nineteenth Century Europe. Three hours. A detailed study of social and intellectual movements from 1815-1914.

450. Thesis writing. Three hours.

451. Thesis writing. Three hours. Courses which may be taken for graduate credit.

300. The Formative Period, 1776-1815. Three hours.

301a. The Old South. Three hours.

301b. The New South. Three hours.

302. The Middle Period, 1815-1850. Three hours.

303. Civil War and Reconstruction, 1850-1877. Three hours.

305. The Renaissance and the Reformation. Three hours.

313. Diplomatic History of United States to 1900. Three hours.

314. Diplomatic History of United States Since 1898. Three hours.

315. Colonial History of the United States. Three hours.

316. The United States, 1870-1900. Three hours.

320. Twentieth Century Russia. Three

321. The Far East. Three hours.

323. The French Revolution and Napoleonic Era. Three hours.

325. Modern Germany. Three hours.

326. The Middle East in Modern Times. Three hours.

Graduate Courses

Music

420. Investigations in Music Education. Three hours.

Investigations in specialized branches of music education.

421. Problems in Music Education. Three to four hours.

An application of approved theories of music education to specific problems in the field.

422. Directed Individual Study. Three hours.

Research projects in music education. It is an application of pure and action research methods on an individual basis.

423. Principles of Music Supervision. Three hours.

This course deals with the function of supervisors and directors of music education in administrating music programs in elementary and secondary schools.

424. General Music In the Secondary Schools. Three hours.

Training the music teacher to provide orientation experiences in the area of general music. The development of musical knowledge in junior and senior high school non-performers.

430. Music Literature. Two or three hours.

An investigation of a specialized area not covered extensively in other advanced music literature courses, e.g. "early musical notation," "the classical period," "art song repertoire" etc.

431. Medieval and Renaissance Music. Two or three hours.

A survey of musical style and form (ca. 500-1600)

432. The Symphony. Two or three hours. The symphony from its beginning to the twentieth century with emphasis on listening and analysis.

433. Twentieth Century Music. Two or three hours.

A study of the principal trends in contemporary music with emphasis on listening.

434. Opera. Two or three hours.

A study of musico-dramatic forms from Greek lyric theater through contemporary opera.

435. Baroque Music. Two or three hours. A survey of musical style and form (ca. 1600-1750) with special emphasis on the music of J. S. Bach.

436. Nineteenth Century Music. Two or three hours.

A study of musical romanticism from Hoffmann and Weber through Richard Strauss.

437. Chamber Music. Two or three hours. A survey of the literature of small instrumental groups. Special emphasis on the sonata and string quartet.

438. Directed Individual Study. Three hours.

Closely supervised private research culminating in a scholarly paper or research report.

450. Piano. One-three hours.

Material equivalent in difficulty to Beethoven sonatas Op 2, No. 3 Concertos by Mozart or Mendelssohn, romantic and modern compositions.

451. Voice. One-three hours.

Student should possess language facility in French, Italian and German and the ability to interpret a song musically and intelligently. Material to be covered includes German lieder, an operatic aria, an oratorio, French art song and contemporary songs.

452. Strings. On-three hours.

Material including etudes of advanced difficulty, concertos and sonatas and concert pieces selected by the instructor.

453. Organ. On-three hours.

Material comparable in difficulty to the Bach Chorale Precludes, and Fugues and selected pieces.

455. Woodwinds. One-three hours. Advanced etudes, studies and selected

pieces.

456. Brasses. One-three hours. Selected etude material, orchestral studies and solo material.

457. Percussion. One-three hours. Advanced studies for timpani including tuning, cross beats, and technical problems. Rudimental snare drum solos, xylophone and bell studies. Excerpts from

458. Harp. One-three hours. Selected advanced pieces and solos. Courses which may be taken for graduate credit.

orchestral scores.

301. Instrumental Methods. Three hours.

302. Choral Methods. Three hours.

303. Seminar-Principles of Music Education. One hour.

307. Counterpoint I. Two hours.

308. Counterpoint II. Continuation of Counterpoint I. Two hours.

309. Composition. Two hours.

Prerequisite: Consent of the instructor.

312. Orchestration and Arranging for Band. Three hours.

330. Music Literature. Two or three hours.

331. Medieval and Renaissance Music. Two or three hours.

332. The Symphony. Two or three hours.

333. Twentieth Century Music. Two or three hours.

334. Opera. Two or three hours.

335. Baroque Music. Two or three hours.

336. Nineteenth Century Music. Two or three hours.

337. Chamber Music. Two or three hours.

338. Directed Individual Study. Two or three hours.

Graduate Courses

Philosophy

401. Readings in Philosophy. Three hours

An intensive study of selected philosophic classics or readings in a selected area of philosophy. May be repeated for different topics.

Courses which may be taken for graduate credit.

301. Readings in Philosophy. Three hours.

302. Contemporary Philosophy. Three hours.

Prerequisite: 150 or permission of instructor.

- **330.** Philosophy of Science. Three hours. Prerequisite: Philosophy 150 or permission of instructor.
- 332. Early Political Philosophy. Three hours.
- 333. Modern Political Philosophy. Three hours.

Other Graduate Offerings

Graduate Courses

Library Science

- 409. Investigations in Library Science.
 Three hours.
- Prerequisite: Eighteen hours of library science and graduate standing. Study of the scholarly professional literature in library science and of the methods of research used by investigators in the study of library problems. A research paper is required.

- Courses which may be taken for graduate credit.
- 301. Library Organization and Administration. Three hours.
- 302. Libraries and Librarianship. Three hours.
- 303. Books and Related Materials for Young People. Three hours.
- 306. Classification and Cataloging. Three hours.
- 307. Literature for Young Adults. Three hours.
- 308. Reference and Bibliography. Three hours.
- 322. Audio-Visual Materials and Methods. Three hours.