# OAKLAND UNIVERSITY

1963 CATALOG 1965

ROCHESTER, MICHIGAN

#### OAKLAND UNIVERSITY

On February 9, 1963, the Board of Trustees changed the name of Michigan State University Oakland to Oakland University in order to make it easier for this young institution to establish its own clear and separate identity. The action in no way alters the administrative and legal ties with Michigan State University described elsewhere in this catalog. Oakland remains an autonomous institution free to develop its own philosophy, program, policies, staff and faculty.

# CORRESPONDENCE DIRECTORY

Officers of the University will be pleased to answer questions. For prompt attention, inquiries in specific areas should be addressed as follows:

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Scholarships and Grants
Director of Scholarships

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# OAKLAND UNIVERSITY

Catalog 1963-1965

# UNIVERSITY CALENDAR

## 1963 - 1964

## FALL SEMESTER

September 3 September 4 and 5 September 6 November 28 December 2 December 20	Tuesday Wednesday and Thursday Friday Thursday Monday Friday	Convocation exercises Orientation and Registration Classes begin Thanksgiving recess Classes resume Last day of classes	
WINTER SEMESTER			
January 2 and 3	Thursday and Friday	Enrolling, Orientation Registration	
January 6	Monday	Classes begin	
April 17	Friday	Last day of classes	
	SPRING SEMES	TER	
April 24	Friday	Registration	
April 27	Monday	Classes begin	
August 7	Friday	Last day of classes	
0			

## 1964 - 1965

## FALL SEMESTER

September 1

Tuesday Convocation Exercises

September 2 and 3  September 4  November 26  November 30  December 18	Wednesday and Thursday Friday Thursday Monday Friday	Orientation and Registration Classes begin Thanksgiving recess Classes resume Last day of classes
December 30 December 31 April 20	WINTER SEMES Wednesday Thursday Monday	Registration Classes begin Last day of classes

April 20	Monday	Last day of classes
	SPRING	SEMESTER
April 29	Thursday	Registration
April 30	Friday	Classes begin
August 13	Friday	Last day of classes

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# ABOUT OAKLAND UNIVERSITY

#### Its Program

Oakland University is a state-supported, liberal artscentered institution situated midway between Rochester and Pontiac, twenty-five miles north of Detroit. It offers undergraduate programs in all major disciplines of the liberal arts and sciences, and preparation in three professional areas: business administration, engineering science, and teacher education. Every student, no matter what his special interests, must take approximately one half of his work in a prescribed list of studies which the University conceives to be the basis of a liberal education.

Enrollment has grown from 570 students, when Oakland opened its doors in 1959, to about 1,400 students for the 1963-1964 school year. The first senior class was graduated in April, 1963.

Oakland's primary concern is in creating an effective and stimulating community of learning. Everything else is secondary to this. A variety of extracurricular activities and interests is available to round out, to balance, and to support the learning experience. While there are no football or basketball teams, fraternities or sororities, ROTC, or physical education courses, there are comprehensive, well-planned, and competently staffed intramural and individual sports programs. Participation in them is completely voluntary. They are programs built around the student as participant rather than as spectator. In addition, many other kinds of activities compete for the attention of all interested students. They include clubs, drama and debate groups, student publications, and cultural and social events. In place of fraternities, Oakland offers new kind of student housing which provides for small group living, but without the undemocratic philosophy of the fraternity.

For the high calling in which Oakland is engaged, it has assembled an exceptional faculty of the highest competence. It is composed of young and vigorous teacherscholars whose average age is just under thirty-five and who have been attracted here from the great universities of the country. Over eighty percent of them have their earned doctorates, one of the highest percentages in the country.

For adults who are not baccalaureate candidates, the University also has a Continuing Education program. This Division provides nearly eighty noncredit courses in a wide range of professional and cultural subjects. It also sponsors professional conferences and institutes on the campus.

#### The Three-Semester Plan

Oakland is one of the pioneers in putting an entire program on year-round operation. Under what is known as the three-semester plan, students attend classes for three fifteen-week semesters a year and graduate in two and two-thirds years instead of the traditional three and three-fourths years.

A student thus gets a year's earlier start either in a career job or in graduate study. The result is a substantial and long-term financial gain, regardless of the sacrifice of summer earnings. Telescoping the college span grows increasingly important since nearly thirty per cent of today's college graduates continue their educations, and that figure is rising.

From society's point of view, the three-semester plan means that one-third more students can be accommodated in the same number of classrooms and with only a modest increase in staff.

#### Its Resources

The University grounds consist of the 1,600-acre Meadow Brook Farms estate given by Mr. and Mrs. Alfred G. Wilson, who also donated \$2,000,000 for the first academic buildings, North and South Foundation Halls. The campus occupies the northwest portion of this great estate.

NORTH FOUNDATION HALL contains administrative and faculty offices, lecture halls, offices for student publications, and the health service.

SOUTH FOUNDATION HALL contains classrooms, the language laboratory, music rooms, faculty offices, and the Continuing Education offices.

THE KRESGE LIBRARY, a \$1,500,000 air-conditioned structure given by the Kresge Foundation, has a capacity of nearly 300,000 volumes and study space for 1,200 students. The building can be expanded to three times its present size.

THE SCIENCE BUILDING, a \$2,000,000 building provided by the Michigan Legislature, is the first structure on the campus to be built with state monies. It is a clean and functional structure with the most modern facilities for physics, chemistry, mathematics and engineering science programs. It has eighty rooms, including two large lecture halls, a mathematics and science research reading room, classrooms of multiple sizes, and both teaching and faculty research laboratories.

THE OAKLAND CENTER, a \$1,300,000 structure, is a hub of campus life. This building, made possible by the Oakland County Board of Supervisors and by a federal loan, provides dining facilities, private dining and meeting rooms, offices for student activities, and some recreational facilities. The University book store is housed here. Most of the lectures, concerts, and other cultural events are held here, as are student dances and other social functions.

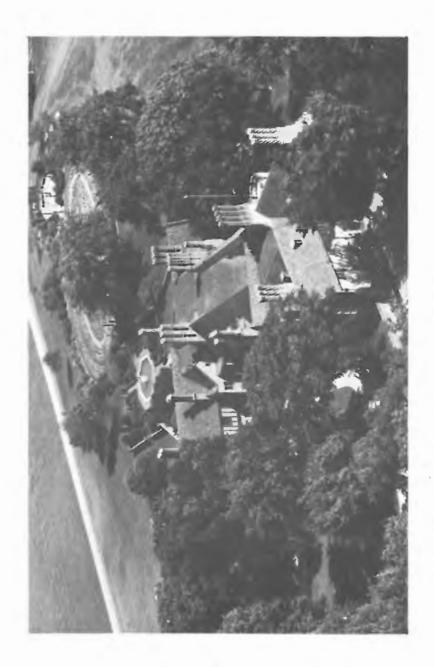
ANIBAL HOUSE, FITZGERALD HOUSE and PRY-ALE HOUSE are the first units of a new kind of student residence. They accommodate forty-eight students in each wing. Two wings joined by a resident adviser's apartment constitute each house. Each student is thus a member of a smaller, more congenial group than would be the case in a large, impersonal dormitory. Besides providing parallel advantages of fraternities and sororities, these houses also offer a natural and easy basis for academic and intramural, as well as social groupings. Anibal House is the residence for women, Fitzgerald House is the residence for men and Pryale House is a co-educational residence.

THE INTRAMURAL SPORTS AND RECREATION BUILDING, is a college gymnasium with a different emphasis, designed as the focal point of a recreation program for all of the students. Activities in seven different sports can be carried on simultaneously. The building provides a swimming pool with diving area, and courts for badminton, handball, squash, tennis, and basketball. It will also provide for a full range of other sports and activities, such as boxing, wrestling, fencing, gymnastics, weight lifting, and modern dance. Beyond the building are tennis courts and extensive additions to existing playing fields. In addition, a ski slope has been developed just to the south of the Intramural Building, complete with ski tow.

#### Its Governance

Oakland is related to Michigan State University. Both institutions have the same President and Board of Trustees. Oakland has its own Chancellor and its own separate, autonomous University organization responsible for developing this university's own individual role, character, and functions.

The Oakland Foundation is also deeply involved in the welfare of the University. The Foundation is comprised of leading citizens of southern Michigan who have been asked to serve on this advisory body. This body had a leading role in shaping the outlines and philosophy of the institution, and is active in fund raising and other efforts to benefit the University. Its Scholarship Committee has provided much of the money available for scholarships.





National Science Foundation Conference at Meadow Brook Hall





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# THE BACCALAUREATE CURRICULUM

#### **Degrees**

The University baccalaureate curriculum consists of programs in the Liberal Arts and Sciences, in Business Administration, Elementary and Secondary School Teaching, and in Engineering Science. The University confers the degree of Bachelor of Arts upon graduates of all programs, except Engineering Science graduates. The degree of Bachelor of Science is conferred on Engineering Science graduates.

#### The Curriculum

Every degree program consists of two complementary parts: first, the prescribed *University Courses*; second, the elected *Major Program of Instruction*.

## 1. The University Courses

This is a university-wide plan of general, liberal arts studies required of all students in all programs. Designed to offer the entire undergraduate student body a common intellectual experience, the University Courses normally extend from the first through the eighth semester. For a more detailed description of the University Courses, see pp 55; for the proper sequencing of the University Courses in reference to particular majors, the student should consult the supplement to this Catalogue entitled *Programs for Majors*. The following is a generalized statement of the University Courses prescription:

All students are required to take, in the first and second semesters, two-semester courses in Literature in the Western Tradition and in The Development of West-

ern Institutions and Social Ideas.

All students are required to study a foreign language. For students electing Liberal Arts Majors in the Humanities, in the Social Sciences, and in Mathematics, the requirement is four one-semester sequential courses in a language chosen from among Chinese, French, German, Greek, Latin, Russian, or Spanish. For students electing Teaching Majors (Secondary) in the Humanities and in the Social Sciences, and for students

electing a Major in Elementary Education (except foreign language concentration), the requirement is three one-semester sequential courses in a foreign language. For students electing a Liberal Arts Major in Chemistry or Physics, for students electing a Teaching Major in Chemistry, Physics, and Mathematics, for students electing a Major in Elementary Education (science concentration), and for students electing a Major in Business Administration and in Engineering Science, the requirement is two one-semester sequential courses in a foreign language.

All students are required to offer two-semester courses in mathematics and science to fulfill the University Course prescription. Students electing a Major in Chemistry, Mathematics, Physics, Engineering Science, Elementary Education, and Business Administration are permitted to offer science and mathematics courses normally taken in pursuit of their major to satisfy this requirement, in whole or in part. All others are required to take, usually in their seventh and eighth semesters, the two-course University Course sequence in mathematics and science.

All students are required to take work in each of the following subject fields: Art and Music, the Social Sciences, and Area Studies (a program of studies dealing with non-Western cultures, specifically China and India). The specific number of courses required in each field varies according to the student's elected major. For students electing Liberal Arts Majors in the Humanities, the Social Sciences and the Sciences, and for students electing a Major in Elementary Education, the requirement is two courses in each field. For students electing Teaching Majors (Secondary) in the Humanities, the Social Sciences and the Sciences, in Business Administration, and in Engineering Science, the requirement is one course in each field, with additional work depending upon the major.

In addition to the prescribed University Courses, and in order to fulfill the requirements of Michigan Public Law 229, all students must take either UC 052: Political Science or any combination of two courses from

the University Course Social Science sequence (UC 054, 056, 058) and the *American History* sequence (History 214, 215).

#### 2. The Major Programs of Instruction

In order to graduate, every student must elect and complete a major program of instruction (a systematic plan of specialized study, most commonly under the direction of a single academic department), designed to offer the student a concentrated intellectual experience of one of the several scholarly or scientific disciplines represented in the University.

The University offers a variety of major programs of instruction, grouped in four general categories, as described below:

A. Major Programs in the Liberal Arts and Sciences

Each of the academic departments offers a major program of instruction in its discipline. The major is designed to fulfill two purposes: one general, the other particular. The curriculum seeks a balance between the breadth of the University Courses plan and the specialization of disciplinary majors. It is the general function of the Liberal Arts Majors to provide each student, regardless of his vocational or professional plans, with a sustained and organized experience of a single major field of study. Further, it is the particular function of the disciplinary majors to prepare intensively and well those students who intend to go on to gradute or professional schools for the pursuit of advanced degrees leading to scholarly and scientific careers in colleges and universities. in research organizations, in government service, in the learned professions, or in other specialized areas. Accordingly, major programs of instruction in the Liberal Arts and Sciences are offered in seventeen different academic disciplines. These are:

## Division of Humanities

Art Classics: Greek and Latin English Language and Literature French Language and Literature German Language and Literature History Music Philosophy

Russian Language and Literature Spanish Language and Literature Division of Science and Engineering

Chemistry Mathematics Physics

Division of Social Sciences
Psychology

Economics Political Science

Sociology and Anthropology

B. The major program in economics and business administration

This major is unique among undergraduate business programs. It was developed with the aid of a Ford Fund grant, and in consultation with leading scholars in the field, and corporate executives. In philosophy and content, this program is in accord with the findings of two major studies of business education done for the Ford Foundation and the Carnegie Corporation. Both studies note that a new kind of business preparation is needed today. The advances of knowledge and technologies, and the growing roles and responsibilities of business in the community and in the world demand broadly informed leaders with critical judgment and imagination.

The Oakland program thus emphasizes a liberal education that encourages the development of an analytical and enlightened person. It provides, through the University Courses, a broad foundation in the liberal arts. On this is built a major designed to prepare graduates who also have (1) a clear understanding of the role of corporate enterprise in our society and an awareness of the social responsibilities of corporations and of their executives; (2) a recognition of the significance of business, government, and labor as great power blocs in the economy; (3) knowledge of the factors involved in the decision-making processes of a successful business enterprise; (4) the ability to understand and to work with people, and (5) awareness that will enable them to apply the tools of other disciplines to the solution of business problems.

The program designed to accomplish these goals provides four semester courses in mathematics and statistics, starting with calculus, and four courses in the behavioral sciences (social psychology, sociology, and po-

litical science). It includes business and economics courses designed to prepare the student for creative management. The capstone is a case study course in which the student plans business operations and makes management decisions. The objective is not to provide a substitute for business experience, but rather to prepare him to profit to the fullest from his business experience and to continue his self-education throughout his career.

# C. The Major Program in Engineering Science

Like the business program, the major in engineering science is a new type of program developed with the aid of the country's leading educators. To prepare the student for a professional career in today's rapidly changing engineering, the program emphasizes the scientific and technological basis for modern engineering rather than its transitory techniques. The Oakland graduate is particularly well prepared for specialized training in industry and for graduate school.

To achieve these aims, the program contains almost as much work in modern physics, chemistry, and mathematics as in engineering. Also, engineering courses involving study of mechanical, electrical, and chemical phenomena are required of every student.

After completing this basic curriculum, the student may spend his senior year specializing in a particular area of engineering. Advanced courses are available in electronics, mechanics and materials, chemical engineering, and computer techniques.

Independent laboratory work is strongly emphasized. The required laboratories primarily involve open-ended experiments in which the student sets up, uses, and analyzes apparatus of his own design.

Sometime during his last four semesters, every student is expected to work on a design problem, or a faculty research project, or a laboratory problem of his own. Normally, design problems involving the synthesis of technical and economic factors are available in every area of specialization.

During the past year, student projects have included the construction of lasers, metallography, the measurement of magnetic susceptibilities, the mechanical testing of steels, numerical analysis of heat flow, and the design and construction of an entire thermodynamics laboratory. An electronic shop, machine shops, and a digital computer are available to the student throughout his undergraduate program.

## D. Major programs in Teacher Education

A variety of programs is offered for prospective elementary and secondary school teachers, and students are certified immediately upon graduation to teach in Michigan and in other states with which Michigan has reciprocity. All of these programs seek to develop graduates who are both broadly educated and competently prepared in the particular subjects they plan to teach.

Prospective teachers take the liberal arts and science courses required of all students, and on this framework they build any one of a variety of majors. The Education department offers professional education courses, but the student's major and minor subjects are taught by the Liberal Arts and Sciences departments.

Teacher preparation at Oakland has some unusual aspects. For one, it is a University-wide responsibility, rather than the exclusive concern of a single department. For another, students get a chance to discover as sophomores whether they like and are suited for the teacher's life and work. This is done by assigning each to two one-hour observation periods a week in a nearby school classroom. This early exposure provides the student with a test of his career choice while there is still time to make a change of majors. It also provides some background experience for the senior year teaching internship, which normally is the student's first exposure to teaching. This observation period also helps make the teaching methods course itself more meaningful. Both the observation and the practice teaching periods are accompanied by weekly seminars in which discussions with other students and professors provide practical help with problems in the classroom.

Prospective elementary school teachers may choose to concentrate in any one of four areas:

General Classroom Teaching

Foreign Language

Mathematics and Science

Music

Prospective secondary school teachers have a choice of any one of twelve teaching majors:

Chemistry
English
Music (vocal)
French
German
History
Latin
Mathematics
Music (vocal)
Physics
Russian
Spanish
Social Science

Seven teaching minors are available to the prospective secondary school teacher:

Art Mathematics
Chemistry Physics
English Social Science

History

## Sponsorship for Michigan Teacher Certification

The State Department of Public Instruction certifies teachers in Michigan. It issues Provisional Certification to candidates deemed qualified by colleges and universities. This Provisional Certificate can be converted to a permanent certificate after a period of teaching and additional studies. Oakland sponsors its graduates for the Provisional Elementary and the Provisional Secondary Certificates if the following requirements are met:

- 1. Completion of the University baccalaureate with a teaching major and (where applicable) an appropriate minor.
- 2. An Internship grade of 2.2 or better.
- 3. Demonstrated proficiency in the use of English as determined by the English Department. Students should satisfy this requirement before the senior year to allow time to remove deficiencies.

Note: Those students planning to teach in a state other

than Michigan should ascertain what special requirements and courses that state demands. It is the responsibility of the student in such cases to plan his program accordingly.

# Preparation for Professional Schools of Law and Medicine

A broad liberal arts education with the appropriate specialization is excellent preparation for either medical school or law school. Admission requirements of the professional school where the student intends to enroll should be studied for guidance in laying out a program. Special faculty advisers have been named to provide counsel for students looking toward such careers.

#### TYPICAL FRESHMAN PROGRAMS

Although the career goals of freshmen vary, and many courses of study are open to them, the University Courses required of all students provide a common core for the programs of all freshmen, and for many will constitute most of the first year's academic work. Because of this, it is possible to give examples of a typical freshman program. The chief differences depend on whether a student is going to major in mathematics or science, or in the humanities or social sciences. For purposes of illustration only, two freshman programs are outlined below; one in the mathematics and science area, and one in the humanities and social sciences. There would, of course, be variations of these for those interested in teacher education. business administration, music or other particular programs, and every student should consult with his faculty adviser in making out his own program.

On Pages 55-58 is the complete list of University Courses. While the University Course listing includes all seven of the languages available, a student is required to study only one language and literature other than English.

#### Science and Mathematics

First Semester

UC 016: Literature in the West-

ern Tradition

UC 034: Development of Western Institutions and Social Ideas

CHM 114: Introductory Chemistry\*

MTH 154: Calculus

Second Semester
UC 017: Literature in the West-

ern Tradition

UC 035: Development of Western Institutions and Social Ideas

CHM 115: Qualitative Inorganic Chemistry\*

MTH 155: Calculus

\*A mathematics major may elect social science instead of chemistry.

#### **Humanities and Social Science**

First Semester

UC 016: Literature in the West-

UC 034: Development of Western Institutions and Social Ideas Foreign Language\*\*

Social Science or Fine Arts\*\*\*

Second Semester

UC 017: Literature in the Western Tradition

UC 035: Development of Western Institutions and Social Ideas Foreign Language\*\*

Social Science or Fine Arts\*\*\*

\*\*Students will have the choice of seven languages: Chinese, French, German, Greek, Latin, Russian, or Spanish. Students will be placed according to their tested abilities. Economics majors are urged to take Math 125 and Math 131 instead of language.

\*\*\*Each student is required to enroll in his freshman or sophomore years in social science and fine arts. For certain major programs, the social science and fine arts courses should be taken in the freshmen year. Each student should

check this with his academic adviser.



When a student arrives on the Oakland campus, he finds that many persons are interested in helping him adjust to college life. The various student services and their operations are outlined in the sections following.

## Academic Advising

Every student is assigned to a member of the faculty who serves as his faculty adviser. Whenever possible, the adviser represents the student's area of special academic interest. When the student enters his major area of study, he may be assigned to a new adviser in his major field. This change ordinarily takes place when a student has completed between twelve and sixteen courses. A student may ask the Dean of Students for a change of adviser at any time, but he must first obtain the assent of the prospective adviser.

All advisers are prepared to help with the selection of courses, the development of career interests, and academic problems. No student is permitted to register until he has met with his adviser. Faculty members serving as advisers work in cooperation with professionally trained people in the Office of Psychological Services.

# **Counseling and Testing**

Help with testing and with problems of adjustment or personality is offered by the Office of Psychological Services. It provides personal counseling and advising on vocational as well as on personal and social problems, and will give tests to help determine aptitude and interests. It conducts all noninstructional testing and a summer orientation program for freshmen.

## Placement Office

The University provides career placement information and assistance for its graduates. Contact is maintained with many organizations to give the graduate a variety of employment possibilities. Part-time student employment is handled by the Dean of Students office.

#### **Health Services**

A registered nurse is in attendance at the Health Service which can provide limited treatment in emergencies and help with minor health problems. The student residences are more accurately described as houses than dormitories since they accommodate forty-eight students to a wing instead of a hundred or more. This is an effort to provide the atmosphere and the benefits of small group living. There are twelve double rooms on a floor and two floors in each wing. Two wings, with a lounge and a resident adviser's apartment linking them, constitute a house.

#### **Policy**

The University requires that all full-time, unmarried students under 21 years of age who do not commute from the residence of their parents or legal guardian must live in university housing.

Women students living on campus are required to be in their houses by 10:30 p.m. Sunday through Thursday; by 1 a.m. Friday, and 1:30 a.m. Saturday.

#### Accommodations

The first meal served each semester is breakfast on the first day of registration except during the fall semester when the first meal is served on day of convocation. The last meal is the evening meal on the last day of classes. Meals are served cafeteria style in the Oakland Center.

Rooms can be occupied the day preceding registration. At the end of the semester they must be vacated at 6 p.m. the day following the last day of classes. If the student is enrolled for the succeeding semester he may store his personal belongings in the halls between semesters.

Each occupant has a single bed, pillow, dresser, ward-robe, study desk with lamp, chair, wastebasket, book-shelves, and bulletin board. A weekly change of linen (two sheets, one pillow case, and two bath towels) is provided. Each student must furnish his own blankets and bedspread.

Lamps, electric blankets, clocks, radios, and record players are allowed subject to safety regulations.

Coin-operated washers and dryers are available on each floor, and ironing facilities are available at no cost.

Public telephones are available on each floor. Students may have private telephones in their rooms for a small monthly charge.

#### Cost

The fee for room and board is \$385 per semester. Twenty-one meals a week are served. Contracts for accommodations are made for the Fall and Winter semesters, and no refunds are made for meals missed. Payment may be made in full on registration day, or the fee may be paid in three equal parts on registration day and the first day of each of the next two months.

A request for a room reservation must be accompanied by a \$25 deposit which is refundable up to June 1, if the University is notified of a change in plans before that date. Any request for refund after June 1 will not be honored nor will reservation deposits made after June 1 be subject to refund if the student does not register or take up residence.

Room reservations are made in the order in which applications are received.

Since intellectual and personal development take place in the student's cultural, social and recreational activities as well as in his academic work, Oakland University seeks to provide the opportunities and the climate that will foster this development. Students are encouraged to participate in some phase of a comprehensive program of sports and recreational activities, although there is no required physical education. Similarly, the pattern of co-curricular experiences and activities in publications, discussion groups, student government, music, dramatics, and cultural offerings are intended to enhance the student's development.

### Student Government

A Student-Faculty University Council provides for a forum for discussion and proposal of and action on needs in University life.

# Student Activities Council

The Student Activities Council generates and coordinates student groups and organizations. Among the many events sponsored by the SAC and its several adjunct groups are the Concert-Exhibit-Lecture Series, the Oakland Collegium, theater parties, student dances, picnics, and canoe trips. The organization also stages the annual Snow Carnival with its election of a queen and her court, snow sculpture competition, skating and toboggan races and student-faculty ice hockey games. A dance at which the queen is crowned climaxes the Carnival.

# Other Important Clubs and Organizations

The Associated Women Students seek to promote the interests of women students. One of its notable achievements has been sponsorship of the annual *Culture Internationale*, a week-long program featuring talks on world problems, displays of art, handicrafts, and foods from around the world, as well as costumes and entertainment. The AWS also functions as a link between the University

and new students in helping them to feel at home and to provide the friendship and counsel a newcomer appreciates.

Many academic clubs are active on the campus—Spanish, French, German, Philosophy, Science, Psychology, Art, and others. One of these, the Teacher Education Association, stages one of the annual University picnic, a feature of which is an auction in which members of the administrative staff and faculty are sold into a day of servitude to the highest bidders. Each must discharge a chore or perform in a concert.

Political interests are provided for by Young Democratic and Young Republican Clubs and a Socialist Study Club.

# Religious Groups

There are also several religious groups on campus, including the Intervarsity, a nonsectarian club; the Newman Club, the Oakland Christian Federation, the Wesley Foundation, the Christian Science Organization, and the Hillel Foundation.

# Dramatics, Dance, and Music

Among the significant co-curricular organizations are the University Chorus, Meadow Brook Theatre Guild, Orchesis, which is a modern dance group, and the Concert-Exhibit-Lecture Series sponsored by the Cultural Committee of the Student Activities Council.

The University Chorus of 150 voices is the largest campus activity. It performs major choral works both on and off campus with groups such as the Minneapolis, Detroit, Pontiac and Saginaw Symphony Orchestras. Among the works recently performed are Handel's "Messiah", Brahm's "Song of Fate", Stravinsky's "Symphony of Psalms", and Vivaldi's "Gloria". The University Chamber Orchestra plays concerts of its own as well as joining the

Chorus in combined works. There are also a men's Octet, a Hi-Fi Club, and a student-faculty group that was formed to play Baroque music on the recorder and other instruments of earlier historical periods.

The Meadow Brook Theater Guild was the driving force which generated the first annual Arts Festival. This four-day festival included several one-act plays, e.g. Albee's "The Sand Box", a student art exhibit, readings and concerts.

Among some of the events planned for the 1963-64 Concert - Exhibit - Lecture Series are the internationally known folk singer Guy Carawan, The Vienna Choir Boys, and the Stanley String Quartet. Also included will be several speakers on timely topics. Some of the ones featured in past series are Wernher von Braun, Jacques Barzun, Malcolm Boyd, Basil Rathbone, and Bob Newhart.

# Art Exhibitions

The Art Department sponsors several times a year showings of the work of outstanding artists. They are exhibited in the permanent University Art Gallery, located in North Foundation Hall. The University also has acquired, through gifts and permanent loans, the beginnings of what it hopes to make an outstanding permanent collection. The score of works so far acquired represent the work of some of today's best young painters, as well as of Matisse, Renoir, Rouault, Picasso, and Cezanne.

# The Oakland Collegium

The Oakland Collegium is a faculty-organized series which takes place twice a week during the one o'clock hour. The majority of lectures are given by faculty members themselves and topics may range from the art of the folk song or the idea of courtly love, to the structure of modern music or the works of Salvadore Dali.

# The Dramatic Arts Film Series

A student group arranges a year-long schedule of foreign and American film classics.

### Student Publications

The Oakland Observer, the student newspaper, is a lively weekly publication. The Observer is independent editorially, controlled by an editorial board made up of the senior staff members, who are salaried. The editor is appointed each year by advisers with much newspaper experience. The Observer's editorial and business offices are located in North Foundation Hall. Facilities include a complete photographic laboratory.

The Contuse, a literary magazine is published once a semester and contains essays, poems, short stories, and literary criticism. This publication is generated and edited by students. Students also publish a yearbook and, as is the case with The Observer, senior staff members are salaried.

# **Athletics**

Athletic and recreational activities are voluntary. There are no physical education courses. And since the University has no intercollegiate teams, it provides instead a well-planned program of intramural sports and individual activities under the direction of a competent, professional staff. A number of leagues and tournaments for the various individual, dual, and team sports have been formed.

# ADMISSIONS, REGISTRATION, AND GRADUATION

# Requirements for Admission

The University considers the best preparation for its work a program of studies that provides fundamental training in English, foreign languages, social science, science and mathematics. A candidate for admission must be a graduate of an approved secondary school, should be in the top quarter of his graduating class and must have the recommendation of his secondary school principal endorsing him as a sound college risk. Out-of-state students must present College Entrance Examination Board or other nationally recognized test scores with their applications.

A candidate not in the top quarter of his class may apply to take a qualifying examination, the result of which is one of the criteria for determining admissibility.

Applicants must have a minimum of 16 Carnegie units of high school preparation (a unit is two semesters of a subject). It is strongly recommended that these include the following:

English—4 units

Foreign Language—2 units (in the same language)

Science—2 units (must include one laboratory science)

Social Science-2 units

Mathematics—3 units (Students planning majors in the sciences, mathematics, engineering, or business administration must present at least three years of mathematics—algebra, 1½ units; geometry, 1 unit; and trigonometry, ½ unit. For other majors 1 unit of algebra and 1 unit of geometry are required.)

Under the Michigan Association of Schools and Colleges Program, Oakland accepts students from among the *more* able graduates of accredited high schools without regard to the pattern of subject matter completed, provided they are recommended by their high school principals.

# **Application for Admission**

Application forms, available from high school counselors or the University director of admissions, should be completed and submitted as early as possible in the senior year, and in any case before the end of the school year.

# **Advanced Placement**

Credit toward graduation is granted to students presenting evidence of satisfactory completion of courses in high school under the Advanced Placement Program of the College Entrance Examination Board. Oakland automatically gives credit for grades of 5 or 4 in the Advanced Placement examinations. If a grade of 3 or 2 is achieved, the examination is subject to review by the department concerned, which may grant advanced placement with or without credit toward graduation.

# Transfer Admissions with Advanced Standing

A student is eligible to transfer to Oakland from another college only if he is entitled to an honorable dismissal without social or academic probation. He must complete an application form and request the registrar of his institution to send an official transcript of his record. Each application will be considered on its merits.

Credit is granted for individual courses passed with a grade of "C" or better at accredited institutions, provided that these courses fit into the Oakland curriculum.

### Readmissions

A student whose registration at Oakland is interrupted for one or more semesters, spring semester not counted, must be readmitted. Application should be made at least one month before reentry.

# Foreign Students

A student from abroad should write to the Office of Admissions, Oakland University, Rochester, Michigan, at least a year before the time he hopes to be admitted. He will be sent instructions and an application, which he should complete and return at once. When the application is approved, he will receive a certificate of permission to enter the University. These forms will help the student in making application for his passport and a student visa.

# Registration and Orientation

Information regarding registration procedures and orientation for freshmen and transfer students will be furnished by mail approximately three weeks before the beginning of the semester in which the student is to enter the University.

# Course and Credit System

The unit of credit is the course which is one semester of a subject. All courses are valued alike, regardless of the number of class meetings per week or per semester. For transcript purposes only, each course is accorded four semester credits.

Normally, a student may take only four courses a semester, but any student in good standing may register for a fifth course in any two of his last four semesters. Only as a result of a successful Petition of Exception will a student be permitted to take a fifth course at another time. Forms and details concerning Petitions of Exception are available from the Registrar.

# **Change of Courses**

To drop a course, a student must have the permission of both the instructor and the academic adviser.

Courses approved for dropping before the close of the second week of classes will not be entered on the student's record. Courses dropped after that time but before the beginning of the seventh week of the semester will receive an N grade. After this date, a student may not drop a course. A grade of 0.0 is given if a course is dropped without official approval.

No addition of courses or change of sections initiated by the student can be made after the end of the second week of classes.

# **Repeating Courses**

A student may repeat a failed course no more than twice. Each grade received will be used in computation of the grade point average. A course may not be repeated for credit if the grade earned was a 1.0 or better.

# **Grades and Grade Point System**

New System	Letter Equivalent	55-100 Scale Equivalent	
4.3		98	
4.2	A+	97	
4.0	A	95	
3.7	A-	92	
3.3	B+	88	
3.0	В	85	
2.7	В-	82	
2.3	C+	78	
2.0	C	75	
1.7	C-	72	
1.3	D+	68	
1.0	D	65	
0.7	D-	62	
0.5		60	
0.0	F	55	

The lowest passing grade is 0.5.

The grades 0.1, 0.2, 0.3, 0.4 are not given.

I (Incomplete) is a temporary grade given only after the thirteenth week for work which is passing, but unfinished because of prolonged illness or other satisfactory reasons. It must be removed by completing the required work before the close of the next semester in which the student is enrolled or a grade of 0.0 will be recorded for the course.

The grade of N (no grade) is given only during the first six weeks when a student drops a course or officially withdraws from school.

A student's grade point average is computed by multiplying the grade received by the hours of credit for each course and dividing by the total hours attempted. Courses for which grades of I or N are reported are not used in this computation. A student may be placed on probation or asked to withdraw from the University if his grade point average does not meet the minimum requirements.

# Academic Record

A report of the student's grades earned in each course is sent to the student at the end of each term.

A student may be warned, placed on probation, or suspended from the University if his work is not satisfactory.

A permanent record of all the student's courses, credits and grades earned is kept at the Registrars Office. Copies of the permanent record are available to the student upon request and payment of a small service charge.

# Withdrawal

A student withdrawing from the University must do so through the Office of the Dean of Students. The withdrawal must be presented to the Registrar for recording and to the Director of Business Affairs for any possible refund. Grades and refunds are determined according to the effective date of the withdrawal. Students who fail

to follow this procedure must obtain permission of the Dean of Students to register again.

Upon official voluntary withdrawal from the University grades will be assigned as follows:

- a. before the end of the first two weeks of classes no grades will be recorded.
- b. from the third week through the sixth, a grade of N will be given.
- c. after the sixth week, a grade of N or 0.0 will be assigned by the instructor in consultation with the Dean of Students.

# Requirements for Major Standing

A student must have passed 14 courses before he may be formally admitted to major standing. It is the student's responsibility to apply for major standing before completing his fourteenth course. A student may be admitted to major standing if he has passed with at least a 2.0 average all courses prerequisite to the major. For a more detailed listing of requirements, see the separate supplement entitled *Programs for Majors*.

# **Graduation Requirements**

In order to graduate, a student must:

- I. Have passed at least 31 courses and have fulfilled all residence requirements.
- II. Have a cumulative grade point average of at least 2.0.
- III. Have completed and passed all prescribed University Courses.
- IV. Have completed and passed all requirements for an elected major.

# **Tuition Charges**

Tuition is assessed each semester on the basis of the credit value of the courses carried, as follows:

Full Tir 12 or more		rt Time credits
Michigan Residents \$163	\$ 72	\$109
Out-of-State Residents 436		277
(All fees are payable at registra	tion, including	those of
Veterans under Public Law 550	.)	

### Other Fees

Processing Fee

A fee of \$10 must accompany all applications for admission. This is a processing fee and is not refundable.

# **Tuition Deposit**

Within three weeks after notification of admission, a deposit of \$50 must be paid which will be applied to tuition. One half of this deposit is refundable if a student notifies the University before April 1 that he does not intend to enroll. No refunds will be made after that date.

# Room Deposit

Requests for room reservations must be accompanied by a \$25 deposit which is refundable up to June 1, if the University is notified. Deposits made after June 1 are not refundable.

# Late Credential Fee

A fee of \$5 is charged students who fail to file credentials before 5 p.m., seven days before the first day of registration.

# Late Registration Fee

Students registering or paying fees after the regular registration date are required to pay an additional, nonrefundable fee of \$15 for the first day, plus \$5 a day until a maximum of \$25 is reached.

# Repeat Course Fee

An additional fee of \$5 per credit is charged for all courses repeated.

### Refunds of Fees

A student who withdraws voluntarily before the eighth week of the semester will receive a refund of one half of his course fees. The student must present to the Registrar's office an official withdrawal slip, his fee receipt, and his identification card. No refund will be given after this time.

A student dropping a course (before the eighth week) which puts him in a lower fee category will receive a refund of half the difference between the two fee groups. No refund will be given after this time.

### **Out-of-State Tuition Rules**

- A resident of Michigan is defined as a person who has resided in this state six months immediately preceding his first enrollment.
- 2. No one may gain or lose the status of a resident while a student at the University.
- The residence of a minor shall be the same as his legal guardian except where guardianship has been established in this state for the purpose of evading the fee.
- 4. Aliens who have secured their Declaration of Intent papers and have otherwise met the residence requirements shall be considered residents.
- The residence status of any person other than a parent or legal guardian who may furnish funds for payment of University fees shall in no way affect the residence status of the student.

### Veterans

Students eligible to attend the University under Public Laws 550 or 894 must obtain a "Certificate for Education and Training" from the Veterans' Administration. Under Public Law 550, the veteran pays his own fees and buys his own books. Reimbursement is obtained by filling out a monthly Report of Attendance Form at the Registrar's office.

# ESTIMATED EXPENSES

The cost of attending Oakland is moderate. For a commuter student \$303 per semester may cover all costs: tuition, books, lunches, and transportation.

The basic costs for a Michigan student living on campus would be about \$588 per semester for tuition, books, room, and board. For an out-of-state student they would be about \$861 per semester.

Since under the three-semester plan a student goes to school three semesters a year instead of two, the eight terms are telescoped into two and two-thirds years. Thus, the costs are more in each of the first two calendar years, but the total remains the same.

A table of estimated basic expenses for a semester, which does not include such things as laundry, transportation to and from home for students living on campus, clothing or incidental spending money, follows:

	Michigan	
Commuter		Out-of-State
Tuition\$163	\$163	\$436
Books and Supplies 40	40	40
Board and Room	385	385
Lunches and Local		
Transportation 100		
	*	-
\$303	\$588	\$861



# FINANCIAL AIDS

Oakland University seeks to provide financial aid to worthy students who, because of their economic circumstances, do not have sufficient funds to finance their education. This aid is offered in the form of scholarship grants, national defense education loans, and in some cases, campus jobs.

The University is a member of the College Scholarship Service and requires the parents of all students seeking assistance to file a confidential financial statement with that organization. This statement is necessary in order that a need factor can be determined, and may be obtained from the applicant's high school, from the University, or by writing to the College Scholarship Service, Box 176, Princeton, New Jersey.

Approximately 30% of each freshman class will be awarded financial aid. Because all awards are based on academic achievement and financial need the stipends vary. Under this policy it is possible for the University to make awards ranging from an amount equal to full tuition, room and board, down to a small honorary stipend. Also, this policy allows the applicant to be considered for all awards for which they are eligible. Applicants need not apply for a specific scholarship.

The greater part of the funds available for Oakland's aid program have been raised by the Oakland University Foundation Scholarship Committee, a group of prominent women in the greater Detroit area. Donors who have provided full scholarships, either tuition or Foundation awards (worth up to \$500 a semester) are listed. In addition, scores of other individuals, groups, and companies have provided funds for other awards in varying amounts to help deserving students. Unless otherwise noted, all scholarships are awarded by a University scholarship committee, and may be renewed each year throughout the recipients college career if he maintains a satisfactory record.

For Freshmen:

Nearly 150 awards up to the full amount of tuition are made each year. The amount of the award is based on need.

Also the Oakland University Foundation provides scholarships worth up to \$1,000 each annually for students who have demonstrated outstanding ability in high school. Candidates must take a competitive examination. For Junior College and Transfer Students:

Students who apply as transfer students from accredited public junior colleges in Michigan will be considered for all awards normally made available to freshmen students. The same procedure of filing the parents confidential statement with the College Scholarship Service should be followed. Transfer students from other four year institutions are eligible for loan opportunities and campus work. However, transfer students from four year institutions do not qualify for scholarship grants until they have completed at least one year of academic work at Oakland University.

# Special and Endowed Scholarships

Alfred G. Wilson Scholarship:

The Oakland University Foundation Scholarship Committee awards an annual \$1,000 scholarship to an entering freshman in honor of the late Alfred G. Wilson.

The Mrs. C. Allen Harlan Scholarship:

The Charles Evans Hughes Scholarships:

One award having a value of \$1,000 a year is made annually to an outstanding entering student who intends to go into law or government service.

These scholarships are being provided by Mrs. William T. Gossett, honoring her father, the late Chief Justice of the United States. Winners of these awards will be known as the Charles Evans Hughes Scholars.

Mr. and Mrs. Roger M. Kyes Scholarship in English: One award worth approximately \$400 a year is given annually to a student majoring in English.

The Harlow H. Curtice Memorial Scholarship:

# Pontiac Central High School Scholarship:

Established by Pontiac Central students, this award worth approximately \$250 a year, is made annually on the basis of competitive examination. Both entering and enrolled students who are graduates of that high school are eligible.

# Village Woman's Club of Birmingham Scholarship:

A tuition scholarship is given each year to a woman student from the Birmingham-Bloomfield Hills-Pontiac area.

# Mildred Byars Matthews Memorial Scholarship in Art History:

This fund has been established by staff and faculty members of the University in honor of a former Art Department colleague. Gifts are being received to create an endowed scholarship for an outstanding art history major, to be awarded annually.

# General Motors Scholarships

Three awards are made each year to entering students under the nationwide scholarship program of the General Motors Corporation. Each award is worth from \$200 to \$2,000 a year, depending on need.

# Other Scholarship Donors (\$200 or more)

Roy and Florence Abernethy Foundation

Charles F. Adams

Mr. and Mrs. Don E. Ahrens

American Association of University Women, City Grove, Pa.

American Business Women's Association, Tipacon Chapter American Society of Tool and Manufacturing Engineers, Pontiac Chapter No. 69

The General Henry H. Arnold Educational Fund, Air Force Aid Society

Auburn Heights Community Scholarship Fund

Wilbur S. Awrey

Roy Fruehauf Foundation Bass Engineering and Construction Co. General Motors Girls' Club of Baldwin Rubber Company Pontiac Beta Sigma Phi, Theta Eta John F. Gordon Chapter Gossett Fund Warren S. Booth Mr. and Mrs. Graham J. Graham John S. Bugas Fund Samuel and Louis Hamburger Business and Professional Women's Club, Royal Oak Foundation Campbell Ewald Foundation Mr. and Mrs. Jack W. Haupt Detroit Bank and Trust Company H. E. Howlett Memorial (Community National Bank) Edward N. Cole Elaine and Walter Carev Junior Chamber of Commerce, Foundation Pontiac. Mrs. Jesse Chamberlain Junior League of Birmingham Mr. and Mrs. L. L. Colbert Edward B. Klotzberger Community National Bank Lambda Chi Omega (Board of Directors) L'Anse Creuse High School Consumers Power Company Faculty Wives Mrs. D. H. Curry R. C. Mahon Foundation Dawson, Hanley Chevrolet, Inc. Manufacturers National Bank Detroit Edison Company Howard L. McGregor Memorial Irving A. Duffy Michigan Tractor and Machinery John Dykstra Foundation Company Ray R. Eppert Million Dollar Round Table Eurpac Service, Inc. Foundation Exchange Club of Brooklands National Bank of Detroit (Rochester) Max M. Fisher National Secretaries Association Harold A. Fitzgerald National Twist Drill and Ford Educational Assistance and Tool Company Incentive Donation Program The Nichols Company Russell G. Ford

William and Sarah Seidman Mr. and Mrs. Ralph Norvell Foundation Oxford Child Study Club I Teacher Education Association, Pontiac Oakland Town Hall Inc. Oakland University The Pontiac Press Trumbull Foundation Pontiac PTA Council Urban League Scholarship Fund of Pontiac Pontiac Rotary Club No. 1296 Utica Community Schools Pontiac State Bank George A. Wasserberger Republicans of Oakland County Waterford Township High School Reuther Labor Foundation Wayne Oakland Bank Reynolds Metals Company Charles L. Wilson Richardson Foundation Women's National Farm and T. M. Rinehart, Jr. Garden Club (Lake Angelus) Rochester Area Ministerial Women's National Farm and Association Garden Club (Pontiac) Rochester Junior Women's Club Women's National Farm and Rochester Paper Company Garden Club (Rochester) Romeo Community Schools Wyman Furniture Company Royal Oak Daily Tribune Mr. and Mrs. Theodore Yntema Mr. and Mrs. Fred W. Sanders Victor M. Zink

There are also several anonymous donors.

Zonta Club of Pontiac

#### Loans

Four loan funds are available, one for long-term and three for short-term assistance. All are available to students in good standing on the basis of need.

# W. Everett Grinnell Loan Fund:

John W. and Madeline Schenefield

This fund provides for short-term loans to any Oak-land student.

# National Defense Education Act funds:

These monies provide for loans up to \$1,500 per year. The three percent interest rate and the ten-year repayment period begin a year after the student leaves college (or graduate school). No interest accrues nor are payments required during military service. In the event of the borrower's death or total disability, the obligation is cancelled. Up to one-half of the obligation may be forgiven—at the rate of ten percent per year—for teaching in a public school.

# The Pontiac Kiwanis Club Loan Fund:

This provides for short-term loans to students or staff. Interest is one percent per year. These loans are available to sophomores and upperclassmen.

# The Joan Selby Fund:

This fund is intended primarily to provide adult students with short-term loans, also at one percent, but its resources are also available to other students.

# Part-time Employment

Although demand almost always exceeds supply, oncampus jobs of varying kinds and durations have been provided for over 200 students at some time during each school year. Many of these have been for special occasions or tasks. Students who wish employment should register with the Dean of Students' office, which is the clearing house for both on- and off-campus jobs. No student is permitted to work more than twenty hours a week on a campus job, and all are discouraged from working more than fifteen.

A student who works two hours a day or ten hours a week may earn from \$140 to \$190 per semester, depending on the type of work.

# COURSES OF INSTRUCTION

### Credits

All courses are assigned four semester hours of credit unless otherwise indicated. A course sequence joined by hyphens must be taken in the order indicated. Each course in such a sequence is regarded as prerequisite to that succeeding, except by permission of the department. Prerequisite course requirements may be waived by permission of the department.

#### Course Numbers

Course numbers separated by commas indicate related courses which may be taken in any order. Departmental or program requirements, however, may govern the order in certain cases.

The Registrar reserves the right to cancel a course in which there

is insufficient registration.

Courses numbered 100-199 normally are taken by students in the first and second semesters, 200-299 courses in the third and fourth semesters, 300-399 courses in the fifth and sixth semesters, and 400-499 courses in the seventh and eighth semesters.

# Requirements for Majors, and Major Standing:

Requirements for a major and for a teaching major in each discipline precede the course listings for each department.

Admission to major standing requires the passing of fourteen courses. It is the student's responsibility to apply to the department concerned for major standing before completing his fourteenth course.

For a more detailed listing of requirements and schedules, see the separate supplement entitled *Programs for Majors*.

# UNIVERSITY COURSES

### UC 016-017 Literature in the Western Tradition

Lectures on the literary traditions, forms, and conventions of the West enabling the student to acquire a sound foundation for the understanding and judgment of literature. Discussion sections are based on the lectures and offer the student continuing instruction and practice in expository and critical writing. UC 016 deals with epic and drama, UC 017 with the novel and lyric poetry.

# UC 034-035 Development of Western Institutions and Social Ideas

An exploration of the development of characteristic political, social, and economic institutions of Western society in the context of those ideas which have been advanced to explain, understand, or justify them. Beyond providing a sense of fact, the course develops the skills of critical inquiry into complex historical and philosophical situations. UC 034 starts with representative ancient ideas, as interpreted in the European Middle Ages, and closes with the era of the French Revolution. UC 035 considers the Nineteenth and Twentieth Centuries.

### UC 047 Introduction to Art

An interpretation of major styles and ideas in world painting, sculpture, and architecture. No practice of studio art is required. Note: Prospective art majors should take UC 047 in the first or second semester.

#### UC 049 Introduction to Music

An introduction to the techniques of listening to great music, and a study of its elements, forms, and styles. Begins at the level of the student lacking previous musical experience. Note: Prospective music majors should consult with the Music Department before registering for this course.

#### SOCIAL SCIENCE SEQUENCE

#### UC 052 Introduction to Political Science

A survey of the main concepts and modes of analysis in political science. Such themes as political power, ideologies, authority, law, constitutions, public opinion, political parties, and interest groups are presented. Particular countries (e.g., Great Britain, Russia, and the U.S.) are studied to illustrate various types of government. Note: Prospective political science majors should take this course in the first or second semester.

### UC 054 Introduction to Social Psychology

Observational, experimental, and analytical techniques for the objective study of relationships among men and the effects of these relationships upon the participants in them. The analysis of social functions and roles; the study of the development and change of attitudes, beliefs, and values; the influence of social groups on the individual; and the development of personality in relation to the social milieu are considered. Required of all teaching candidates, who should take this course in the first or second semester.

#### UC 056 Introduction to Economics

Topics include national income and employment, money and banking, government expenditures and taxes, inflation and deflation, economic growth, prices in competitive and monopolistic markets, labor problems, and international trade. Note: Prospective economics or business administration majors should take this course in the first or second semester.

### UC 058 Introduction to Sociology

An introduction to the basic principles, concepts, and theories of sociology, relating to the study of man as a participant in group life. Areas emphasized are social structure, cultural processes and patterns, socialization and personality development, social stratification, collective behavior, and population, as well as the major institutional areas. Note: Prospective sociology majors should take this course in the first or second semester.

#### LANGUAGES

Chinese, French, German, Greek, Latin, Russian, and Spanish are offered. For course descriptions see subsequent section.

#### AREA STUDIES

A study of important areas of human civilization not included in, or differing significantly from, the civilizations of Europe and North America.

Courses in two areas, China and India, are offered. Students may take either UC 062 or UC 066 for the first course.

#### UC 062 Chinese Civilization

Analysis of the evolution of traditional Chinese civilization. Topics covered include history, philosophy and religion, literature, the arts, politics, and social organization.

Prerequisites: UC 035 and social science sequence.

#### UC 063 Modern China

An exploration of the development of modern China in the 19th and 20th centuries. Consideration of contemporary Chinese conditions and problems is included.

Prerequisite: UC 062

### UC 066 Indian Civilization

A survey of the civilization of the Indian sub-continent before the British period. Following a brief historical treatment, attention is directed to such topics as the state, society, everyday life, religion, literature, and the arts.

Prerequisites: UC 035 and social science sequence.

### UC 067 Modern India

An exploration of the development of modern India in the 19th and 20th centuries. Some attention is also paid to Pakistan, Ceylon, and Nepal. Approximately half of the course is devoted to contemporary India, its problems and prospects.

Prerequisite: UC 066

### SCIENCE AND MATHEMATICS

The science and mathematics requirement may be fulfilled by two courses chosen from the following three: UC 085, UC 086, UC 087. This requirement also may be met by two departmental courses in science or one course in science and one in mathematics.

#### UC 085 Mathematics

A course for nonscience majors which emphasizes the creative and deductive nature of mathematics. Material is selected from set theory, logic, number systems, algebra, geometry, topology, and axiomatics. Not open to those with credit for MTH 125, 131, 154, 314, or 316 except by permission of the instructor.

Prerequisite: Two years of high school mathematics.

### UC 086, UC 087 Science

Courses for nonscience majors which provide knowledge and appreciation of science through readings, discussions, demonstrations, and laboratory work. Selected topics from the life sciences are presented in UC 086, and topics from the physical sciences are presented in UC 087. The courses may be taken independently of each other. Not open to those with credit for CHM 114, PHY 251, or any laboratory science course.

Prerequisite: Two years of high school mathematics.

# **DEPARTMENTAL COURSES**

#### ART

Requirements for a Liberal Arts Major in Art History:

Nine departmental courses are required, exclusive of UC 047. The student may be required to take: (1) at least one course in studio art; (2) two semesters of a foreign language other than that used to fulfill the University Course prescription.

Requirements for a Liberal Arts Major in Studio Art:

Nine departmental courses are required, exclusive of UC 047; three of these courses must be in art history. Two semesters of a foreign language other than that used to fulfill the University Course prescription may be required.

Requirements for a Teaching Minor:

Five departmental courses in art are required, including UC 047; two of these must be ART 333 and 381.

#### ART 226 Introduction to Studio Arts

Fundamental techniques of drawing, painting, and three-dimensional construction.

Prerequisites: Open to art majors and minors who have completed UC 047 and one course in art history. With permission of the Department, open to others who have completed UC 047 and one course in art history.

### ART 308 Connoisseurship, Materials, and Conservation Laboratory

Theories and techniques of determining the authenticity of works of art. Methods of conserving masterpieces are also studied.

Not offered in 1963-1965.

Prerequisite. Major Standing in art.

# ART 326 Painting

Study and practice of painting in oil, water color, and related media. Designed mainly for art majors and minors.

Prerequisites: UC 047, ART 226, and one course in art history.

### ART 328 Sculpture

The study of techniques of creative work in third-dimensional and relief forms using traditional and recent media.

Prerequisites: Major Standing in art and completion of two studio

### ART 333 Art of the U.S.A.

American art from the Colonial settlements to the end of the nineteenth century, with emphasis on the relation to European and especially English art, and the developments from those influences. Prerequisite: UC 047

#### ART 351 Primitive Art

The major artistic styles of Africa, Oceania, and the Americas. Influences of primitive art upon recent Western art are considered. Prerequisite: UC 047

# ART 361 Architecture and Sculpture of the Middle Ages

A study of major cathedrals and sculptural styles of Medieval Europe and their relation to secular architecture and decoration. Prerequisite: UC 047

#### ART 369 Renaissance Art

An investigation of architecture, painting, and sculpture of the fifteenth and sixteenth centuries in Italy and Northern Europe. Emphasis is given to the major artistic figures and their relationship with the development of Renaissance art. Such topics as humanism, the revival of classical antiquity, perspective, and the graphic arts are considered.

Prerequisite: UC 047

# ART 371 English Art, 1550-1850

Architecture, painting, and sculpture in England from the introduction of Renaissance art in the reign of Elizabeth I to the Great Exhibition of 1851. In addition to a survey of English art, special attention is given to such major figures as Inigo, Jones, Wren, Adam, Reynolds, Gainsborough, Constable, and Turner.

Prerequisite: UC 047

# ART 381 Art of the Twentieth Century

A study and interpretation of modern art in Europe and the United States from 1905 to the present. Painting and sculpture are emphasized and the contributions of Picasso, Matisse, and the early masters of abstract style are discussed.

Prerequisite: UC 047

### ART 383 Modern Architecture

Architecture in Europe and America from the late nineteenth century to the present, coupled with an investigation of the sources of the modern architectural tradition and idiom.

### ART 426 Advanced Painting

The development of techniques and ideas in creative painting. Prerequisites: Major Standing in art and completion of two studio courses.

#### ART 455 Greek and Roman Art

A historical and critical interpretation of pre-classical and classical styles of sculpture, painting, and architecture from the Minoan age through the Roman imperial epoch.

Prerequisites: UC 047 and one course in art history.

# ART 480 Seminar in Art History

Individually assigned topics in various areas of the history of art. Prerequisite: Permission of the Department.

# ART 491 Special Problems in Art

A program of individual research designed for advanced art majors. May be taken for one or more semesters. May be taken for 4 or 8 credits per semester.

Prerequisite: Art majors may apply to the Department for admission during their sixth semester.

#### CHEMISTRY

Requirements for a Liberal Arts Major:

Fourteen courses are required: nine courses in chemistry, including CHM 335, 416, 442; three courses in mathematics, completed before the fifth semester (MTH 154-155, 258); two courses in physics (PHY 251-252).

Requirements for a Teaching Major:

Eight courses in chemistry, plus a minor, requiring five courses in physics or mathematics, or a group minor requiring six courses in physics and mathematics. Twenty semester credits in education also are required.

Requirements for a Teaching Minor:

Five courses in chemistry.

# CHM 114-115 Chemistry

An introduction to the study of gases, liquids, solids, atomic and molecular structure, stoichiometry, equilibria, thermodynamics, and nuclear chemistry. The laboratory work includes synthetic preparations and the separation, purification, and qualitative and quantitative analysis of various substances.

Prerequisite: Three years of high school mathematics. Concurrent registration in MTH 154-155 is strongly recommended.

Offered as a fall-winter sequence only.

# CHM 234 Organic Chemistry

Functional groups, reaction mechanisms, stereochemistry, rearrangements, polymers, and natural products. Laboratory work includes

organic synthesis and qualitative organic analysis.

Prerequisite: CHM 115

# CHM 335 Organic Chemistry

A continuation of CHM 234. The laboratory work includes application of instrumental methods to organic analysis.

Prerequisites: CHM 234 and CHM 341

### CHM 341 Physical Chemistry

Physical interpretation of chemical phenomena, including thermodynamics, phase transitions, equilibria, and electrochemistry. Laboratory emphasizes physical-chemical techniques.

Prerequisites: CHM 115 and MTH 155. PHY 252 is highly de-

sirable.

### CHM 405 Selected Topics

Advanced study in special areas; seminars, laboratory work, and readings. May be taken for 4 or 8 credits per semester. May be taken for one or more semesters.

Prerequisite: Permission of the Department.

### CHM 416 Inorganic Chemistry

The development of atomic theory, chemical periodicity, coordination compounds, and nonaqueous systems. Laboratory work includes synthetic preparations, as well as instrumental methods in inorganic chemistry.

Prerequisite or corequisite: CHM 442

# CHM 442 Physical Chemistry

A continuation of CHM 341, emphasizing the molecular basis of chemistry. Kinetic theory of gases, reaction kinetics, molecular structure, and spectroscopy. Includes laboratory.

Prerequisites: PHY 252, and MTH 258 or 259.

#### CHM 490 Research

Library and laboratory practice in research. May be taken for 4 or 8 credits per semester. May be taken for one or more semesters. Prerequisitie: Permission of the Department.

#### CHINESE

See Modern Languages and Literatures, Pages 78 and 79.

#### CLASSICAL LANGUAGES AND LITERATURES

Requirements for a Liberal Arts Major in Classical Languages:

Nine courses, in addition to four courses in Latin (LTN 114-115, LTN 214-215) used to satisfy the University Course language requirements. A typical classics major would include: three courses in Latin (LTN 320, LTN 414-415); four courses in Greek (GRK 114-115, GRK 214-215); two courses in classics. Those planning graduate work in classics should complete in addition to the above nine courses: one course in Latin literature; two courses in Greek; two courses in classics.

Requirements for a Liberal Arts Major in Latin:

Nine courses in Latin and classics, in addition to the courses fulfilling the University Course language requirement. A typical program would include: five courses in LTN 320; two courses in LTN 414-415; two courses in classics.

Requirements for a Teaching Major in Latin:

Eight courses in Latin and classics, in addition to the courses fulfilling the University Course language requirement. A typical program includes: four courses in LTN 320; two courses in LTN 414-415; two courses in classics. Twenty semester credits in education also are required.

### CLS 111, 112 Classical Literature in Translation

A series devoted to the major writers of Greece and Rome. Either semester may be elected independently. Prerequisite. UC 017

### CLS 115 Classical Mythology

The principal Greek and Roman myths and their uses in classical and postclassical art and literature. Prerequisite. UC 017

### CLS 117 The Classical Tradition

A study of the classical influences on Western culture. Some attention is given to the visual arts, but the emphasis is on classical traditions in European literature.

Prerequisite. UC 017

# GRK 114-115 Elementary Greek

Classical Greek. Elements of grammar and some connected reading will be studied. May be conducted as a tutorial.

### GRK 214-215 Intermediate Greek

Review of grammar, exercise in prose composition, and the reading of simple literary works, ordinarily Plato's Apology, selections from Herodotus, and selected books of Homer's Iliad. May be conducted as a tutorial.

Prerequisite: GRK 115

### GRK 320 Selections from Greek Literature

Greek drama and history. Selected dramas of Aeschylus, Sophocles, Euripides, and Aristophanes, and seelctions from Herodotus and Thucydides. May be conducted as a tutorial. May be taken for one or more semesters.

Prerequisite: GRK 215

# GRK 414-415 Survey of Classical Greek Literature

Readings in classical Greek literature from Homer to the Hellenistic Age. Selections will be chosen to illustrate the historical development of Greek literature. May be conducted as a tutorial.

Prerequisite: GRK 320

### LTN 114-115 Elementary Latin

The first semester is devoted to elements of grammar; the second semester to a review of grammar, exercises in composition, and the reading of simple selections from Latin prose and poetry.

#### LTN 214-215 Intermediate Latin

The first semester is devoted to selections from Cicero, Catullus, and Horace; the second semester to the reading of extensive selections from Virgil's Aeneid.

### LTN 320 Selections from Latin Literature

A detailed study of selected works by major Latin writers. May be conducted as a tutorial. May be taken for one or more semesters. Prerequisite: LTN 215

### LTN 414-415 Survey of Classical Latin Literature

Readings will be selected from representative writers of the Republic and Empire and will be chosen to illustrate the historical development of Latin literature.

Prerequisite: LTN 320

#### ECONOMICS AND BUSINESS ADMINISTRATION

Requirements for a Liberal Arts Major in Economics:

UC 056 and six other departmental courses. The six other courses must include EB 216, EB 217, and EB 480. Of the remaining courses to be selected, one must have as prerequisite EB 216 and another must have as prerequisite EB 217. All majors must take two semesters' work in another social science. Two semesters of collateral work in mathematics are required (preferably taken in the first two semesters): MTH 125 and MTH 131.

# Requirements for a Major in Business Administration:

Ten courses in economics and business administration, plus UC 056. Of the ten: two are in economics, (EB 216, 217); eight are in the functional areas, including EB 301, 442, and 435. In related social science areas, four courses are required: two courses in psychology (UC 054, PSY 261); two courses in either political science or sociology. Mathematics-science requirement; four courses: MTH 125, 131, (taken in the first two semesters), MTH 321, UC 086 or UC 087.

# EB 216 Micro-Economic Analysis

Analysis of prices, output, and distribution at the level of the individual firm.

Prerequisites: UC 056 and MTH 131

# EB 217 Macro-Economic Analysis

Study of factors determining the level of national income and employment.

Prerequisites: UC 056 and MTH 125

### EB 301 Accounting and Statistical Techniques

Accounting systems for individual firms and the national economy. Use of statistical techniques to solve problems faced by firms and industries.

Prerequisites: UC 056 and permission of the Instructor.

### EB 303 Business Fluctuations and Economic Forecasting

Analysis and empirical testing of business-cycle theories. Preparation of economic forecasts for the individual firm and the national economy.

Prerequisite: EB 217

### EB 322 Capital Markets

Corporate and public finance, and the operation of major financial institutions and markets.

Prerequisite: EB 217

### EB 323 International Trade and Finance

Principles of international trade and finance, postwar international economic problems and policies.

Prerequisite: EB 216

### EB 324 Business in the American Economy

Public attitudes toward and government regulation of business; social and legal responsibilities of business.

Prerequisite: EB 216

### EB 325 Industrial Organization

Resource patterns, production processes (including technology and economics of scale), and managerial organization as related to the size of firms and the location of industries.

Prerequisite: EB 216

# EB 333 Labor-Management Relations

Analysis of management-employee relations in modern industry; public policy in labor-management areas.

Prerequisites: UC 056 and permission of the Instructor.

# EB 334 Business Enterprise

Origin and evolution of contemporary business institutions; social, philosophic, legal, and economic foundations of the modern corporation.

Prerequisites: UC 056 and permission of the Instructor.

#### EB 435 Business Policies

Financial, economic, and other management tools used to analyze business case studies.

Prerequisites: EB 216 and EB 217

### EB 442 Operations Research

Operations research techniques are used in exploring problems selected from the several functional areas of business.

Prerequisites: EB 216 and EB 217

### EB 480 Seminar

Theses, individual topics and readings. Prerequisite: Permission of the Department.

### EB 490 Independent Research

Prerequisite: Permission of the Department.

#### **EDUCATION**

Requirements for Certification:

All teaching majors must take ED 244-245 and 455 to meet Michigan Teacher Certification Code requirements. Prospective elementary school teachers must add ED 331 and 433, while prospective secondary teachers must add ED 428.

See specific departmental listings for secondary teaching majors and minors offered by individual departments. The divisional and interdivisional majors and minors are listed below.

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Requirements for a Teaching Major in the Social Sciences:

Eight courses, UC 054 plus seven courses in one of the following three areas of concentration:

- Five courses in economics including UC 056, and either two courses in political science including UC 052, or two courses in sociology including UC 058.
- (2) Five courses in political science including UC 052, and either two courses in economics including UC 056, or two courses in sociology including UC 058.
- (3) Five courses in sociology including UC 058, and either two courses in economics including UC 056, or two courses in political science including UC 052.

Requirements for a Teaching Minor in the Social Sciences:

Six courses, UC 034-035, two courses in the social science sequence, and two courses in area studies.

Requirements for Elementary School Teaching Majors:

The general program for elementary teachers consists of ENG 301, HST 214-215, MTH 314-315-316; two science courses including SCI 305, plus an approved elective in history, social science, or area studies.

The science and mathematics concentration for elementary or junior high school teachers consists of CHM 114-115, MTH 314-315-316, SCI 305, plus two more science courses, and two additional mathematics or science courses.

The modern language concentration for elementary or junior high school teachers consists of four language courses above the 210 or 215 level, MTH 314, and SCI 305.

The music program is described under Music.

### ED 244 Social and Philosophic Issues in Education

Education is treated both as a social phenomenon and as an embodiment of philosophic commitments. Basic concepts studied in the social sciences are examined with special attention to their pertinence to education. Such questions as the nature of reality, knowledge, and values are examined from widely differing points of view in order to analyze controversial issues in theory and practice.

Prerequisites: UC 054 and UC 017

### ED 245 Psychological and Field Studies in Education

Psychological factors involved in learning and development are examined in lectures, class discussions, and extensive field observations in schools.

Prerequisite: ED 244

#### Teaching of Reading ED 331

Intensive preparation for the teaching of reading skills in the elementary grades. Identification of reading readiness, problems of program construction and a variety of teaching methods are among the topics of the course.

Prerequisite: ED 245

### ED 428 Teaching of the Major Field

Content and methodology appropriate to the student's major field. Organization of programs and courses, bibliography of the field, and techniques of instruction receive special emphasis.

Prerequisites: ED 245, Major Standing, and permission of the student's major department.

# ED 433 Teaching in the Elementary School

The content and methodology of instruction in the elementary school. It is designed to supplement specialized courses in the various teaching fields.

Prerequisites: ED 245, Major Standing, and permission of the Director of the Teacher Education Program.

# ED 455 Internship (8 credits)

Supervised teaching in the public schools. Students spend approximately fifty days in public school classrooms and participate in such further activities as a supervising teacher may direct. The course includes a seminar dealing with problems of instruction.

Prerequisites: ED 245, Major Standing, and permission of both the student's major department and the Director of the Teacher Education Program.

Note: Sinse the internship requires full-time work for ten weeks, students should plan to complete all courses with the exception of Teaching of the Major Field (ED 428) no later than the seventh semester. In some cases it may be possible to take one additional course during this semester, but generally such will not be the case. Arrangements for housing during internship should be made in consultation with the Office of the Dean of Students.

#### **ENGINEERING SCIENCE**

Requirements for a Major in Engineering Science:

Nine courses in engineering science, normally including ES 223, 343, 344, 346, 354, 431, and either 347 or 445. Corequisite work includes four courses in mathematics, MTH 154-155, 258-259; three courses in physics, PHY 251-252, 472; two courses in chemistry, CHM 114-115.

### ES 223 Statics and Dynamics

Vector mechanics including the conditions of equilibrium, structural mechanics, friction, kinematics, Newton's laws, momentum, energy, and rotation.

Prerequisite: MTH 154

# ES 343 Thermodynamics

The laws of thermodynamics, entropy, cyclic processes, reactions, equilibrium, and mixtures.

Prerequisites: CHM 114 and PHY 251

#### ES 344 Electric Circuits

Resistance, inductance, magnetic circuits, transformers, capacitance, alternating circuits, transient analysis, non-sinusoidal voltages, network analysis, electrical measurements; with laboratory. Prerequisites: PHY 251 and MTH 155

#### ES 346 Electronics

Vacuum tubes, transistors, power supplies, A.C. equivalent circuits, amplifiers, feedback, and oscillators; with laboratory.

Prerequisite: ES 344

#### ES 347 Advanced Electronics

Selected topics in the analysis and design of electronic circuits; with laboratory.

Prerequisite: ES 346

#### ES 354-355 Transport Processes

Topics in the kinematics and dynamics of perfect, compressible, and viscous fluids; turbulence; momentum and energy transport; static and dynamic heat flow; with laboratory.

Prerequisites: ES 343 and MTH 259

#### ES 405 Special Topics

Prerequisite: Permission of the Department.

#### ES 431-432 Structure of Matter

An introduction to the physics of crystalline and amorphous solids, with applications to the strength and other properties of engineer-

ing materials; with laboratory.

Prerequisites: ES 223 and PHY 252

### ES 445 Electric and Magnetic Fields

Electrostatics including solutions of Laplace's equation, magnetostatics, Maxwell's equations, electromagnetic waves.

Prerequisites: PHY 252 and MTH 258

### ES 484 Analysis and Design of Systems

A seminar on the design of equipment and systems; topics to be chosen by the Instructor.

Prerequisite: ES 431

#### ES 490 Research

Independent study or laboratory work on advanced problems in engineering. For the exceptional student.

Prerequisite: Permission of the Department.

#### ENGLISH LANGUAGE AND LITERATURE

Requirements for a Liberal Arts Major:

Nine departmental courses, two of which are specified: ENG 315 and either ENG 311 or 316. Seven additional courses must be taken from departmental offerings. Each major must complete two courses in the literature (300-400 level) of a foreign language, classical or modern.

(Most graduate schools require a reading knowledge of French and German for the Ph.D. in English, and a few require Latin as well.) Requirements for a Teaching Major:

Eight departmental courses, four of which are specified: ENG 303, either ENG 205 or 315, either ENG 311 or 316, any one course in American literature; four additional courses must be taken from departmental offerings.

Requirements for a Teaching Minor:

Three departmental courses in addition to UC 016-017. One of these courses must be in American literature.

# ENG 200 Major Literary Forms

An introduction to the analysis of one of the following: poetry, novel, drama. Specific form announced whenever course is offered. May be taken for credit more than once, provided form is not repeated. The following forms are scheduled: Drama—Fall 1963 and Winter 1965, Poetry—Winter 1964 and Spring 1965, Novel—Fall 1964.

Prerequisite: UC 017

# ENG 204 The Nature of Language

An introduction to principles of linguistics: the description, comparison, and history of languages, the grammar of English, problems of usage, dialect geography, differences between speech and writing, techniques of language teaching and learning, and the

relationship of language to culture.

Prerequisite: UC 017 Spring, 1964

### ENG 205 Shakespeare

Reading and discussion of a majority of the plays. Satisfies Shakespeare requirement in English major for secondary teaching major. Recommended but not required of liberal arts majors.

Prerequisite: UC 017 Fall, 1963; Spring, 1964

#### ENG 224 American Writers

Selected major American writers from the beginning to the Civil War.

Prerequisite: UC 017 Fall, 1963; Spring, 1965

#### **ENG 225 American Writers**

Selected major American writers from the Civil War to the present. Prerequisite: UC 017 Winter, 1964; Fall, 1965

#### ENG 285 Modern British Writers

The principal works, themes, and techniques of major twentieth-century British writers. Special attention will be given to the works of W. B. Yeats, James Joyce, T. S. Eliot, among others.

Prerequisite: UC 017 Spring, 1964

### ENG 300 Topics in Literature and Language

Special topics and problems as selected by the Instructor. May be taken for credit more than once, provided topic is not repeated. The following form is scheduled: Colonial American Literature to 1800—Winter 1964.

Prerequisite: UC 017 and one 200-level English course.

# ENG 303 Modern English Grammar

A survey of English structure, especially of syntax, with descriptions based on the work of important contemporary scholars. Prerequisite: UC 017 and one 200-level English course. Fall, 1964

### ENG 305 History of English Language

A detailed survey of the English language from its beginnings to modern times.

Prerequisite: UC 017 and one 200-level English course. Spring, 1965

# **ENG 307** Advanced Exposition

Practice in non-fictional writing, primarily the critical essay. Close criticism of students' writing, individually and in class. Continuous discussion of the meanings of style. No news or editorial writing. Enrollment limited to fifteen. Students desiring to enroll should submit samples of their work during the semester preceding that in which the course is given.

Prerequisite: UC 017 and one 200-level English course.

Fall, 1963 and Fall, 1964

#### ENG 311 Chaucer

The major works, with emphasis on The Canterbury Tales and Troilus and Criseyde.

Prerequisite: UC 017 and one 200-level English course.

Fall, 1963 and Fall, 1964

### ENG 315 Shakespeare

Intensive analysis of four or five of the plays, textual and dramatic criticism, sources, and Shakespeare in the theater.

Prerequisite: UC 017 and one 200-level English course.

Winter, 1965

### ENG 316 Milton

Selected early poems, including "On the Morning of Christ's Nativity," "Comus," "Lycidas"; some of the sonnets and prose treatises, including Areopagitica, Paradise Lost, Paradise Regained, and Samson Agonistes.

Prerequisite: UC 017 and one 200-level English course.

Spring, 1964 and Winter, 1965

#### ENG 345 Medieval Literature

Dominant forms and themes in English literature from the Anglo-Saxons to about 1550, excluding Chaucer. Ballad and drama, chivalric romance, the code of courtly love, the sacred and the secular in medieval civilization. Representative works and authors include Beowulf, Gawain and the Green Knight, Langland, Malory, Skelton.

Prerequisite: UC 017 and one 200-level English course.

Winter, 1964

### ENG 355 Literature of the English Renaissance

Selected poetry and prose, non-dramatic and dramatic, exclusive of Shakespeare; the Renaissance as a historical and cultural phenomenon.

Prerequisite: UC 017 and one 200-level English course.

Winter, 1964 and Spring, 1965

#### **ENG 357** Restoration Literature

Representative poetry, comedy, and prose of the later seventeenth century, read with an eye to the consistency, and the inconsistencies, of the Age of Dryden and Bunyan.

Prerequisite: UC 017 and one 200-level English course.

Fall, 1963

### ENG 368 Eighteenth-Century Literature

The chief works of Swift, Pope, and Johnson, together with whatever coincides with the particular emphasis of the course in a given year. Classicism, Pre-Romanticism, Rise of the Novel, Form and Feeling, and Primitivism are examples of various topics around which readings may cluster.

Prerequisite: UC 017 and one 200-level English course.

Winter, 1965

#### ENG 370 The Romantic Period

Poets of the Romantic Period—Wordsworth, Coleridge, Scott, Byron, Shelley, Keats—with some attention to the pre-Romantics, Burns and Blake. Their poetry and its relation to the intellectual currents of the time.

Prerequisite: UC 017 and one 200-level English course.

Winter, 1965

#### ENG 371 Victorian Literature

A selection of fiction, prose, and poetry of the middle and late nineteenth century. Representative authors include Dickens, Thackeray, Meredith, Tennyson, Browning, and Arnold.

Prerequisite: UC 017 and one 200-level English course.

Fall, 1964

#### ENG 385 Modern Literature

Modern British, American, and/or Continental literature, with special concentration on the work and development of a single writer.

Prerequisite: UC 017 and one 200-level English course.

Winter, 1964 and Spring, 1965

## ENG 395 Nineteenth-Century American Literature

An introduction to problems of research and literary criticism in American literature. Intensive reading of specified literary texts and extensive reading in relevant historical, biographical, and critical materials.

Prerequisite: UC 017 and one 200-level English course.

Fall, 1964

#### ENG 400 Topics in Literature and Language

Special topics and problems as selected by the Instructor. May be taken for credit more than once, provided topic is not repeated. The following topic is scheduled: Linguistic Analysis (Winter 1965); prerequisite ENG 303.

#### ENG 401 Literary Criticism

Problems in the analysis of literature and practical difficulties in evaluating individual works. Readings in important modern and earlier schools of criticism, together with relevant works of literature

Prerequisite: Four 200- and 300-level English courses.

Fall, 1964

#### **ENG 431** Imaginative Writing

Designed to provide potential writers of fiction, poetry, and drama with an opportunity to develop technical proficiency and receive criticism of work in progress. Students desiring to enroll should submit samples of their work during the semester preceding that in which the course is given.

Prerequisite: Four 200- and 300-level English courses.

Winter, 1965

#### ENG 480 Seminar

Intensive reading and research designed particularly for English majors. Topic at the pleasure of the Instructor.

Prerequisite: Four 200- and 300-level English courses.

Fall, 1965

## ENG 490 Independent Reading

Directed reading and research designed exclusively for senior English majors.

Prerequisite: Permission of the Instructor.

#### FRENCH

See Modern Languages and Literatures, Pages 79-82.

#### GERMAN

See Modern Languages and Literatures, Pages 82-84.

#### GREEK

See Classical Languages and Literatures, Page 62.

#### HISTORY

## Requirements for a Liberal Arts Major:

Eight departmental courses, beyond the University Course requirements, one of which must be a 400-level course. Normally work in more than one field of history is involved. Every major must complete at least a year's work in a language beyond the University Course requirements. This may be either a continuation of the language already studied or a year's work in the study of a second language. Most graduate schools require a reading knowledge of at least two foreign languages for the Ph.D. in history.

Requirements for a Teaching Major:

Eight departmental courses, exclusive of the University Courses. One of the eight must be a 400-level course. Two of the remaining must be HST 214, 215. Twenty semester credits in education also are required.

Requirements for a Teaching Minor:

Five courses: UC 034-035 and three courses in history, including HST 214, 215.

## HST 214, 215 Introduction to American History

An integrated series of courses offering an introduction to American history from Colonial times to the present.

HST 214 is a survey of American political, economic, and intellectual history from the Colonial period to the close of the Civil War

HST 215 is a survey of modern America: Reconstruction, industrial growth, the experiment with imperialism, the progressive era, domestic reform, and world conflict.

Prerequisite: UC 035

#### HST 234, 235 History of England and British Expansion

An integrated series of courses offering an introduction to English and British history from Roman times to the present.

HST 234 considers the period of Roman rule in Britain, the period of the invasions, the establishment of Norman order, the evolution of late medieval political and social institutions, and concludes with the Tudor and Stuart revolutions in government and society.

HST 235 starts with the Hanoverian monarchs (since 1714), analyzing the arrival of industrial production in England and the effects of this change on society and politics, the age of reform in the nineteenth century, the growth and the development of the empire, and Britain's role in the world politics of the twentieth century.

Prerequisite: UC 035

#### Introduction to European History

A coordinated series of courses (HST 227, 247, 248, 249) offering an introduction to the chief epochs of European history from c. 400 A.D. to the present. Emphasis throughout is upon critical analysis of the basic economic, social, and political context of the successive transformations of Europe from late medieval times to the contemporary scene. These courses need not be taken in sequence.

Prerequisite: UC 035

## HST 227 Medieval Europe, 400-1300

An examination of the development of the European "Middle Ages" from c. 400 to c. 1300 A.D.

## HST 247 Europe, 1300-1715

Chief emphasis is upon the development of the modern state and the state system.

## HST 248 Europe, 1715-1870

A study of Europe in the age of liberal revolutions.

## HST 249 Europe Since 1870

An analysis of Europe in an age of recurrent crises.

## HST 251, 252 Introduction to Russian History

An integrated series of courses offering an introduction to Russian history from earliest times to the present.

HST 251 is a study of the political, social, and intellectual history of the Russian nation from its origins to 1856.

HST 252 is an analysis of the history of the decline of the Russian monarchy and the rise of the Soviet state, 1856 to the present. Prerequisite: UC 035

## HST 271, 272 Introduction to Chinese History

These courses are the same as UC 062, 063 (China area studies). They may be counted as credit toward a history major, provided

the student also takes UC 066, 067 (India area studies) to satisfy University Course prescriptions.

Prerequisite: UC 035

## HST 308 History of Colonial Society, 1607-1750

The course of European expansion and colonization in the New World, the development of political ideas and institutions in British America, and the economic foundations and social evolution of the thirteen mainland colonies.

Prerequisite: HST 214

## HST 309 The Age of the American Revolution, 1750-1790

The structure of colonial society, the effects of British policy on American life, the growth of revolutionary movements, the advent of political independence, the consequences of revolution, and the adoption of the 1787 Constitution.

Prerequisite: HST 214

#### HST 311 The Age of Jackson

The economic, political, and social development in the United States from 1824 to 1861, emphasizing the changing nature of political parties, material and intellectual influences shaping American democracy, westward expansion and sectional conflict, and the origins of the Civil War.

Prerequisite: HST 215

#### HST 312 The Civil War and Reconstruction

Secession, wartime problems of the Union and the Confederacy, principal military campaigns, the Reconstruction Era and the creation of a new Union, the significance of the Civil War and Reconstruction in American history.

Prerequisite: HST 215

## HST 314 American History, 1898-1928

Political and social history of the United States from the Spanish War to the Great Depression.

Prerequisite: HST 215

## HST 315 American History Since 1928

A study of the United States from the Great Depression to the Cold War.

Prerequisite: HST 215

#### HST 326 The Renaissance

An intensive study of the European Renaissance with special emphasis upon the Italian experience.

Prerequisite: UC 035

#### HST 331 Tudor England

The political, social, and cultural life of England in the age of the

Tudor dynasty. Emphasis is on individual reading, discussion, and special reports.

Prerequisite: HST 234

## HST 332 Stuart England

The revolutionary period of seventeenth century England; political and cultural aspects will be emphasized. Emphasis is on individual reading, discussion, and special reports.

Prerequisite: HST 234

## HST 333 Eighteenth Century England

Critical study of the political, cultural, and intellectual life of England during the eighteenth and early nineteenth centuries. Emphasis is on individual reading, discussion, and special reports. Prerequisite: HST 234

#### HST 334 Victorian and Edwardian England

The political, cultural, and intellectual life of England to the outbreak of World War I. Emphasis is on individual reading, discussion, and special reports.

Prerequisite: HST 234

#### HST 341 Postwar Europe in Its World Setting

A study of both Eastern and Western Europe since World War II, stressing the problems of reconstruction and readaptation to an altered world power structure. Special attention is paid to the problem of European unification.

Prerequisite: UC 035

#### HST 342 The Rise of Modern Nationalism

The emergence of European nationalism from the time of the French Revolution, specific nationality and minority problems, and the spread of nationalist ideologies to the non-European world.

Prerequisite: UC 035

## HST 343 Germany Since 1815

A study of the political development of modern Germany as a nation state and the cultural and economic movements connected with German public life.

Prerequisite: UC 035

## HST 391 Directed Readings in History

A program of independent but directed readings designed for junior and senior majors in fields of history in which advanced courses are not available to the student.

Prerequisite: Permission of the Department.

## HST 411 Senior Seminar in American History

Reading and research in selected topics.

Prerequisite: Open to history majors who have taken HST 214, 215.

#### HST 431 Senior Seminar in British History

Selected topics for individual research in British cultural, social, and political history, sixteenth to the late nineteenth century. Prerequisite: Open to history majors who have completed two courses in British history.

#### HST 441 Senior Seminar in European History

Reading and research in selected topics.

Prerequisite: Open to history majors who have completed two courses in European history.

#### HST 481 Seminar in Historiography

Reading and research in topics analyzing the literature of historical inquiry and writing from the Greeks to the present. Prerequisite. Four history courses.

## **HST 491** Directed Research in History

A program of directed individual research designed for advanced history majors. May be taken for one or more semesters. May be taken for 4 or 8 credits per semester.

Prerequisite: Permission of the Department.

#### LATIN

See Classical Languages and Literatures, Page 63.

#### MATHEMATICS

Requirements for a Liberal Arts Major:

Nine courses in mathematics (exclusive of MTH 125, 131, 314, 315, or 316), plus PHY 251-252, plus three courses in a subject area closely related to mathematics.

The foreign language requirement must be satisfied in French, German, or Russian.

Requirements for a Teaching Major:

Eight courses in mathematics (exclusive of MTH 131, 314, 315, or 316), plus a minor requiring five courses in physics or chemistry, or a group minor requiring six courses in physics and chemistry, or other minors arranged in consultation with the Department. If the minor is not in science, the program must include two semesters of science. Twenty semester credits in education also are required.

Requirements for a Teaching Minor:

Five courses in mathematics.

## MTH 125 Introduction to Probability and Statistics

Elementary set theory, sample spaces, combinatorics, random variables, Chebyshev's inequaliy, Bernoulli trials, binomial distribution, joint distribution, introduction to statistics, and introduction to stochastic processes.

Prerequisite. Three years of high school mathematics.

#### MTH 131 Elements of Calculus

The basic concepts, theorems, and applications of calculus, including

material on functions of more than one variable and infinite series. Credit cannot be earned for both MTH 131 and 154 or 155. Prerequisite. Three years of high school mathematics.

#### MTH 154-155 Calculus

A comprehensive study of analytic geometry, limits, differentiation and integration for functions of one real variable, and infinite series. Prerequiste: Three years of high school mathematics, including trigonometry.

#### MTH 258 Advanced Calculus

A study of multiple integration, differential calculus of scaler and vector fields, line integrals, and surface integrals.

Prerequisite: MTH 155

#### MTH 259 Advanced Calculus

A study of linear differential equations, Fourier series, and partial differential equations.

Prerequisite: MTH 155

#### MTH 314 Structure of Number Systems

Emphasizes the logical structure of the real number system. Properties of the natural numbers, integers, rational numbers, and real numbers are carefully proved. Computational techniques and methods which pertain to the mathematics of the elementary grades. Prerequisite. Two years of high school mathematics.

#### MTH 315 Algebraic Structures

From properties of numbers, algebraic concepts are developed; examples of other algebraic systems are investigated to show the generality and structure of algebra.

Prerequisite: MTH 314

#### MTH 316 Geometric Structures

Selected topics from Euclidean geometry, finite projective and finite affine geometry, analytic geometry, set theory and combinatorial topology. Includes an analysis of axiom systems, ruler and compass constructions, equations of lines, circuits and graph theory. Prerequisite. Two years of high school mathematics.

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#### MTH 321 Mathematical Statistics

A study of continuous random variables. Includes the law of large numbers, central limit theorem, estimation of parameters, testing of statistical hypothesis, and regression.

Prerequisites: MTH 125 and MTH 131, or MTH 155

#### MTH 361 Geometry

A group-theoretic and axiomatic study of projective, affine, non-Euclidean, and advanced Euclidean geometry.

Prerequisite: MTH 155

#### MTH 373 Linear Algebra

Finite-dimensional vector spaces, linear transformations, matrices, linear equations, quadratic forms, eigenvalues.

Prerequisite: MTH 155

#### MTH 374 Modern Algebra

A development of the important properties of algebraic structures, including groups, rings, integral domains, and fields.

Prerequisite: MTH 373

#### MTH 405 Special Topics

Prerequisite: Permission of the Department.

## MTH 451 Foundations of Analysis

A rigorous study of continuity, differentiation, integration, and uniform convergence for real-valued functions of a real variable. Prerequisite: MTH 259

#### MTH 461 Topology

Elementary point-set topology with an introduction to homotopy theory.

Prerequisite: MTH 374

#### MTH 490 Independent Study

Prerequisite: Permission of the Department.

#### MODERN LANGUAGES AND LITERATURES

Requirements for a Liberal Arts Major:

Nine courses in the chosen language and its literature (except Chinese) beyond 215 (or 210 with special permission). Ordinarily, these include 261-262, 271, 272, plus five courses in literature at the 400-499 level. Majors are urged to elect courses in other literatures, history, philosophy, art, and linguistics, related to their major. Those planning to do graduate work are strongly urged to begin work in a second foreign language. Prospective majors should have completed at least two years of a single language in high school whereever possible.

Requirements for a Teaching Major:

Eight courses in the chosen language and its literature (except Chinese) beyond 215 (or 210 with special permission). Ordinarily, these include 261-262, 271, 272, plus four courses in literature at the 400-499 level. Twenty semester credits in education also are required.

Requirements for a Teaching Minor:

The Department does not offer a formal teaching minor but students with special language backgrounds who wish to present a teaching minor should contact the Department for permission.

#### CHINESE

## CHE 114-115 Elementary Chinese

An introduction to modern Mandarin Chinese (Kuo-yii), emphasizing both conversation and reading.

#### CHE 214-215 Intermediate Chinese

Continued study of Kuo-yü with increasing emphasis on reading and composition. May be conducted as a tutorial.

Prerequisite: CHE 114-115 or permission of the Instructor.

#### CHE 270 Selections from Chinese Literature

The study of various genres of Chinese literature, classical or modern. May be conducted as a tutorial, and may be repeated for credit.

Prerequisites: CHE 215 and permission of the Instructor.

#### FRENCH

#### FRH 109-110 First Year French

Elements of grammar, pronunciation, and conversation with extensive reading and translation of graded texts. Not ordinarily open to students who have had two or more years of secondary school preparation. Admission contingent upon departmental testing. To be followed by FRH 209-210.

#### FRH 114-115 First Year French

Devoted to aural-oral adaptation, the study of fundamental speech patterns, practice in writing, and the reading of graded texts. Not ordinarily open to students who have had two or more years of secondary school preparation. Admission contingent upon departmental testing. To be followed by FRH 214-215.

#### FRH 209-210 Second Year French

Review of grammar, practice in writing and speaking. Extensive reading and translation of literary and cultural texts.

Prerequisite: FRH 110 or an appropriate placement examination score.

#### FRH 214-215 Second Year French

Devoted to aural-oral adaptation. Review of grammar essentials and more intensive practice in developing speaking and writing skills combined with reading of literary and cultural texts.

Prerequisite: FRH 115 or an appropriate placement examination score.

#### FRH 261-262 French Composition and Conversation

Devoted to increasing the student's command of the language and familiarizing him with idiomatic French. Intensive practice in oral and written composition as well as translation. Techniques of textual analysis and exposition are introduced. Conducted primarily in French

Prerequisite: FRH 210 or FRH 215, or a satisfactory high school entrance record. Especially qualified freshmen may be admitted.

#### FRH 271, 272 Introduction to French Literature

The study of masterpieces of French literature. Classwork and oral and written reports in French. (Continued on next page.)

Prequisite: FRH 210 or FRH 215, or a satisfactory high school entrance record. Especially qualified freshmen may be admitted.

#### FRH 285 Main Currents of French Thought and Literature

Man and society as seen in the works of representative authors since the Renaissance, including Montaigne, Pascal, Molière, Voltaire, Rousseau, Zola, Gide, Sartre or others. Lectures and readings in English. Not open to French majors.

Prerequisite: UC 017

#### FRH 301 French Phonetics and Diction

Elements of the sound system of French with intensive oral practice based on practical and cultural topics. Some written work. Designed primarily for students planning to teach French at the elementary and secondary levels.

Prerequisite: FRH 262

#### FRH 385 Principal Trends in Modern France

Intellectual tendencies from Bergsonism to Existentialism, as reflected in the works of authors such as Proust, Gide, Mauriac, Malraux, Camus, Sartre and others. Lectures and readings in English. Not open to French majors.

Offered in alternate years.

Prerequisite. Major Standing in any department and permission of the Instructor.

#### FRH 411 Literature of the French Renaissance

Philosophical and esthetic ideas in the works of the principal authors of the period, including Marot, Marguerite de Navarre, Rabelais, the Pléiade, Montaigne, and d'Aubigné. Conducted in French.

Offered in alternate years. Prerequisite: FRH 272

## FRH 421, 422 Seventeenth Century French Literature

FRH 421 deals with the development and character of French classicism. Descartes, Pascal, the novels of D'Urfé and Mme de La Fayette, the theatre of Corneille and Racine.

FRH 422 is principally a study of Molière and La Fontaine. Selections from the great prose writers: La Rochefoucauld, Mme de Sévigné, Bossuet, La Bruyère, Fénélon, Saint-Simon, Bayle, and Fontenelle. These courses are offered in alternate years; conducted in French.

Prerequisite: FRH 272

## FRH 431, 432 Eighteenth Century French Literature

FRH 431 deals with the development of the philosophical spirit from Bayle to Voltaire. The interplay between France and England. The comedy of Marivaux and Beaumarchais and developments in the novel.

FRH 432 deals with political, social, and ethical thought of the Enlightenment. The Encyclopedists and later *Philosophes*. Primarily a study of Montesquieu, Diderot, and Rousseau, including the origins of Romanticism. These courses are conducted in French and are offered in alternate years.

Prerequisite: FRH 272

## FRH 441, 442 Nineteenth Century French Literature

FRH 441 is concerned with the flowering of Romanticism and the beginnings of Realism. Novelists, dramatists, poets, and essayists, including Chateaubriand, Lamartine, Hugo, Vigny, Musset, Nerval, and Stendhal.

FRH 442 deals with the realistic novel, review of the Parnassian poets and the problem play, and the esthetics of naturalism. The relation of literature to the philosophical, political, and social ideas of the time. Primarily a study of Balzac, Flaubert, Zola, the Goncourt, and de Maupassant.

Offered in alternate years. Prerequisite: FRH 272

#### FRH 443 French Poetry of the Symbolistic Movement

The esthetics and poetic innovations of Symbolism. Study of the theoretical writings and poetry of Baudelaire, Verlaine, Rimbaud, and Mallarmé. Review of the legacy of Symbolism. Conducted in French. Offered in alternate years.

Prerequisite: FRH 272

## FRH 451 Twentieth Century French Novel

Developments in the novel since the turn of the century. Primarily a study of Proust, Gide, Mauriac, Malraux, Camus, Sartre, and representative authors of the new school. Conducted in French.

Offered in alternate years. Prerequisite: FRH 272

## FRH 452 Twentieth Century French Theatre

Drama since the *Théâtre Libre*. Theatrical innovations and reforms of Copeau, Jouvet, Baty, Dullin, and others. Primarily a study of Claudel, Giraudoux, Anouilh, Montherlant, Camus, Sartre, and the recent experiments of Ionesco and Beckett. Conducted in French. Offered in alternate years.

Prerequisite: FRH 272

## FRH 453 Twentieth Century French Poetry

French poetry since the turn of the century. The legacy of Symbolism, Dadaism, Surrealism, *la poésie pure*, and the principal themes of contemporary poetry. Primarily a study of Apollinaire, Claudel, Valéry, Eluard, Aragon, and St. John-Perse. Conducted in French. Offered in alternate years.

Prerequisite: FRH 272

#### FRH 480 Seminar in French Literature

Study of individual authors, selected themes or critical problems. Prerequisites: Major Standing in French and permission of the Instructor.

#### FRH 490 Independent Reading and Research

Directed individual research and reading designed for advanced French majors. May be taken for 4 or 8 credits per semester and may be taken for one or more semesters.

Prerequisite. Permission of the Department.

#### GERMAN LANGUAGE AND LITERATURE

#### GRM 101-102 Reading in German

Designed to help students acquire a reading knowledge of German. Material ranges from elementary and intermediate texts of general interest to specialized texts in the student's major field. This course may not be offered as partial fulfillment of the degree requirement in foreign languages by students who must take the regular (more than two semester) courses, but may be taken as an elective with special permission.

#### GRM 114-115 First Year German

Devoted to aural-oral adaptation, the study of fundamental speech patterns, practice in writing, and the reading of graded texts. Not ordinarily open to students who have had two or more years of secondary school preparation.

#### GRM 214-215 Second Year German

Review of grammar essentials and more intensive practice in developing speaking and writing skills, combined with reading of literary and cultural texts.

Prerequisite: GRM 115 or an appropriate placement examination score.

## GRM 261-262 German Composition and Conversation

Devoted to increasing the student's command of the language and familiarizing him with idiomatic German. Intensive practice in oral and written composition as well as translation. Techniques of textual analysis and exposition are introduced. Conducted primarily in German.

Prerequisite: GRM 215 or a satisfactory high school entrance record. Especially qualified freshmen may be admitted.

#### GRM 271, 272 Introduction to German Literature

Masterpieces of German literature. Classwork and oral and written reports in German.

Prerequisite: GRM 215 or a satisfactory high school entrance record. Especially qualified freshmer, may be admitted.

#### GRM 285 Main Currents of German Thought and Literature

A survey of German culture from the Enlightenment to the present day, as reflected in philosophical, critical, and literary works from the various eras. Lectures and readings in English. Not open to German majors.

Offered in alternate years.

Prerequisite: UC 017

#### **GRM 301 German Phonetics and Diction**

Elements of the sound system of German with intensive oral practice based on practical and cultural topics. Some written work. Designed primarily for students planning to teach German at the elementary and secondary levels.

Prerequisite: GRM 262

#### GRM 305 Introduction to Germanic Philology

Historical development of the German language, the sound shifts, linguistic changes, dialects. Offered in alternate years.

Prerequisite: GRM 262

#### GRM 385 Modern Intellectual Developments in Germany

A survey of intellectual history since the turn of the century, the heritage of Marx, Nietzsche, and Freud, the existentialist philosophers Heidegger and Jaspers, the art and literature of Expressionism and succeeding periods. Lectures and readings in English. Not open to German majors.

Offered in alternate years.

Prerequisite: Major Standing in any department and permission of the Instructor.

## GRM 421, 422 The Age of Goethe

GRM 421 deals with representative works of Goethe (exclusive of Faust), Schiller, and their contemporaries, which exemplify the intellectual and artistic currents of the Enlightenment, Storm and Stress, and Classicism.

GRM 422 is a detailed study of Faust I and II, its position in German literature and its importance as a masterpiece of world literature. Prerequisite: GRM 272

#### GRM 431 German Romanticism

The poetry and prose of Romanticism, the philosophical bases for the movement, its origins, development, and decline. Offered in alternate years.

Prerequisite: GRM 272

## GRM 432 German Prose of the Nineteenth Century

The novels and Novellen from Poetic Realism to the end of the century are examined in detail. Offered in alternate years. Prerequisite: GRM 272

## GRM 433 Kleist, Grillparzer, Hebbel

Intensive reading in the works of these dramatists, with emphasis on textual interpretation, philosophic and esthetic explication, and criticism. Offered in alternate years.

Prerequisite: GRM 272

## GRM 434 Naturalism, Impressionism, Expressionism

German literature of the era 1880-1920, with analysis of selected texts from these periods. Offered in alternate years.

Prerequisite: GRM 272

#### **GRM 451** Modern Prose Fiction

A survey of novels and Novellen from World War I to the present, stressing developments in these genres since World War II.

Offered in alternate years.

Prerequisite: GRM 272

#### GRM 480 Germanistisches Proseminar

Intensive investigation of some special aspects of German literature, stressing research and independent study.

Prerequisites: Major Standing in German and permission of the Instructor.

#### GRM 490 Independent Reading and Research

Directed individual research and reading designed for advanced German majors. May be taken for 4 or 8 credits per semester and may be taken for one or more semesters.

Prerequisite. Permission of the Department.

#### RUSSIAN LANGUAGE AND LITERATURE

#### RUS 114-115 First Year Russian

Devoted to aural-oral adaptation, the study of fundamental speech patterns, practice in writing, and the reading of easy Russian texts. Not ordinarily open to students who have had two or more years of secondary school preparation.

#### RUS 214-215 Second Year Russian

Review of grammar essentials and more intensive practice in developing speaking and writing skills combined with reading of literary and cultural texts.

Prerequisite: RUS 115 or an appropriate score on placement examination.

## RUS 261-262 Russian Composition and Conversation

Devoted to increasing the student's command of the language and familiarizing him with idiomatic Russian. Intensive practice in oral and written composition as well as translation. Techniques of textual analysis and exposition. Conducted primarily in Russian.

Prerequisite: RUS 215 or a satisfactory high school entrance record. Especially qualified freshmen may be admitted.

#### RUS 271, 272 Introduction to Russian Literature

The study of masterpieces of Russian literature. Classwork and oral and written reports in Russian.

Prerequisite: RUS 215 or a satisfactory high school entrance record. Especially qualified freshmen may be admitted.

#### RUS 285 Main Currents of Russian Literature

Selected works by authors from the beginning of the nineteenth century to the present, including Pushkin, Lermontov, Gogol, Turgenev, Tolstoy, Dostoevsky, Chekhov, Gorky, Bunin, Sholokhov, and Pasternak. Lectures and readings in English. Not open to Russian majors.

Offered in alternate years. Prerequisite: UC 017

#### RUS 301 Russian Phonetics and Diction

Elements of the sound system of Russian with intensive oral practice based on practical and cultural topics. Some written work. Designed primarily for students planning to teach Russian at the elementary and secondary levels.

Prerequisite: RUS 262

#### RUS 425 Pushkin and His Time

Primarily a study of Pushkin's works. Includes selections by Pushkin's predecessors and contemporaries such as Derzhavin, Batyushkov, Zhukovsky, Venevitinov, Delvig, and Maratynsky. Conducted in Russian. Offered in alternate years.

Prerequisite: RUS 272

#### RUS 431 Russian Poetry of the Nineteenth Century

Russian poetry from Pushkin to the beginning of symbolism with special emphasis on Lermontov, Tiutchev, Fet, Tolstoy, and Nekrassov. Conducted in Russian. Offered in alternate years.

Prerequisite: RUS 272

## RUS 432 Russian Realism from Gogol to Gorky

Development of ideas and the evolution of style in the novel and short story from Gogol to Gorky (excluded). Includes selections from Herzen, Goncharov, Turgenev, Saltykob-Shchedrin, Leskov, Garshin, and Korolenko. Conducted in Russian. Offered in alternate years.

Prerequisite: RUS 272

## RUS 433 Survey of Nineteenth Century Russian Drama

Principal dramatic works from Griboyedov through the turn of the Century. Includes review of the development of dramatic techniques. Conducted in Russian. Offered in alternate years.

Prerequisite: RUS 272

#### **RUS 441 Tolstoy**

Study of Tolstoy's novels, short stories, and essays. Tolstoy the moralist and the influence of his philosophy on Russian thought and letters. Conducted in Russian. Offered in alternate years.

Prerequisite: RUS 272

## RUS 442 Dostoevsky

Study of Dostoevsky's literary and ideological evolution. The influence of Dostoevsky as psychological novelist and moral philosopher on Russian thought and letters. Conducted in Russian. Offered in alternate years.

Prerequisite: RUS 272

## RUS 443 Chekhov and Gorky

Study of prose and dramatic writings of Chekhov and Gorky with emphasis on the development of ideas in the late nineteenth and early twentieth centuries. Conducted in Russian. Offered in alternate years.

Prerequisite: RUS 272

#### RUS 446 The Russian Silver Age

Literary trends as reflected in the prose and poetry of the late nineteenth and early twentieth centuries. Includes, among others, Kuprin, Leonid Andreyev, Audrey Bely, and Blok. Conducted in Russian. Offered in alternate years.

Prerequisite: RUS 272

## RUS 447 Early Soviet Writers and Russian Emigres

Selected works of writers of the 1920's and 1930's, such as Sholokhov, Leonon, Bunin, Remizov, and Zaitsev. Conducted in Russian. Offered in alternate years.

Prerequisite: RUS 272

## RUS 451 Contemporary Soviet Literature

Study of the literary situation shortly before and since World War II. Includes writers such as K. Simonov, Tvardovsky, Ehrenburg, V. Grossman, V. Panova, Pasternak, and others. Conducted in Russian. Offered in alternate years.

Prerequisite: RUS 272

#### RUS 480 Seminar in Russian Literature

Intensive investigation of some aspect of Russian literature. Prerequisites: Major Standing in Russian and permission of the Instructor.

## RUS 490 Independent Reading and Research

Directed individual research and reading designed for advanced Russian majors. May be taken for 4 or 8 credits per semester and may be taken for one or more semesters.

Prerequisite. Permission of the Department.

#### SPANISH LANGUAGE AND LITERATURE

#### SPN 109-110 First Year Spanish

Elements of grammar, pronunciation, and conversation with extensive reading and translation of graded texts. Not ordinarily open to students who have had two or more years of secondary school preparation. Admission contingent upon departmental testing. To be followed by SPN 209-210.

#### SPN 114-115 First Year Spanish

Devoted to aural-oral adaptation, the study of fundamental speech patterns, practice in writing, and the reading of graded texts. Not ordinarily open to students who have had two or more years of secondary school preparation. Admission contingent upon departmental testing. To be followed by SPN 214-215.

#### SPN 209-210 Second Year Spanish

Review of grammar, practice in writing and speaking. Extensive reading and translation of literary and cultural texts.

Prerequisite: SPN 110 or an appropriate score on a placement examination

#### SPN 214-215 Second Year Spanish

Devoted to aural-oral adaptation. Review of grammar essentials and more intensive practice in developing speaking and writing skills combined with reading of literary and cultural texts.

Prerequisite: SPN 115 or an appropriate score on a placement examination

#### SPN 261-262 Spanish Composition and Conversation

Devoted to increasing the student's command of the language and familiarizing him with idiomatic Spanish. Intensive practice in oral and written composition as well as translation. Techniques of textual analysis and exposition are introduced. Conducted primarily in Spanish.

Prerequisite: SPN 210 or SPN 215, or a satisfactory high school entrance record. Especially qualified freshmen may be admitted.

#### SPN 271, 272 Introduction to Spanish Literature

The study of masterpieces of Spanish literature. Classwork and oral and written reports in Spanish.

Prerequisite: SPN 210 or SPN 215, or a satisfactory high school entrance record. Especially qualified freshmen may be admitted.

#### SPN 285 Survey of Spanish Literature

Principal dramatists, novelists, and essayists from the Golden Age to the present, including Cervantes, Lope de Vega, Tirso de Molina, Galdos, Baroja, Unamuna, Ortega y Gasset, Cela or others. Lectures and readings in English. Not open to Spanish majors.

Offered in alternate years.

Prerequisite: UC 017

#### SPN 301 Spanish Phonetics and Diction

Elements of the sound system of Spanish with intensive oral practice based on practical and cultural topics with some written work. Designed primarily for students planning to teach Spanish at the elementary and secondary levels.

Prerequisite: SPN 262

## SPN 385 Intellectual Trends in Modern Spain

The struggle between traditionalism and liberalism, its background and manifestations in Spanish thought and letters from the turn of the century through the Civil War. Emphasis on Unamuno, Ortega y Gasset and present-day writers, including Cela, Goytisolo, and Laforet. Lectures and readings in English. Not open to Spanish majors.

Offered in alternate years.

Prerequisite: Major Standing in any department and permission of the Instructor.

#### SPN 411 Cervantes

Detailed study of the literary value and philosophical connotations of the Quijote. The Novelas Ejemplares and dramatic works, especially the Entremeses. Conducted in Spanish. Offered in alternate years.

Prerequisite: SPN 272

## SPN 421 Spanish Novel of the Golden Age

A detailed study of the picaresque novel, the pastoral novel of Montemayor, and selections from other prose writers, including Vélez de Guevara and Zayas. Conducted in Spanish. Offered in alternate years.

Prerequisite: SPN 272

## SPN 422, 423 Spanish Drama of the Golden Age

SPN 422 places special emphasis on the role of Lope de Vega in the development of Spanish drama. Includes Tirso de Molina and the Don Juán legend, Ruiz de Alarcón, Guillén de Castro and others. Conducted in Spanish.

SPN 423 places special emphasis on Calderón. Includes Rojas Zorrilla, Moreto, Quiñones de Benavente, and selections from the *autos sacramentales*. Conducted in Spanish.

Offered in alternate years. Prerequisite: SPN 272

## SPN 431 The Romantic Movement in Spanish Literature

Developments in drama, poetry, and the novel. Includes Martínez de la Rosa, Hartzenbusch, Duque de Rivas, Espronceda, Zorrilla, Fernández y González, Gil y Carrasco, and others. Conducted in Spanish. Offered in alternate years.

Prerequisite: SPN 272

#### SPN 432 Spanish Realism and Naturalism

Emphasis on novelists such as Fernán Caballero, Galdós, Pardo Bazán, Palacio Valdés. Selections from principal poets and dramatists, including Becquer, Echegaray, and others. Conducted in Spanish. Offered in alternate years.

Prerequisite: SPN 272

#### SPN 441 The Generation of 1898

New modes of thought and aspirations as reflected in the works of novelists, poets, and thinkers such as Baroja, Azorín, Valle-Inclán, Pérez de Ayala, Unamuno, Ortega y Gasset, Maeztú, and M. Machado. Conducted in Spanish.

Prerequisite: SPN 272

#### SPN 451 The Modernista Movement in Spanish-American Literature

Principally a study of the prose and poetry of Rubén Darío and his influence. Selections from authors such as Gutiérrez Nájera, Martí, Rodó, Santos Chocano, and Amado Nerva. Conducted in Spanish. Offered in alternate years.

Prerequisite: SPN 272

#### SPN 461 Modern Spanish-American Literature

Selected works of Spanish-American authors after the "modernista" movement, including José Vasconcelos, Alfonso Reyes, Horacio Quiroga, Rómulo Gallegos, Gabriela Mistral, and Pablo Neruda. Conducted in Spanish. Offered in alternate years.

Prerequisite: SPN 272

## SPN 471 The Contemporary Spanish Novel

Esthetic innovations and themes in the works of authors such as Cela, Zunzunegui, Laforet, Gironella, Goytisolo, and others. Conducted in Spanish. Offered in alternate years.

Prerequisite: SPN 272

## SPN 480 Seminar in Spanish Literature

Study of individual authors, selected themes, or critical problems. Prerequisites: Major Standing in Spanish and permission of the Instructor.

#### SPN 490 Independent Reading and Research

Directed individual research and reading designed for advanced Spanish majors. May be taken for 4 or 8 credits per semester and may be taken for one or more semesters.

Prerequisite: Permission of the Department.

#### MUSIC

Prospective music majors should consult the Music Department before their first semester registrations. (Continued on next page.)

Requirements for a Liberal Arts Major in Music Theory and Composition:

Nine departmental courses beyond UC 049, of which six are in music theory and composition, and three are in music history and literature. Corequisites include solo performing proficiency meeting the two-year standards recommended by the National Association of Schools of Music, and minimum keyboard facility. Prospective music majors should discuss with the Music Department at the time of their admission to the University the methods for satisfying these requirements. Participation each semester in at least one recognized performing group at the University is also required. German is the recommended language for satisfying the University Course language requirements.

Requirements for a Liberal Arts Major in Music History and Literature:

Nine departmental courses beyond UC 049, of which five are in music theory and composition, and four are in music history and literature. Other requirements are the same as for the preceding major.

Requirements for a Teaching Major in Music:

Eight departmental courses beyond UC 049, of which five are in music theory, two are in music history and literature, and one is MUS 351. Other requirements are the same as for the music theory major. Twenty semester credits in education also are required. This major will normally certify students for both elementary and secondary school teaching.

## MUS 111 Beginning Musicianship

An introduction to the techniques of reading and writing music, notation, pitch, and rhythmic organization, elementary sight singing, dictation, and keyboard familiarity. An elective course for nonmusic majors.

## MUS 211-212-311-312 Music Theory

A four-semester sequence designed to develop sound musicianship, with constant emphasis on its usefulness in study, performance, and teaching. Included are such topics as music reading, ear training and dictation, written harmony, keyboard harmony, form and analysis, and arranging.

Prerequisite. Permission of the Instructor.

## MUS 321 Music History and Literature to 1800

History and literature of music through the eighteenth century classicism. Suggested as an elective for nonmusic majors. Prerequisite: UC 049

## MUS 322 Music History and Literature Since 1800

History and literature of music from 1800 to the present. Suggested as an elective for nonmusic majors.

Prerequisite: Permission of the Instructor.

#### MUS 331 Opera and Music Drama

A study of music drama from the lyric drama of the ancient Greeks to the present. Suggested as an elective for nonmusic majors. Prerequisite: UC 049

## MUS 332 Symphonic Music

A study of symphonic music from the pre-classic compositions of C.P.E. Bach to the present. Suggested as an elective for nonmusic majors.

Prerequisite: UC 049

## MUS 351-352 Vocal and Choral Techniques

The methods and materials of singing in groups and individually. Includes singing lessons as well as the subject matter contained in courses usually called choral conducting, choral literature, vocal methods, and vocal materials.

Prerequisites: MUS 312 and MUS 322

## MUS 371-372 Keyboard Technique

Designed to develop the basic keyboard facility essential to the equipment of any musician and to acquaint him with keyboard literature. Students planning to register for this course should indicate such intention to the Music Department at the time of their first registration in the University.

Prerequisite. Permission of the Instructor.

## MUS 411-412 Advanced Music Theory

An integrated study of the materials of music and the techniques of its composition. Includes elementary and advanced aspects of courses usually called form and analysis, counterpoint, orchestration, and composition.

Prerequisite: MUS 312

## MUS 424 Music in the Baroque Era

History of music from the beginning of the Monodic Revolution, c. 1600, through the death of Handel. Suggested as an elective for nonmusic majors.

Prerequisite: UC 049

#### MUS 426 Music in the Classic and Romantic Eras

History of music from the early rococo style through Wagner. Suggested as an elective for nonmusic majors.

Prerequisite: UC 049

## MUS 428 Post-Romantic and Contemporary Music

History of music since Wagner. Suggested as an elective for non-music majors.

Prerequisite: UC 049

#### PHILOSOPHY

Requirements for a Liberal Arts Major:

Nine departmental courses, including PHL 201, 204, 205, 206, and 490. Knowledge beyond the elementary level in at least one area outside philosophy is required. This condition normally is met by taking four or more courses in the same field exclusive of the University Courses. These are chosen by the student in consultation with his adviser.

In conjunction with PHL 490, each major must pass an oral examination on the work of one major philosopher whom he has chosen with the approval of the Department.

## PHL 201 Introduction to Philosophical Thinking

Several problems within the scope of philosophical inquiry are intensively examined. Different problems are chosen each year, but typical examples are: the nature and grounds of political obligation; the possibility of demonstrating God's existence; grounds for belief in the evidence of the senses. The emphasis is on active critical and constructive philosophical thinking on the part of the students. Prerequisite: UC 034

## PHL 204, 205, 206 Introduction to Systematic Philosophy

The development of systematic philosophical thought in the Western world from the age of pre-philosophical mythical and religious thinking in the Mediterranean region to the present time. The three terms are as follows: the classical Greco-Roman period, from Homer to Boethius (PHL 204); the religious period, from St. Augustine to Leibniz (PHL 205); the scientific period, from Francis Bacon to the present (PHL 206). Each term may be taken separately, although together they present a continuous development. Extensive reading is done in original writings of major philosophers. Prerequisite: UC 035

## PHL 301, 302 Introduction to Logic

The first semester deals with traditional theories of logic and language; concentrating on those of Aristotle and J. S. Mill. The second semester is on the theories and problems of the last hundred years, including the development of a degree of facility with symbolic techniques.

Prerequisite: UC 035. PHL 201 is recommended.

#### PHL 317 Ethics

The questions of right action, of duty and obligation, and of the best life for man are discussed, with the aid of readings in major examples of ethical analysis, from the time of the ancient Greeks to the present. An effort is made to evaluate conflicting ethical theories. Prerequisite: UC 035. PHL 201 is recommended.

#### PHL 319 Esthetics

The significance of the literary, visual, and musical arts for a philo-

sophical understanding of man is developed through inquiry into the factors entering into the creating and the intelligent judgment of a work of art, such as Aristotle's Poetics, Kant's Critique of Esthetic Judgment, R. G. Collingwood's Principles of Art, and Dewey's Art as Experience, but a constant effort is made to keep philosophical principles in relation to actual art works.

Prerequisites: UC 014, and UC 047 or UC 049. PHL 201 is rec-

ommended.

#### PHL 321 Theories of Justice, Power, and Freedom

The meanings of these three central concepts in political philosophy, together with several closely related concepts such as those of law, authority and the like, are examined and analyzed through intensive readings in classic writings of political philosophers and through study of especially crucial problems such as the question of segregation. Three main branches of political thought are dealt with: the classical tradition, stemming from Aristotle; the modern Continental European tradition, stemming from Rousseau, Hegel and Marx; and the modern Anglo-American democratic tradition, stemming from Locke, Madison, and others.

Prerequisite: UC 035

## PHL 325 Philosophy of Religion

Various approaches to religious faith and worship in the Western world will be examined, from the traditional arguments for a benevolent Deity to the theories of modern psychologists and anthropologists. A few of the great classics of religious literature — for example, the Book of Job, St. Augustine's Confessions, Pascal's Pensées —will be read and discussed. The approaches of present-day existentialism and positivism to religion will be considered. The course does not strive to produce or confirm any particular point of view other than that of enlightened interest.

Prerequisite: UC 035. PHL 201 is recommended.

## PHL 327 Philosophy of History

A study of various views of the nature and significance of the historical perspective on human affairs as these views are related to general philosophical problems of man, society, time, and truth. The presuppositions of orthodox historians, as well as those of speculative historians such as Toynbee and Spengler, are examined.

Prerequisite: UC 035. PHL 201 is recommended.

## PHL 341 Pragmatism

A critical examination of America's only native philosophical movement, concentrating on the work of five men: Charles Sanders Peirce, William James, Dewey, George Herbert Mead, and Clarence Irving Lewis. The course is philosophical rather than historical, having as its goal an evaluation of pragmatism as a significant philosophical position.

Prerequisite: UC 035. PHL 201 and PHL 206 are recommended.

#### PHL 355 Existentialism

A study of the several types of modern existentialist philosophy, on the basis of readings in the works of Kierkegaard, Sartre, Camus, Jaspers, Heidegger, and Marcel. An attempt is made to remove misconceptions concerning existentialism, and to discover its positive contributions.

Prerequisite: UC 035. PHL 201 and PHL 206 are recommended.

#### PHL 365 Plato

A close study of the major dialogues of Plato, with special attention to the later, more didactic ones, and to the view of the world that emerges from them.

Prerequisite: PHL 204

#### PHL 366 Aristotle

A careful study of the major works of Aristotle, with special attention to his theoretical works and to the theory of nature and mind that is worked out in them.

Prerequisite: PHL 204

#### PHL 381 Kant

An intensive study of Kant's major works: the Critique of Pure Reason, the Critique of Practical Reason, and the Critique of Judgment. An attempt is made to indicate and assess the profound influence of the Critique of Pure Reason in particular on modern philosophy.

Prerequisite: PHL 206

## PHL 490 Philosophical Research

The goal of the study of philosophy is the independent practice of philosophical inquiry. In this final phase of the program for philosophy majors, students have an opportunity to formulate philosophical questions and to progress toward carefully considered solutions. The research is carried on in consultation with and under the supervision of a staff member, and the results are embodied in a written paper.

Prerequisite: Major Standing in philosophy.

#### PHYSICS

Requirements for a Liberal Arts Major:

Nine courses in physics and six collateral courses in mathematics and chemistry. The four courses in mathematics must include MTH 258; the two courses in chemistry are CHM 114-115.

Requirements for a Teaching Major:

Eight courses in physics, plus a group minor requiring four courses in mathematics plus CHM 114-115. Twenty semester credits in education also are required.

Requirements for a Teaching Minor:

Five courses in physics.

#### PHY 251-252 Introductory Physics

An introduction to mechanics, electricity and magnetism, sound, optics, heat, and modern physics for students majoring in mathematics, science, or engineering science; with laboratory.

Prerequisites: MTH 154 for PHY 251; MTH 155 for PHY 252.

#### PHY 332 Optics

Geometrical optics, optical instruments, wave theory of reflection, refraction, interference, diffraction, and polarization of light; with laboratory.

Prerequisite: PHY 252

#### PHY 344 Electric Circuits

Resistance, inductance, magnetic circuits, transformers, capacitance, alternating currents, transient analysis, nonsinusoidal voltages, network analysis, electrical measurements; with laboratory.

Prerequisites: PHY 251 and MTH 155

#### PHY 346 Electronics

Vacuum tubes, transistors, power supplies, A.C. equivalent circuits, amplifiers, feedback, and oscillators; with laboratory.

Prerequisite: PHY 344

#### PHY 347 Advanced Electronics

Selected topics in the analysis and design of electronic circuits; with laboratory.

Prerequisite: PHY 346

#### PHY 361 Mechanics

Applications of Newton's laws to particles, systems of particles, oscillators, central forces, accelerated reference frames, and rigid bodies.

Prerequisites: PHY 251 and MTH 258

#### PHY 405 Special Topics

Prerequisite: Permission of the Department.

#### PHY 421 Thermodynamics

The zeroth, first, and second laws of thermodynamics with applications to pure substances. Introduction to the kinetic theory of gases and to statistical mechanics.

Prerequisites: PHY 251 and MTH 258

#### PHY 445 Electric and Magnetic Fields

Electrostatics including solutions of Laplace's equation, magnetostatics, Maxwell's equations, electromagnetic waves.

Prerequisites: PHY 252 and MTH 258

#### PHY 472 Modern Physics

Relativity, the experimental bases of atomic physics and quantum mechanics, introduction to quantum mechanics; with laboratory. Prerequisites: PHY 252 and MTH 258

#### PHY 473 Advanced Modern Physics

Selected topics in nuclear and solid state physics; with laboratory. Prerequisites: PHY 472 and MTH 259

## PHY 490 Independent Study and Research

Individual readings, conferences, and laboratory work on advanced problems in physics. This course is intended only for students who have shown ability and a thorough understanding of the fundamentals of physics and mathematics.

Prerequisite: Permission of the Department.

#### POLITICAL SCIENCE

Requirements for a Liberal Arts Major:

Nine courses, in addition to UC 052. Seven of the courses are from departmental offerings, and the other two may be drawn from a variety of cognate courses, including PSY 361 and PHL 321.

#### PS 204-205 American Government and Politics

Designed to explore and analyze the organization and operation of American government and politics. PS 204 is devoted to an intensive study of the major characteristics of the American governmental and political system. PS 205 is composed of independent readings and discussions of the major classics in the field.

Prerequisite: UC 052

#### PS 213 World Politics

Intensive interdisciplinary study of concepts and hypotheses basic to the understanding and analysis of relations among nations. The class engages in a mock U.N. exercise and in the analysis of a number of actual cases to gain experience in the application of the hypotheses studied.

Prerequisite: UC 052

## PS 301-302 Comparative Politics

A sequence normally begun in the fifth semester, designed to apply analytical political theory to a study of various types of political systems, both European and non-European.

PS 301 deals with Western-style democracy and concentrates on the British parliamentary system. Some attention also is given to other Continental systems.

PS 302 analyzes authoritarian and dictatorial systems, and gives particular attention to the Nazi and fascist systems of Europe and recent dictatorships in Latin America.

Prerequisite: UC 052

#### PS 315 Opinion, Politics, and Diplomacy in the United States

Study of the foreign policy issues and challenges confronting the United States in the Nuclear Age, in the light of the historical evolution of American diplomacy, and of the limitations imposed upon foreign policy-makers by public opinion and the exigencies of domestic politics.

Prerequisite: PS 213

#### PS 421 Systematic Political Analysis

Analysis of systematic theories formulated by contemporary political scientists.

Prerequisite: UC 052

#### PS 441 Law and Politics

The exploration of the role of judges and courts in the American political system.

Prerequisite: UC 052

#### PS 480 Senior Essay

Individual projects to be arranged with the political science staff. Prerequisite: Permission of the Department.

#### **PSYCHOLOGY**

Requirements for a Liberal Arts Major:

Nine departmental courses, including UC 054 and PSY 246. Normally, PSY 351, 353, 361, and 363 are included in the major program.

#### PSY 246-247 Foundations of Contemporary Psychology

An introduction both to basic principles and the most recent formulations in psychology. Topics include the central psychological processes of attending, perceiving, learning, thinking, remembering, as well as a study of social behavior and the development and organization of personality.

PSY 247 may not be elected by students who have had UC 054.

## PSY 251 Abnormal Psychology

The psychodynamics of abnormal behavior, clinical types, methods of investigation, and principles of psycho-therapy. Occasional field trips to nearby institutions.

Prerequisite: UC 054

## PSY 261 Foundations of Organizational Behavior

Empirical and theoretical approaches to understanding human behavior in complex organizations.

Prerequisite: UC 054

## PSY 351 Experimental Psychology

Techniques and findings in the investigation of the basic psychological processes of sensation, perception, learning, memory, and thinking are studied.

Prerequisite or corequisite: Two courses in psychology and PSY 361.

#### PSY 353 Motivation and Personality

The study of the nature of motivation and emotion, and the organization of personality, with emphasis on research approaches and methods of measurement.

Prerequisite. Three courses in psychology.

#### PSY 361 Statistics and Research Design

A survey of the principal statistical procedures commonly employed in research in the social sciences. Emphasis is given to the design of experimental studies, problems of sampling and control of variables, and psychological measurement.

Prerequisite: Two years of high school mathematics are recom-

mended.

## **PSY 363 Research Projects**

A course providing opportunity for individual projects of research in the fields of perception, learning, motivation, personality, or social psychology.

Prerequisite: Three courses in psychology including PSY 361, or

permission of the Department.

## PSY 421 Advanced Experimental Psychology

Empirical and theoretical investigation of issues in learning, perception, thinking, physiological psychology, and animal behavior, with research projects.

Prerequisites: PSY 351, 361, and 363

## PSY 423 Advanced Social Psychology

Problems of human social behavior are approached through intensive study of the research literature and by carrying out further research. Prerequisite: Three courses in psychology including PSY 361.

## PSY 427 Human Personality

The development and functioning of the adult person, with emphasis on experimental and clinical approaches to understanding. Prerequisite: Four courses in psychology including PSY 353 and 361.

## PSY 431 Historical and Contemporary Issues

Major theoretical issues in psychology, approached by the study of their historical background, with intensive reading in the current literature.

Prerequisites: Major Standing in psychology and permission of the Department.

## PSY 435 Psychology of Communication

Selected topics from among the following: the nature and origin of language, structural syntactics and semantics and their psychological significance, translation, persuasion, mass communication, including its sources, determinants, organization, messages, audience, and effects.

Prerequisite: Three courses in psychology including PSY 361.

#### PSY 490 Individual Research

Individual research projects under supervision of a member of the Department. May be taken for one or two semesters.

Prerequisite: Permission of the Instructor.

#### **PSY 495 Special Topics**

Seminar for majors.

Prerequisites: Major Standing in psychology and permission of the Instructor.

#### RUSSIAN

See Modern Languages and Literatures, Pages 84-86.

#### SCIENCE

#### SCI 305 Science in the Elementary School

Content and methodology appropriate to students in the elementary education program.

Prerequisite: Major Standing in elementary education.

#### SCI 405 Selected Topics in Science

Advanced study in special areas.

Prerequisite: Permission of the Instructor.

#### SOCIOLOGY AND ANTHROPOLOGY

Requirements for a Liberal Arts Major:

Nine departmental courses are required, including UC 058, AN 102, SOC 311, and 321. Of the remaining five, two must be chosen from SOC 231, 254, 255, and 355; two others must be chosen from SOC 333, 341, and AN 351.

## AN 101 Introduction to Physical Anthropology and Archaeology

An intensive study, including the primates, fossil man and evolution, problems of heredity and genetics, and problems of race and racial classification.

## AN 102 Introduction to Cultural Anthropology

An intensive study, including the nature of culture, and methods and theories of cultural anthropology. Characteristic features of language, family life, rituals, and values of tribal peoples in many parts of the world are considered. Note: Prospective sociology and anthropology majors should take this course in the first or second semester.

## SOC 231 American Minority Groups

A study of racial, nationality, and religious groups, with an emphasis on their historical development, special problems of adjustment and assimilation, and specific present-day problems and trends. Prerequisite: UC 058

## SOC 254 American Community

The social analysis of small towns, cities, and suburban communities in the United States. Family organization, social class, clubs and other associations, religion, political belief and behavior, and occupations are included.

Prerequisite: UC 058

#### SOC 255 Industrial Sociology

A study of: the relationship between industrial and business organizations and the community; the history of industrial sociology; the study of occupations; the social structure of business and industrial organizations, labor unions, and informal work groups; and the direction of occupational life in America.

Prerequisite: UC 058

## SOC 311 Sociological Theory

A critical examination of basic concepts of sociology and their current theoretical and empirical status. Writings of Marx, Weber, Durkheim, Cooley, G. H. Mead, Park, Lasswell, and Parsons will be examined. The object of the course is to stimulate evaluation of existing theories and to explore the major tasks of synthesis.

Prerequisite: UC 058

#### SOC 321 Social Research

Comprehensive survey of the various research strategies and techniques in sociological research. Emphasis will be placed on the methodological problems in current social research.

Prerequisite: UC 058

#### SOC 333 Social Stratification

A comparative study of the class, caste, status, and power structures in various types of human societies. Such topics as theories of social stratification, inequality and reward distribution, opportunities for mobility, and conflict over rewards are discussed.

Prerequisite: UC 058

## SOC 341 Social Change

The prediction and explanation of social changes in society. Special attention is given to such mechanisms of change as crowds, publics, mass movements, and social movements. Implications and research findings for social action are discussed.

Prerequisite: UC 058

## AN 351 Social Organization

The comparative study of family and kinship, social class and caste, associations, and political organization, with emphasis on non-European societies. Theories accounting for cultural differences in social organization are considered.

Prerequisite: UC 058 or AN 102

## SOC 355 The Family

A comparative and historical treatment of the background of contemporary problems of this institution. Functions, forms, and processes are discussed.

Prerequisite: UC 058

## SOC 471 Principles of Social Work

A preprofessional course in social work, designed as an introduction to the field. Emphasis is on theories which underlie practice. Prerequisites: UC 058 and permission of the Instructor.

## SOC 480 Readings in Sociology

A tutorial course in which the student will pursue a course of reading and discussion with the Instructor.

Prerequisites: UC 058 and permission of the Instructor.

## SOC 490 Independent Study and Research

Prerequisite: Permission of the Instructor.

#### SPANISH

See Modern Languages and Literatures, Pages 87-89.



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