

Oakland
University

Under-
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Catalog
77/78

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Oakland University is a legally autonomous state institution of higher learning. Legislation creating Oakland University as an independent institution, separate from Michigan State University, was established under Act. No. 35, Public Acts of 1970. The university is governed by an eight-member Board of Trustees appointed by the Governor with the advice and consent of the State Senate. The president of the university is appointed by the Board of Trustees and is an ex-officio member without vote. The board also appoints a secretary and treasurer.

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REFERENCE



ABS 4589.1.20

CORRESPONDENCE DIRECTORY

Mailing address: Oakland University, Rochester, Michigan 48063. Officers of the university will be pleased to answer questions. For prompt attention address specific inquiries to the officers listed below. Telephone numbers are also included (area code 313).

ADMISSIONS INFORMATION AND BULLETINS

Undergraduate Students — Director of Admissions 377-3360
Graduate Students — Dean of Graduate Study 377-3166

BUSINESS MATTERS

Vice President for Business Affairs 377-2240

CAREER ADVISING AND PLACEMENT

Director, Placement Office 377-3250

CONTINUING EDUCATION

Dean of Continuing Education 377-3166

EDUCATIONAL PROGRAM, TRANSFER

Registrar 377-3450

LOANS AND ON-CAMPUS EMPLOYMENT

Financial Aid Officer 377-3370

SCHOLARSHIPS AND GRANTS

New Students — Director of Admissions
Other Undergraduates — Director of Admissions
Graduate Students — Dean of Graduate Study

STUDENT AFFAIRS AND SERVICES

Undergraduate Students — Vice President for Campus and Student Affairs 377-3166
Graduate Students — Dean of Graduate Study 377-3166

STUDENT HOUSING

Director of Residence Halls 377-3570

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Rochester,
Michigan

All data in this catalog applies to the 1977-78 academic year and reflects information as it was available on the publication date. However, all announcements herein are subject to revision at the discretion of the university.

June, 1977

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This catalog describes in detail the undergraduate offerings at Oakland University, necessary information on admission, fees, and support programs, along with general information on the university. For a more detailed description of undergraduate courses offered in a specific semester, see the *Undergraduate Course Selection Guide*. The university also offers an extensive graduate program at the master's level and a limited offering at the doctoral level. For information on graduate programs, consult the *Oakland University Graduate Study Catalog*.

1977-1978 ACADEMIC CALENDAR

Fall, 1977

Registration	M, T, W	August 29, 30, 31
Classes Begin	5 p.m. W	August 31
Labor Day Holiday	M	September 5
Fall Commencement	Saturday	September 17
Thanksgiving Recess Begins	5 p.m. W	November 23
Classes Resume	8 a.m. M	November 28
Classes End	10 p.m. M	December 12
Exams Begin	9 a.m. T	December 13
Exams End	10 p.m. F	December 16

Winter, 1978

Registration	Th, F	January 5, 6
Classes Begin	8 a.m. M	January 9
Winter Recess Begins	5 p.m. F	March 3
Classes Resume	8 a.m. M	March 13
Classes End	10 p.m. F	April 21
Exams Begin	9 a.m. M	April 24
Exams End	10 p.m. Th	April 27

Spring, 1978

Registration	M	May 1
Classes Begin	5 p.m. M	May 1
Memorial Day Holiday	M	May 29
Spring Commencement	Saturday	June 3
Classes End	5 p.m. T	June 20
Final Exams	W, Th	June 21, 22

Summer, 1978

Registration	M	June 26
Classes Begin	5 p.m. M	June 26
Independence Day Recess	5 p.m. F	June 30
Classes Resume	8 a.m. W	July 5
Classes End	5 p.m. W	August 16
Final Exams	Th, F	August 17, 18

1978-1979 ACADEMIC CALENDAR

Fall, 1978

Registration	M, T, W	August 28, 29, 30
Classes Begin	5 p.m. W	August 30
Labor Day Holiday	M	September 4
Fall Commencement	Sunday	September 17
Thanksgiving Recess Begins	5 p.m. W	November 22
Classes Resume	8 a.m. M	November 27
Classes End	10 p.m. M	December 11
Exams Begin	9 a.m. W	December 13
Exams End	10 p.m. T	December 19

Winter, 1979

Registration	Th, F	January 4, 5
Classes Begin	8 a.m. M	January 8
Winter Recess Begins	5 p.m. F	March 2
Classes Resume	8 a.m. M	March 12
Classes End	5 p.m. F	April 20
Exams Begin	9 a.m. M	April 23
Exams End	10 p.m. Th	April 26

Spring, 1979

Registration	M	April 30
Classes Begin	5 p.m. M	April 30
Memorial Day Holiday	M	May 28
Spring Commencement	Saturday	June 2
Classes End	5 p.m. T	June 19
Final Exams	W, Th	June 20, 21

Summer, 1979

Registration	M	June 25
Classes Begin	5 p.m. M	June 25
Independence Day Recess	W	July 4
Classes Resume	8 a.m. Th	July 5
Classes End	5 p.m. T	August 14
Final Exams	W, Th	August 15, 16

INTRODUCTION

Oakland University is a medium-size public institution with a diverse set of academic offerings at the undergraduate and graduate levels. Anchored by a strong liberal arts program, the university is organized into a College of Arts and Sciences, and Schools of Economics and Management, Education, Engineering, Nursing, a Center for General and Career Studies, and a Center for Health Sciences.

All academic programs of the university are accredited by the North Central Association of Colleges and Schools.

The university faculty, whose number now exceeds 400, has a distinguished record of research and scholarship. One of the focal points of the research is the Institute of Biological Sciences, a nationally-recognized center for research of the eye. The university has also established national reputations in several undergraduate and graduate degree programs.

Complementing its academic program, Oakland has a major public service program, with particular emphasis on the professional performing arts. The Meadow Brook Theatre, a professional theatre, is located on the campus. The Meadow Brook Music Festival is the summer home of the Detroit Symphony Orchestra. In addition, Meadow Brook Hall, the home of the university's benefactors, now serves as a major conference and cultural center.



The university was founded in 1957 when the late Mr. and Mrs. Alfred G. Wilson donated their 1,600-acre estate and \$2 million to Michigan State University to begin a new college in Oakland County. Named Michigan State University-Oakland, the new campus enrolled its first students in 1959. In 1963, the name was changed to Oakland University, and in 1970 the State Legislature recognized the maturity and stature of Oakland and granted the university its independence. The Governor appointed Oakland's first Board of Trustees in the fall of 1970.

Located between the cities of Pontiac and Rochester, Oakland is easily accessible to millions of residents of the metropolitan Detroit area because of its proximity to major freeways. The natural beauty of the campus, much of it still wooded and undeveloped, is enhanced by a comprehensive set of recreation facilities and a modern physical plant that houses the university's academic and public service programs. The university has seven residence halls with a capacity for 1,550 students.

Equality of Opportunity

Oakland University is committed to a policy of equality of opportunity for students, faculty, and staff. The university recognizes the requirements of state laws as well as the provisions of Title IX and the regulations of the U.S. Department of Health, Education, and Welfare prohibiting discrimination based upon sex. To carry out these commitments, the Board of Trustees of Oakland University has adopted the following policy:

It shall be the policy of the Board of Trustees to provide equal opportunity to all students and employees and all other members of the Oakland University community regardless of race, color, religion, sex, age, national origin, or ancestry. No discrimination shall be allowed in housing, employment, the academic program, or any other activity supported or subject to approval by the University. No organization may exist on the Oakland University campus if it operates to discriminate against potential members on the basis of race, color, religion, sex, age, national origin, or ancestry.

Inquiries concerning the application of Title IX to the university may be directed to Wilma Ray-Bledsoe, director, Urban Affairs.

Family Educational Rights and Privacy Act, 1974

The Family Educational Rights and Privacy Act, 1974, addresses the question of confidential student educational records. This legislation, in essence, allows students the right to view upon request their own confidential educational records and restricts

the use of these records by others. Copies of the Family Educational Rights and Privacy Act, 1974, may be obtained from the Assistant to the Dean for Student Life, 144 Oakland Center (377-3352), or from the United States Department of Health, Education, and Welfare.

Notification of Oakland University compliance with this legislation may be found in the Oakland University Policy Statement on the Family Educational Rights and Privacy Act (available at the office of the Dean for Student Life), the *Oakland Sail*, the *OU News*, and the undergraduate and graduate Oakland University catalogs. In addition, the Assistant to the Dean for Student Life is the university compliance officer for the Family Educational Rights and Privacy Act. Any questions, grievances, complaints, or other related problems may be brought to the attention of the compliance officer and/or filed with the U.S. Department of Health, Education, and Welfare.

GENERAL INFORMATION

ADMISSION

Admission to Freshman Standing

Candidates for admission to the undergraduate degree programs should have completed regular college preparatory work at the high school level or otherwise demonstrated sufficient academic preparation to begin or continue college work. Highly qualified students may be admitted without regard to the pattern of subject matter completed at their high school. Students planning majors in the sciences, mathematics, engineering, or management should present at least three years preparation in mathematics, including algebra, geometry, and trigonometry. Consideration for admission is based upon an applicant's total background including high school academic achievement, recommendations, educational goals, and potential for success at the university.

Students entering as freshmen must submit scores from the American College Test (ACT). Prospective applicants are encouraged to take the ACT in the spring of their junior year and have scores forwarded to the university (School Code 2033). Students unable to submit scores from the spring testing must submit scores prior to matriculating as freshmen. Test scores will be used for counseling purposes only and will not be part of the credentials necessary for consideration of the applicant.

Applications for undergraduate admission are available from high school counselors or from the university admissions office. They should be submitted as early as possible in the senior year.

Admission of Special High School Students

Specially qualified high school students may be permitted to enroll in classes on a part-time nonmatriculated basis. Students who wish to pursue course work at the university which is not available at their high school must present a letter of endorsement signed by their high school principal and counselor. An application for undergraduate admission and a copy of the current transcript must accompany the principal's endorsement. Admission of a special high school student is valid for one semester only. Students wishing to take subsequent courses must reapply as described above.

Admission of Transfer Students

Transfer students may enter Oakland University at four different times: fall semester, winter semester, spring session, or summer session. Students are encouraged to submit their applications at least six weeks before the beginning of the semester in which they wish to enroll. To be eligible to enter as transfer students, applicants who are in good academic standing (commonly defined as a cumulative college grade point average of 2.00 or higher) at their previous college or university and who have completed 26 or more semester credits normally will be admitted. Applicants who are in good academic standing at their previous college or university and who have not completed 26 or more semester credits may be admitted if one or more of the following indicate likely success at Oakland University: previous high school work, letters of recommendation, test scores, or an interview with a university admissions counselor. The admission of individuals whose formal education has been interrupted for three years or more and who would not normally meet other admission criteria may be based on one or more of the following criteria: sustained employment record; recommendations from employers, educators, and other professional persons; success in formal training programs; and standardized test results. An interview with a university admissions counselor is required for such applicants to be considered for admission.

Every transfer candidate must complete an application form and request that the registrar of each college or university previously attended send an official transcript of record to Oakland's Admissions Office. Oakland will review these transcripts and determine the number of credits which are applicable to the student's proposed program. Credits will be accepted in transfer only from institutions which are accredited by one of the nationally-recognized regional agencies and only for courses in which a grade of C (or equivalent) or better was earned. Oakland will transfer the number of semester-hour credits for which a course was taken, regardless of the number of credits a similar course at Oakland University may carry.

A student may transfer to the university a maximum of 62 semester credits earned at a community college. Students whose academic records combine work at both two- and four-year institutions may transfer only 62 semester credits if the last institution attended was a community or junior college. Technical and applied science courses will be granted credit only where the courses are directly relevant to the intended major.

Special Note for Transfer Students from Michigan Community Colleges

Oakland University's baccalaureate programs are designed to accommodate students from community colleges. Early application is recommended so that candidates can take advantage of the services extended to community college transfer students. Transfer students from community colleges are eligible for the same financial aid programs and other services available to students who enter the university directly from high school.

Oakland University participates in the Michigan Association of Collegiate Registrars and Admissions Offices (MACRAO) Articulation Agreement. Graduates of participating Michigan public community colleges whose transcripts bear the stamp "MACRAO Agreement Satisfied" are considered to have met most, and in some programs all, of Oakland's general education requirements. Prospective transfer students should consult their community college counselor or an Oakland University admissions counselor to discuss how they might best utilize the MACRAO Agreement in meeting general education requirements. For information on Oakland's general education program, see individual school and college requirements.

Admission of Students Who Are Not Citizens of the United States

A foreign student should write to the director of admissions at least one year before the time he/she wishes to be admitted. The candidate will be sent instructions and an application form to be completed and returned at once. When the application is approved, the candidate will receive a certificate of admission and form I-20 to enter the university. These are to be used to apply for the appropriate visa. Prior to the student's official registration, proof of adequate medical insurance plus a signed authorization for emergency medical treatment must be on file in the university health center.

Students who are not citizens of the United States and who are transferring from other institutions to the university must apply for permission to do so through the Immigration Office nearest them. Before applying for permission to transfer, the candidate must have form I-20 from Oakland University and form I-538 from the school from which he/she is transferring.

Admission to Guest Status

Students enrolled at accredited Michigan colleges and universities may apply for guest admission by filing the Michigan Uniform Undergraduate Guest Application form, which is obtainable

from the registrar's office at their home institution. It should be submitted to the Admissions Office six weeks before the beginning of each semester in which the student plans to attend as a guest. Students attending Michigan colleges or universities are not required to submit transcripts.

Students attending accredited colleges and universities outside of Michigan may apply for guest admission by filing Oakland's Guest Application form six weeks before the beginning of each semester in which they plan to attend. These applications may be obtained from Oakland's Admissions Office and must be accompanied by a transcript of grades from the institution to which the student plans to return.

Post Baccalaureate Status

Post baccalaureate status may be granted applicants who have a bachelor's degree from an accredited college or university and who wish to take several additional undergraduate courses. Application for this type of admission should be made through the undergraduate admissions office.

Advanced Placement

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

Credit by Examination (CLEP)

Credit toward graduation can be granted to students demonstrating competency in the various areas tested in the College-Level Examination Program administered by the College Entrance Examination Board, Princeton, New Jersey 08540. (Candidates who wish to use CLEP tests as an admissions credential should have their scores forwarded to the director of admissions.)

CLEP examinations are of two types, general and subject. General examinations are offered in English composition, humanities, mathematics, natural sciences, and social sciences and history. Oakland will grant 6 credits for each examination passed with a score of at least 600, no subscore below 55, and an average of subscores of at least 60, provided that:

- a. the student has not accumulated 32 credits at the time of the examination;
- and

- b. the student has not previously done work for college credit in the field of the examination.

Credit for CLEP subject examinations is granted according to the following stipulations:

- Nontransfer students must not have accumulated 64 credits at the time of the examination; transfer students must not yet have earned 32 Oakland credits.
- Examinations must have scores of 60 or better, and each sub-score must be at least 60.
- The student must not previously have taken more advanced work in the field of the examination.
- The amount of credit shall range from 3 to 6 hours, at the discretion of the academic unit responsible for the subject.

Financial Assistance

Oakland University offers two programs of financial assistance to students: achievement scholarships and need-based grants-in-aid. Achievement scholarship opportunities are not contingent upon financial need; however, students may qualify for both a grant-in-aid and an achievement scholarship.

Need-Based Grants-in-Aid

Students without sufficient funds to finance their education may qualify for assistance under one or more of the following programs: Basic Educational Opportunity Grant (BEOG), Supplemental Education Opportunity Grant, National Direct Student Loan, College Work Study Program, and Oakland University Grant-in-Aid.

These programs, along with the federally-insured Guaranteed Student Loan, allow Oakland University to assist students so that no person needs to be denied the opportunity for higher education due to inability to pay.

In addition, the following awards are made each year as part of the grant-in-aid program:

- Don Iodice Grant-in-Aid Program for Foreign Study
- Oakland Alumni Association Upperclass Scholarship
- Oakland County Medical Society Women's Auxiliary Scholarship
- Pontiac Central High School Scholarship
- Gladys B. Rapoport Scholarship
- Daily Tribune Carriers Scholarship

Procedures for Applying for Need-Based Aid

Entering freshmen and transfer students must submit a confidential financial statement to the College Scholarship Service.

They must also file an Oakland Application for Financial Aid and a copy of the family's 1976 Federal Income Tax Form 1040 and the corresponding W2 forms with the university Financial Aid Office (205 Wilson Hall). Continuing students or those applying for readmission should follow the same procedure, and application must be made each year that renewal of aid is desired.

All students requesting Oakland University need-based aid must apply for the federal Basic Educational Opportunity Grant.

All application materials may be obtained from the Financial Aid Office, from high school counselors, and from the Oakland Admissions Office.

Stipends vary, and may range from an amount equal to full tuition, room and board, to a minimal amount depending upon the degree of financial need demonstrated in the application.

Short-Term Loans

Short-term, no-interest loans are available for personal and emergency needs, but not for payment of regular university fees for tuition, room and board, or any other fees that can be anticipated. These loans are made possible by gifts to the university from the following individuals and groups:

- Century Brick Loan Fund
- David R. Robson Memorial Loan Fund
- Pontiac Kiwanis Club Loan Fund
- C. Allen Harlan Loan Fund
- H. H. Corson Loan Fund
- Kenneth B. Covert, Jr. Memorial Loan Fund
- Joan Selby Memorial Loan Fund
- Greater Pontiac Centennial Student Loan Fund
- Li Russ Club Student Loan Fund
- Walter K. Willman Loan Fund
- W. Everett Grinnell Loan Fund
- Oakland County Engineering Society Loan Fund
- Student Activities Coordinating Council Loan Fund
- John A. MacDonald Loan Fund
- Lathrup Village Women's Club Fund
- Piety Hill Chapter of the Daughters of the American Revolution of Birmingham Loan Fund
- Paul Solonika Loan Fund
- William Spickler Memorial Loan Fund
- George N. Higgins Loan Fund
- James Mangrum Loan Fund
- Pat Dandurand Memorial Loan Fund
- Civitan Loan Fund
- Oakland University Alumni Loan Fund
- Insurance Women of Detroit, Inc. Loan Fund
- Michael Werenski Memorial Loan Fund

Mark Platt Memorial Loan Fund
 Women's Literary Club of Pontiac Loan Fund
 Emily Moses Memorial Loan Fund
 Henry Tiedemen Loan Fund
 Warren Tope Memorial Loan Fund

Achievement Scholarships

The wide range of scholarship opportunities at Oakland University is indicative of the scope of the university's commitment to academic excellence and student leadership. Scholarships are awarded on the basis of accomplishment and are not contingent upon financial need. Most awards are made in the early spring for the subsequent academic year.

Applicants for admission to the university who wish to be considered for an achievement scholarship should send a scholarship application to the director of admissions. Maximum consideration is given to applications received before January 1.

Many scholarships are renewable if the holder continues to demonstrate the excellence which led to the original award. Renewal is not automatic, however, and scholarship recipients should apply for renewal to the Financial Aid Office before March 1.

A limited number of new scholarships is awarded each year to continuing students. Application should be made to the Financial Aid Office before March 1.

Major achievement scholarships are:

American Association of University Women (Oakland Branch) Scholarship: awarded to a mature student with family responsibilities who has experienced an interruption in completing baccalaureate degree requirements. The stipend is \$500 for the academic year.

Athletic Scholarships: awarded to men and women athletes with ability in one of the intercollegiate sports offered at Oakland University. Stipends vary and are renewable for a total of eight semesters.

Black Scholarship Program: awarded to outstanding black students entering Oakland University as freshmen. Candidates must have demonstrated the capability of achieving scholastic excellence and assuming a leadership role at Oakland University through their performance in high school. Stipends are \$500 per academic year and may be renewed for a total of eight semesters as long as the student maintains a 3.00 grade point average.

Community College Scholarships: designed to recognize

academic achievement of students transferring from accredited community or junior colleges in Michigan. Candidates should have a minimum grade point average of 3.00 for all college credit earned with a minimum of 55 semester hours of transferable work. Stipends are \$300 per semester, for a maximum of four semesters. Students must maintain a 3.00 grade point average.

Cotillion Club Scholarships: awarded to outstanding black graduates of the Detroit high schools. The Cotillion Club of Detroit, Inc. awards a \$1,000 renewable scholarship to a black freshman from the Detroit schools whose grade point average exceeds 3.00. The scholarship is renewable for eight semesters.

Edith Harris Memorial Scholarship: awarded to mature students with family responsibilities who have experienced interruptions in their education for the baccalaureate degree. Awards are based on academic excellence. Candidates are expected to have completed 28 credits in the academic year preceding the award and recipients are expected to enroll for a minimum of 12 credits in each semester in which the award is received. Stipend is one-half tuition for the academic year.

Engineering Scholarships: awarded to entering engineering students on the basis of high school grades and scores on the OU Competitive Engineering Scholarship Examination, which is normally administered in January or February of each year. Stipends are \$600 per academic year and may be renewed for a total of eight semesters as long as a student maintains a 3.00 grade point average and continues to major in engineering.

Honors Scholarships: awarded to students with a 3.75 grade point average in high school. Stipend is \$100 or \$200, and is not renewable. It is offered only to students who do not receive any other financial assistance.

Isaac Jones Memorial Scholarship: awarded to a promising black student from the city of Pontiac. Stipends are \$800 per academic year and may be renewed for up to eight semesters.

The Mary Fogarty Anibal and Eleanor Anibal Burgum Memorial Scholarship: awarded to students who have demonstrated in high school that they are capable of superior scholarship at Oakland University. Stipends are \$2,000 per academic year and are awarded for a maximum of eight semesters. The student must maintain a cumulative grade point average of 3.25.

Music Scholarships: awarded to either freshmen or community college transfers who have exceptional ability in a music performance medium. Candidates must audition with the Department of Music. Stipends are \$250 or \$500 per academic

year and may be renewed for a total of eight semesters as long as the student continues to major in music.

Oakland University Competitive Scholarships: awarded to freshmen on the basis of high school grades and scores on the OU Competitive Scholarship Exam. The exam is normally administered in November of each year. Stipends are \$300 to \$600 per academic year and may be renewed for a total of eight semesters as long as a student maintains a 3.00 grade point average.

The Oakland University Foundation Scholarship: awarded each year to a high school student of exceptional ability and achievement to permit residence at Oakland while pursuing full-time study. Candidates must be nominated by the principal of their high school. Stipends are \$2,500 per academic year and are awarded for up to eight semesters. A recipient must complete 30 credits each academic year with a cumulative grade point average of at least 3.25.

Oakland University Women's Club Scholarship: awarded to a female junior or senior maintaining a grade point average of 3.20 or better. Stipends cover half of tuition. The scholarship is renewable for three semesters (or the equivalent time in spring/summer sessions).

Student Life Scholarships: awarded to students who have leadership potential. Students must have a minimum 3.00 average and be active in cocurricular and extracurricular activities. Stipends are for room and board only and range up to \$1,000 per year. They may be renewed for a total of eight semesters.

Upper Class Achievement Scholarships: awarded to continuing Oakland students on the basis of scholastic achievement. Candidates must have a 3.50 grade point average at the end of the winter 1977 semester and must have earned at least 28 credits at Oakland University during the 1976-77 academic year. Recipients are expected to be enrolled for 16 credits each in the fall and winter semesters. Stipends are \$250 per academic year.

All scholarships listed above are contingent upon the student maintaining normal progress toward graduation. Other scholarships awarded each year include the Sally Borus Piano Award, the Boys Club of Royal Oak Scholarship, the Lee Grekin Memorial Scholarship, and the Friends of Teruko Yamasaki Award.

Funds for the Oakland University scholarship programs are derived from the general budget, gifts from individuals, groups and corporations, and from the fund-raising efforts of the Oakland University Scholarship Committee for Macomb County. The special scholarship funds are:

Mr. and Mrs. Benjamin Anibal Scholarship Fund
Campbell-Ewald Scholarship Fund
John Engerson Memorial Scholarship Fund
George H. Gardner Scholarship Fund
C. Allen Harlan Scholarship Fund
Herbert M. Heidenreich Scholarship Fund
Ormond E. Hunt Scholarship Fund
Mr. and Mrs. Roger M. Kyes Scholarship Fund
Harry A. MacDonald Memorial Scholarship Fund
Mildred Byars Matthews Memorial Scholarship Fund
Oakland University Women's Club Scholarship Fund
Village Women's Club of Birmingham Scholarship Fund
Ruth E. Wagner Scholarship Fund
A. Glen Wilson Scholarship Fund
Matilda R. Wilson Memorial Honor Scholarship Fund
Thomas E. Wilson Scholarship Fund

TUITION/FEES

The Board of Trustees of Oakland University reserves the right to change any and all fees and rates of charge at such times as conditions or circumstances make change necessary.

All fees are assessed and payable, in U.S. dollars, at registration or as otherwise hereinafter provided. Students are urged to use checks or money orders payable to Oakland University, rather than cash, for fee payment. If checks or money orders are in excess of the required payments, the balance will be given to the student. Nonpayment of fees will result in cancellation of registration. Checks returned by the bank will place a student in a nonpayment status.

Tuition and fees for graduate students also apply for post-baccalaureate students.

Course Fees: On-Campus Programs

All course fees and special fees must be paid in full before a registration is considered final.

Students who are residents of Michigan and register as undergraduates are assessed \$24.25 per credit. Those who register as graduate students are assessed \$33.50 per credit. All students who have not maintained Michigan residency for the 12 consecutive months immediately prior to enrollment are assessed \$63.50 per credit.

Course Fees: Off-Campus Extension Programs

Students who register as undergraduates for off-campus extension courses are assessed \$30.25 per credit. Those who register as graduates are assessed \$40.50 per credit.

Special Fees

Undergraduates who register for 10 or more on-campus program credits are charged an additional \$33.00 (\$10 Oakland Center fee, \$8 transportation use fee, \$5 activity fee, \$5 enrollment fee*, and \$5 athletic fee).

Undergraduates who register for less than 10 on-campus program credits are charged an additional \$21.00 (\$5 Oakland Center fee, \$4 transportation use fee, \$3.50 activity fee, \$5 enrollment fee*, and \$3.50 athletic fee).

Graduates who register for 10 or more on-campus program credits are charged an additional \$23.00 (\$10 Oakland Center fee, \$8 transportation use fee, and \$5 enrollment fee*).

Graduates who register for less than 10 on-campus program credits are charged \$14.00 (\$5 Oakland Center fee, \$4 transportation use fee, and \$5 enrollment fee*).

Students registered in off-campus courses will be assessed a \$5 enrollment fee.*

Special fees are also charged for applied music instruction and some laboratory and other special courses. These fees are charged per course as follows:

Art History	\$10.00
Biology 112, 114	10.00
Chemistry 107, 117, 118	10.00
Cinema Studies 300, 301	13.00
Cinema Studies 302	15.00
Computer and Information Science 120, 121	5.00
Computer and Information Science 180	10.00
Education 455	35.00
Education 585	10.00
Education 597	50.00
Engineering 172	10.00
English 250	15.00
English 566	14.00
English 392	11.00
Literature in Translation 251	14.00
New Charter College 101	5.00
Physical Education	2.00
Physics 158	10.00
Speech Communication 200	13.00
Studio Art 100, 101	10.00
Applied Music:	
Individual Music Instruction	60.00
Group Instruction	15.00

*Nonrefundable

Course Competency by Examination Fee

Students who are residents of Michigan and register as undergraduates for course competency by examination are assessed \$12 per credit. Those who register for course competency as graduate students are assessed \$15 per credit.

All students who are not residents of Michigan are assessed \$33 per credit for course competency registrations. See page 42 for course competency regulations.

Late Registration Fee

Students registering or paying initial fees after classes officially begin will be required to pay an additional nonrefundable fee of \$15. Students who take courses exclusively within a program scheduled to register after the beginning of classes will not be required to pay the late registration fee if they register during the special registration period scheduled for such groups. Tuition checks returned by the bank are considered as nonpayment and will result in cancellation of registration or assessment of the late registration fee.

Late Add Fee

Students adding classes after the end of the second week (first week for spring and summer sessions) of classes will be required to pay a fee of \$5 per class in addition to the cost of the credits added.

Late Penalty Payment

The late payment of outstanding balances due for tuition, fees, and/or housing will result in assessment of a late payment fee of \$5 per billing. Balances due paid by checks that are returned by the bank are considered as nonpayment and will result in assessment of the \$5 fee.

Application Fee

A fee of \$15 must accompany all applications from students applying to degree programs. This is a nonrefundable processing fee which is paid only once.

Enrollment Deposit

Students admitted for the fall semester must pay a nonrefundable deposit of \$50 by May 15 preceding their fall enrollment. Students admitted after May 15 for the next fall semester must pay the deposit within three weeks of admission. This deposit will

be applied to the student's account and offset against future fee assessments.

Graduation Service Fee

Early in their last semester, students who wish to be graduated must file an application-for-degree card with the Office of the Registrar and must pay a nonrefundable fee of \$10.

Orientation Fee

An orientation fee of \$35 for all freshmen and \$10 for all transfer students and exclusively evening students is charged to cover the expense of orientation and the ongoing advising process.

Fees for Residential Services

The residence halls are financially self-supporting. Housing fees reflect the actual cost of operation and are established by the university's Board of Trustees. The rate for the 1977-78 academic year is \$1,548, which includes charges for room and board of \$1,510, hall government fee of \$8, and a debt service reserve charge of \$30. Single rooms may be rented, as available, for an additional charge of \$300. Special options of room only (\$968) and cooperative housing (\$786) are available to upperclass students.

If the student signs a housing contract prior to or during the fall semester, that contract is binding for both the fall and winter semesters. If the contract is signed during the winter semester or spring or summer sessions it is binding for that particular period only. The housing fee may be paid in full at registration or, in fall or winter semester, paid in four installments, the first of which is due at registration. The remaining three installments are due respectively on the 10th day of each of the three months following registration.

If a student withdraws from the university, room and board fees are refunded on a prorated basis net of an early withdrawal assessment of \$30. Formal notice of withdrawal must be given to the Residence Halls Office.

Refund of Fees

A student who withdraws from the university or drops a course which reduces his/her total credit load will receive a refund of fees upon application to the appropriate office. Failure to drop or withdraw formally will result in forfeiture of any refund. Undergraduate students withdrawing from the university apply to the Office of Student Services. Graduate students withdrawing from the university apply to the Office of the Dean of Graduate Studies. Changes in enrollment are processed in the Office of the

Registrar. The amount of refund will be based on the following schedule.

Date Application is Received	Tuition Refund
Before the beginning of classes	100%
After the beginning of classes and before the beginning of the second week	80%
During the second week of classes	70%
During the third week of classes	60%
During the fourth week of classes	50%
During the fifth week of classes	40%
During the sixth week of classes	30%
During the seventh week of classes	20%
After the beginning of the eighth week of classes	0%

The date the application is received in the proper office determines the percentage of refund.

Refunds are based upon the total of tuition and fees assessed less forfeitures and any unpaid balance. They should not be confused with amounts paid on the account. Awards received through Oakland's financial assistance programs are returned to their sources before personal refunds are calculated.

Refund checks will be mailed approximately four weeks after application has been made.

Out-of-State Tuition Regulations

Students enrolling at Oakland University shall be classified as in-state or out-of-state students for purposes of assessing tuition charges. It is the student's responsibility to register each semester or session under the proper in-state or out-of-state classification. For the purpose of these regulations, an in-state resident shall be defined as a person who has a Michigan domicile and has resided in Michigan 12 months immediately preceding his/her enrollment.

A student who was originally classified as an out-of-state student may be reclassified as an in-state student only if he/she has become a bona fide domiciliary of Michigan for at least 12 consecutive months, primarily as a permanent resident and not merely as a student. A student shall not be considered domiciled in Michigan unless he/she is in continuous physical residence in this state and intends to make Michigan his/her permanent home, not only while in attendance at the university, but indefinitely thereafter.

An alien who has been lawfully admitted for permanent residence in the United States shall not, by reason of that status alone, be disqualified from classification as a resident, provided, however, that aliens who are present in the United States on a

temporary or student visa shall not be eligible for classification as a resident.

Any student who has acquired a bona fide domicile in Michigan subsequent to being classified as an out-of-state student may apply for reclassification to in-state status by obtaining an application for reclassification from the university registrar. The student shall complete the application and list in detail the reasons(s) he/she is a bona fide domiciliary of Michigan, primarily as a permanent resident and not merely as a student, and attach documentary data in support thereof, and return the application to the university registrar 30 days prior to the beginning of classes of the semester or session for which the reclassification shall be effective. The following facts and circumstances, although not necessarily conclusive, have probative value in support of a claim of a residence reclassification:

1. Continuous presence in Michigan when not enrolled as a student.
2. Reliance upon Michigan sources for financial support.
3. Domicile in Michigan of family, guardian, or other relative or persons legally responsible for the student.
4. Former domicile in the state and maintenance of significant connections therein while absent.
5. Ownership of a home.
6. Long-term military commitments in Michigan.
7. Acceptance of offer of permanent employment in Michigan.
8. Other factors indicating an intent to make Michigan the student's permanent domicile will be considered by the university in reclassifying a student.

The following circumstances, standing alone, shall not constitute sufficient evidence of domicile to effect reclassification of a student as a resident under these regulations:

1. Voting or registration for voting.
2. Employment in any position normally filled by a student.
3. The lease of living quarters.
4. A statement of intention to acquire a domicile in Michigan.
5. Domicile in Michigan of student's spouse.
6. Automobile registration.
7. Other public records such as birth and marriage records.

Any student desiring to challenge his/her classification under the foregoing regulations of the Board of Trustees shall have the right to petition an appeal of the determination. Petitions of Appeal and inquiries regarding these out-of-state tuition regulations should be addressed to Chairperson, Out-of-State Tuition Committee.

ORIENTATION

All students new to Oakland are expected to attend an initial orientation session prior to their first registration. During the initial orientation session, the students are advised as to which courses to take, are exposed to the essential policies and procedures which govern student status, and are exposed to the many services and activities available for students. At the conclusion of the initial orientation session, students will select their first-semester courses. Prior to the orientation session, students are requested to attend a testing session in which Oakland placement tests are administered.

After the semester begins, several ongoing orientation programs are offered. These programs are directed toward meeting the student's concerns at particular time periods and are designed to assist the student to utilize the collegiate environment to maximize his/her potential and to give the institution a continued opportunity to communicate the resources available.

An initial fee of \$35 for freshmen and a fee of \$10 for transfers is charged to all new students whether or not they attend the orientation programs. The fee covers not only the initial orientation program, but all of the testing, advising, counseling, and other services available to Oakland students through the Undergraduate Advising and Counseling Department.

RESIDENCE HALL FACILITIES

The university provides on-campus residence halls planned and administered to relate to and enhance the students' academic experiences. A communal living experience with one's peers has been likened to a "laboratory for living" and has inherent value in the personal growth of most students. Students are encouraged to live on campus to take maximum advantage of the activities and resources of the university community.

The university maintains seven residence halls which offer variety in program, accommodations, and size. They are attractively grouped on spacious wooded grounds overlooking a small lake and are all within convenient walking distance of classroom buildings. Anibal, Fitzgerald, and Pryale houses are L-shaped buildings with 24 double rooms in each wing; the wings are joined by a student lounge. Hill and Van Wagoner are six-story units containing 100 double rooms, a lobby, lounge, and recreation room. Vandenberg is a seven-story, twin-tower structure. It contains 285 double rooms, student lounges, multiple-use areas, study and seminar rooms, and recreation areas. Hamlin Hall houses 676 students. A nine-story hall, it has a main lounge, a lounge on each floor, classrooms, and several multipurpose areas.

Rooms are furnished with study desks and lamps, bookshelves,

wastebaskets, bulletin boards, single beds, dressers, wardrobes, and venetian blinds. Residents provide their own blankets, linens, throw rugs, and draperies. Lamps, electric blankets, clocks, radios, television sets, and record players are allowed subject to safety regulations, limitations of space, and consideration of others in their use. Telephones are provided in each suite or room, and coin-operated washers and dryers are available. Maintenance service is provided by the university in common areas. Individual residents assume responsibility for keeping their rooms cleaned and in order.

Food service for resident students is managed by Saga, Inc., a professional catering service. The dining room in Vandenberg Hall provides cafeteria-style service for resident students and their guests. Special dinners, often featuring ethnic or nationality foods, are planned at regular intervals.

To be eligible for university housing a student must be enrolled for a minimum of 8 credits, except with the permission of the director of residence halls. All full-time unmarried students who have earned less than 59 credits and who do not commute from the residence occupied solely by a single-member family related to the student at the time of registration, must live in university residence halls. Exceptions to this policy will be processed by an administrative committee. Exceptions granted to students under age 18 must be accompanied by a written endorsement of exception from the parent or legal guardian of the student.

To apply for residence, students should request university housing through the admissions office. Upon a student's acceptance at Oakland, his/her reservation will be processed by the residence halls office. Notification of assignment will be given approximately two weeks before the beginning of each semester. Returning students may renew housing contracts through the housing office.

Returning students may occupy their rooms the first day of registration for each semester and session; new students beginning with the day preceding the first day of classes. Room and board is not provided between semesters or during official recesses listed in the university calendar.

DIVISION OF CAMPUS AND STUDENT AFFAIRS

The primary objective of the Division of Campus and Student Affairs is to provide an environment conducive to learning and to provide a variety of academic and nonacademic support services for students. Through the many departments of the division, opportunities are offered for students to receive assistance with personal and social problems, to experience group living, to share in student government, and to participate in cultural, intellec-

tual, and social activities that are supportive of the student's academic and personal development.

The major offices of the division are: Physical Education and Athletics, Physical Plant Services, Student Life, Student Services, University Engineer, and Vice President for Campus and Student Affairs.

Student Life

The Office for Student Life is responsible for the operation of the university residence halls, student organizations, commuter services, and student center. In addition, the initiation of student programs and activities, cooperation with student government, coordination of judicial systems, and a student advocacy role are also important functions of this office.

A program of cocurricular activities is designed for flexibility. Student interests, which vary from year to year, determine the strength and scope of existing campus organizations as well as the initiation of new clubs and groups. During the past year, approximately 80 student organizations have been active on campus, including academic clubs, religious and political organizations, and a variety of special interest groups, such as Women's Potential, Commuter Council, Association of Black Students, Ski Club, WOUX Radio Station, the Absention Coffeehouse, the Human Interaction Center, the Oakland Sail newspaper, and the Meadow Brook Ball Committee. Any student who cannot locate a club which serves his/her particular interest is encouraged to form a new group through the Department for Campus Information, Programs, and Organizations.

Students may participate in the following music ensembles: Collegium Musicum, Oakland University Singers, University Chorus, Wind Ensemble, Afram Lab Band, University Orchestra, Opera Workshop, Opera Chorus, University Community Chorus, and Women's Chorus. These ensembles may be taken for academic credit, or as an extracurricular activity.

The student enterprise organizations provide many opportunities for students to pursue and investigate their creative and artistic abilities. Productions sponsored by the Student Enterprise Theatre emphasize drama, music, dance, and comedy. The still-developing Village concept aims to provide a unique facility through the use of the Barn for Student Enterprise Theatre productions as well as to provide students with space for various crafts (pottery, stained glass, etc.) and a multipurpose recreation space.

University Congress is an elected, campus-wide government body which serves students' needs and opinions. In addition to its

administrative duties, University Congress provides funding for the Student Activities Board which allocates money to recognized student organizations and for Unicon Productions, a student concert/lecture board.

Services for commuting students are provided through the Department for Campus Information, Programs, and Organizations. A variety of programs, including ride pools, student lounges, special interest groups, lockers, off-campus housing, transportation needs, and social and educational activities, are available for the convenience of Oakland University students.

The Oakland Center, the university student center, is the hub of activities for the campus. Provided in this facility are the campus food service, the Bookcenter, indoor recreational activities, Charlie Brown's candy counter, student lounges, meeting spaces, and exhibit areas.

Student Services

The Office of Student Services is administratively responsible for academic advising, testing, orientation, career advising and placement, students' master records, veterans' services, and special student services programs of the university for women, minority students, international students, and handicapped students.

Career Advising and Placement

The Career Advising and Placement Office provides counseling services to all undergraduates interested in life planning and the discussion of the world of work and its relationship to the academic major. It provides seniors with the opportunity to interview with employers who regularly recruit on campus. Occupational guidance and counseling materials and an extensive library of graduate school catalogs are available to students in this office's career libraries. Forms for the following examinations are provided: PACE (Federal Civil Service Exam), National Teacher Exam, Graduate Record Exam, Law School Admission Test, Medical College Admission Test, and the Graduate Management Admissions Test.

The Career Advising and Placement Office also offers to students who have completed certain university requirements the opportunity to participate in a cooperative education experience. Students in this program have alternate semesters of work and study. All majors are eligible for the cooperative education opportunity.

Special Needs Groups

The Department of Special Programs provides academic support for students who need special assistance for a successful academic experience at Oakland. This office implements the university's Special Services for Disadvantaged Students (TRIO) Program and is staffed with tutors, professional counselors, and a curriculum innovator. The office staffs and administers the Skill Development Center, the Reading Center, and the Writing Center. The Skill Development Center provides, without cost to students, support seminars and tutorial assistance in an effort to maximize students' chances for success.

Although initially designed to meet the needs of students assigned to the Summer Support Program at the time of admission, the center is open to all students. The Reading and Writing Centers are also open to all students. They provide special assistance to students wishing to improve their skills in these areas. The Upward Bound Program, a precollege academic support program, is also part of the Department of Special Programs.

The Office of Veterans' Affairs provides a one-stop service to veterans or others eligible for veterans' benefits. Veterans may obtain counseling and other supportive services and benefit assistance from the Veterans' Affairs coordinator. Veterans are also advised to keep in close contact with this office, which is responsible for reporting to the Veterans' Administration and enforcing the V.A. Standards of Progress.

Equal Educational Opportunity programs are administered in the Office of Student Services for minority students. General counseling and other supportive services are available to black and Latino students. Other minority students should also consult this office for assistance.

A foreign student adviser is available to answer questions concerning immigration requirements; personal, academic, and financial problems; off-campus visits; and participation in community programs.

General assistance is provided to students with various types of physical disabilities. Students should consult this office to learn of the various services offered.

A Women's Center is provided to direct attention to the special needs of women students. It is staffed with a counselor and student assistants.

Academic Advising and Counseling

The academic advising program, coordinated by the Assistant Dean for Student Services, makes available three sources for

academic advising: faculty advisers within the academic units, counselors within the Office of Student Services, and student advisers located in the Undergraduate Advising Center.

Freshmen who have not selected a major are assigned to specific advisers during their first year. Freshmen who have selected a major are expected to see any adviser within their academic unit.

Upperclass students, including new transfer students, who have selected a major are also expected to see an adviser in their academic unit office.

Upperclass students who have not yet selected a major may request advising at any academic department or they may visit a counselor in the Undergraduate Advising and Counseling Department.

Student advisers are available in the Undergraduate Advising Center for students who wish to be advised by peer advisers.

It is the student's responsibility to take the initiative to talk with an adviser.

While an Oakland student is not required to see an academic adviser unless required by his/her major department, all undergraduates are expected to file with their academic unit or the Undergraduate Advising and Counseling Department at least four program plans indicating how they expect to complete their graduation requirements. These plans will be checked by the unit, and students will be notified of any university requirement deficiencies in the plans.

These plans are to be filed as follows:

1. Plan of first semester schedule at orientation, before first registration.
2. First program plan, filed not later than 48 credits.
3. Major program plan, to be filed with the academic unit in which the student plans to major, no later than 80 credits.
4. Final advising audit, no later than 108 credits.

The Undergraduate Advising and Counseling Department offers test and assessment services to all undergraduates. A variety of tests and inventories are administered for use in assisting students with educational decision-making and setting career goals.

Athletics

The Sports and Recreation Building has facilities for badminton, basketball, combatives, dance, fencing, golf, gymnastics, handball, paddleball, racquetball, squash, swimming, self-defense, weight-lifting, and wrestling. The outdoor areas include the new 18-hole Katke-Cousins Golf Course, a golf practice and instruction area, a baseball diamond, tennis courts, ski hill and tow,

soft-surface quarter-mile track, soccer field, softball diamonds, touch-football fields, field-hockey area, and acres of terrain for hiking, cross-country running, and cross-country skiing.

Oakland's athletic program includes spontaneous and planned recreation, sports clubs, competitive intramural and extramural sports, and competitive intercollegiate sports. The programs are directed toward the participating individual rather than the spectator, but there are vast opportunities for viewing intramural, extramural, and intercollegiate athletic events.

The Sports and Recreation Building is open seven days a week for all types of recreational participation. Fall activities include softball, field hockey, touch football, football pass-punt-kick, two-mile cross-country run, women's basketball, floor hockey, singles racquetball, golf, and wrestling. The winter program includes men's basketball, doubles racquetball, swimming, volleyball, handball, squash, and water polo. Students, faculty, and staff are urged to participate on intramural committees for organization, implementation, and administration of the program.

Oakland University is a member of the Great Lakes Intercollegiate Athletic Conference, the National Collegiate Athletic Conference Division II, and the Association for Intercollegiate Athletics for Women. Oakland men participate in intercollegiate baseball, basketball, cross-country, golf, soccer, swimming, tennis, and wrestling. Women compete in basketball, golf, softball, swimming, tennis, and volleyball.

Health Services and Student Insurance

Students, their spouses, and faculty and staff may receive medical services at the Graham Health Center on weekdays from 8 a.m. to 5 p.m. Services include physician coverage that permits evaluation and treatment of most acute and chronic medical problems. A gynecologist sees students by appointment during fall and winter semesters.

Allergy injections are given while a physician is on the premises. The patient must have written instruction from his/her doctor, and the vaccine may be stored at the Health Center. Many laboratory tests are completed at GHC, and the emergency room is equipped to handle minor trauma and to give initial treatment to more serious emergencies.

G-M Underwriters offers a low-cost student health insurance plan covering almost everything performed at GHC including office calls. The Health Center will bill most insurance companies for eligible services.

Child Care

The School of Education early childhood program operates the Matthew Lowry Early Childhood Center for students, faculty, and staff with child care needs. Located at Adams and Butler roads at the southeast corner of the campus, the Toddler Program is available for children who are walking to 3 years old, while the Child Care/Preschool Program accommodates children from 3 to 5 years old, provided the child is toilet trained. Both programs are designed to stimulate the developmental growth of children. A program for infants which requires parent participation is also available. Student parents participate in the once-a-week sessions during 12 weeks of a regular semester. The Early Childhood Center operates weekdays from 7:45 a.m. to 5:30 p.m. Registration for the programs coincides with university registration days, and parents are assessed an hourly rate that varies for students, faculty, and staff.

University-Community Counseling and Psychological Center

The Counseling Center is staffed with clinical and counseling psychologists who provide specialized counseling, consultation, and psychotherapy to Oakland students and to members of the general community with personal and interpersonal problems. The center also provides group therapy, marriage counseling, and child therapy. Use of the center is voluntary and is available by appointment at a minimal charge. All personal material discussed is held strictly confidential and does not become part of the student's academic record.

CAMPUS BUILDINGS**ACADEMIC, ADMINISTRATIVE, AND PUBLIC SERVICE**

North Foundation Hall (1959), gift of Mr. and Mrs. Alfred G. Wilson, administrative offices

South Foundation Hall (1959), gift of Mr. and Mrs. Alfred G. Wilson, classrooms and administrative offices

Oakland Center (1959), self-liquidating funds, student center and food service

Kresge Library (1961), gift of the Kresge Foundation

John Hannah Hall of Science (1961), funds appropriated by the State of Michigan, classrooms, faculty and administrative offices

Sports and Recreation Building (1963), self-liquidating funds

Charles F. Kettering Magnetics Laboratory (1963), gift of the Kettering Foundation

Howard C. Baldwin Memorial Pavilion (1964), gifts from several foundations and other private sources, roofed pavilion, site of the Meadow Brook Music Festival

Lula C. Wilson Memorial Concert Shell (1964), gift of Lula C. Wilson Trust, acoustical shell at the Baldwin Pavilion

Trumbull Terrace (1965), gift of Mr. and Mrs. George T. Trumbull, food and service facilities for Baldwin Pavilion

Matilda R. Wilson Hall (1966), funds appropriated by the State of Michigan, classrooms, Meadow Brook Theatre, and faculty and administrative offices

Dodge Hall of Engineering (1968), funds appropriated by the State of Michigan and federal grants, classrooms, faculty and administrative offices

Graham Health Center (1968), self-liquidating funds, university health services

Paula and Woody Varner Hall (1970), funds appropriated by the State of Michigan and a federal grant, classrooms, recital hall, faculty and academic administrative offices

Central Heating Plant (1971), funds appropriated by the State of Michigan

Oakland University Observatory (1974), gift of Oakland University Foundation

Public Safety and Services Building (1975), funds appropriated by the State of Michigan

WILSON ESTATE BUILDINGS

Meadow Brook Hall, conference and cultural center

Club House, small meetings and limited social events

Sunset Terrace, president's residence

There are a number of barns and other buildings from the Wilson estate that are also used to house various university activities.

RESIDENCE HALLS

Fitzgerald House (1962), gift of Mr. and Mrs. Harold A. Fitzgerald and self-liquidating funds

Anibal House (1962), gift of Mr. and Mrs. Benjamin H. Anibal and self-liquidating funds

Pryale House (1963), gift of Mr. and Mrs. Harry M. Pryale and self-liquidating funds

Hill House (1964), gift of Mr. O. E. Hunt

Van Wagoner House (1966), self-liquidating funds

Vandenberg Hall (1966), self-liquidating funds, also houses faculty and administrative offices

Hamlin Hall (1968), self-liquidating funds



OTHER ACADEMIC UNITS AND PROGRAMS

This catalog is devoted to undergraduate degree offerings at Oakland University. The university has several other academic programs and units that are central to the university's mission. So that the reader may have an understanding of the entire institution, brief descriptions of these units are given in this section.

GRADUATE STUDY

OFFICE OF THE DEAN

G. Philip Johnson, Dean

Elizabeth L. Conner, Assistant to the Dean

Course offerings and programs of study beyond the baccalaureate level constitute a major Oakland University enterprise. Most schools and departments offer some form of graduate work, and in nearly all cases these offerings comprise courses and research sufficient for the satisfaction of requirements for advanced degrees. There are available at present one doctoral program and 18 master's programs. Additional programs at both degree levels are being developed.

In each of the programs the university seeks to provide its students with intellectual challenge and opportunity for scholarly and professional growth. Its substantial resources in faculty, research facilities, and support functions are all directed to these ends. A graduate program should not be solely a collection of courses and certainly should not be such if the courses are only casually related to each other. Rather, it should be a carefully structured combination of studies and research designed in the aggregate to serve specific needs of the student. Students share with their advisers responsibility for constructing programs of study manifesting this character. They can expect close attention from the faculty while planning their studies and while pursuing them. In turn they should ask of themselves wholehearted commitment to the program's demands.

Details of the programs and regulations of the Graduate Council, which governs graduate work, appear in the *Oakland University*

34 OTHER ACADEMIC UNITS

Graduate Catalog. Copies of the catalog are available from the Office of Graduate Study. Prospective students should also consult the school or department in which they wish to study.

Graduate Degree Programs

Doctor of Philosophy
Systems Engineering

Master of Arts
Area Studies
Clinical Psychology
Developmental Psychology
English
Guidance and Counseling
History
Mathematics

Master of Science
Biology
Chemistry
Engineering
Management
Physics

Master of Arts in Teaching
Early Childhood Education
Elementary Education
English
Mathematics
Reading
Special Education

Master of Music

UNIVERSITY LIBRARY

OFFICE OF THE DEAN

George L. Gardiner, Dean
Robert G. Gaylor, Associate Dean, Public Services
Janet A. Krompart, Associate Dean, Technical Services
Indra M. David, Assistant to the Dean

PROFESSOR: George L. Gardiner

ASSOCIATE PROFESSORS: Indra M. David, Robert G. Gaylor, Thomas H. Lyons, Lois L. Reilly

ASSISTANT PROFESSORS: Jennie B. Cross, Eileen E. Hitchingham, Linda L. Hildebrand, Nancy S. Kleckner, Janet A. Krompart, Mildred H. Merz, Richard L. Pettengill, Ann M. Pogany, Daniel F. Ring, S. Rita Sparks, Elizabeth A. Titus

VISITING LECTURER: Shera M. Farnham

The faculty directs, staffs, and maintains the University Library and its collections of books and related materials. With the advice of members of the other faculties, the library faculty selects materials to be added to the library's collections and is responsible for the acquisition, preparation, and organization of these materials.

Faculty of the library hold appointments as public services or technical services librarians. The Division of Technical Services is a centralized unit responsible for acquiring, cataloging, and preparing books, periodicals, microforms, documents, and other kinds of library materials. The Division of Public Services offers a variety of direct services to the library's users.

The faculty in both library divisions are responsive to the educational thrusts of the university and are active participants in the academic enterprise. They provide classroom as well as one-to-one instruction for students in the use of the library and assist them in mastering techniques for the retrieval of information from a variety of bibliographic sources.

Similarly, the library faculty provides assistance to teachers and scholars in a variety of ways, making every effort to secure for them the library materials needed to support programs of instruction and research.

Since the faculty of the library is also responsible for research outside of the immediate specialties of bibliographic support of current curricula and faculty research, members of the faculty are concerned with developing holdings in interdisciplinary and generalized works of reference and in other bibliographic source materials. Moreover, as a library constitutes a trust for the future, librarians search out, evaluate, and sometimes acquire collections of rare or out-of-print books, periodicals, and documents in order to round out the information resources of the university both in and beyond areas of immediate curricular concern.

The library faculty is involved in continuing research in various areas of academic librarianship. As active members of state, regional, and national professional associations, they make persistent efforts to provide better services, develop collections of high quality, and increase the excellence of the university.

The Library

Oakland University's library collections are housed in Kresge Library and in the Performing Arts Library (Varner Hall) which contains a specialized collection of materials on the performance of music, theatre, and dance. The collections of the University Library now contain approximately 300,000 volumes, 250,000 units of microform, and 7,000 recordings on disc or tape. The Matilda R. Wilson Memorial Collection of works of reference, amassed through gifts of money from the university's students, constitutes a large part of the collections and provides a substantial research facility. Other special collections include one of the largest collections in the midwest of underground newspapers, and the Hicks Collection of books by and about women.

36 OTHER ACADEMIC UNITS

The library offers many services to its users: the specialized Performing Arts Library; an audio-visual service center; a microform reading room; a documents department housing both federal and state of Michigan documents; a science area in which are concentrated the monographs, indexes, periodicals, and abstracts that pertain to this broad subject field; a general reference department; a circulation department with a computerized check-out system; and a serials department which receives about 1,600 current subscriptions.

CONTINUING EDUCATION

OFFICE OF THE DEAN

Lowell R. Eklund, Dean

There are five administrative units within the Division of Continuing Education: Conference Department, Continuum Center for Adult Counseling and Leadership Training, Course Department, Labor Education Service, and Meadow Brook Hall.

The multifaceted programs of the division are designed to help people perform more effectively in their roles as workers, parents, and citizens. The division continuously revises its offerings to meet the expressed needs of adults whether these be personal or job-related. Its programs are available to all students, faculty, and staff, as well as the general public.

The Conference Department designs conferences, institutes, and seminars on a variety of subjects including creative writing, piano pedagogy, women in politics, youth employment, student leadership, death, and air pollution. In addition, many conference programs are conducted in cooperation with the university's academic departments, as well as with off-campus populations. During the summer months, the conference staff works closely with the Division of Student Affairs staff to promote and implement residential conferences and institutes.

The Continuum Center offers both counseling services and leadership training opportunities to individuals and organizations. As a service organization, the center's purpose is to assist people of all ages in the meaningful evaluation and planning of their lives. Various programs are designed to help people make the necessary personal and/or career decisions at turning points in their lives. As a training organization, the center offers training in communications and small group leadership both to persons who want to become paraprofessional counselors for the center and to individuals who want to become more effective helpers within their own organizations.

The Course Department offers evening nondegree diploma programs and courses in professional, vocational, and cultural

subjects at university content level on campus. All programs and courses carry the nationally recognized Continuing Education Unit (CEU) which is of interest to persons who wish to maintain a file of their nondegree learning experiences. Increasingly, the CEU is being taken into account by many employers and professional associations as a means of assessing the personal and/or occupational growth of individuals. One CEU is the equivalent of 10 classroom hours.

Diploma programs, a series of courses related to individual objectives, are offered in management, plastics technology, real estate, and for legal assistants and medical office assistants. Independent study (correspondence) offerings include diploma programs in supervision, management, and marketing as well as preparatory courses for licensing examinations for real estate and C.P.A. In addition, the department conducts programs and courses designed specifically to meet the needs of business, industry, government, and social agencies.

The Course Department offers daytime and evening nondegree extension courses at the Birmingham Center for Continuing Education (BCCE). Degree credit courses are also offered in this location through the university's Center for General and Career Studies. BCCE, a cooperative undertaking among five state universities and the Birmingham Public Schools, offers a variety of graduate, undergraduate, credit, and noncredit courses. BCCE began operating in September, 1976 as the result of a broad-based community effort to convert an unused facility into a community asset. It is located in the former Barnum Junior High School. Daytime child care is available at the center for children of those registered in university courses.

The Labor Education Service provides residential institutes and daytime/evening courses in both on- and off-campus locations for union members.

Meadow Brook Hall, the university's cultural and conference center, is widely used both by the university and groups in the community. The hall offers a secluded setting for residential and daytime conferences, seminars, and workshops. The mansion, a remarkable revival of Tudor architecture, is open for public viewing and dining every Sunday 1 to 5 p.m. year-round without reservations; in July and August the hall is also open for tours Monday through Saturday 10 a.m. to 5 p.m. Group tours for a minimum of 20 persons can be arranged from September through June.



ACADEMIC POLICIES AND PROCEDURES

Student Responsibility

Each student must fulfill all general and specific requirements and abide by all pertinent academic regulations in order to earn a degree at Oakland University. It is the student's responsibility to learn the requirements, policies, and procedures governing the program being followed and to act accordingly. Students should consult their faculty advisers regularly to verify that all degree requirements are being met in timely fashion.

Undergraduate Degree Requirements

Undergraduate degree requirements are of two kinds: general degree requirements determined by the university to be binding on all baccalaureate programs, and specific degree requirements established by the various colleges, schools, and other academic units empowered to offer degree-level programs of instruction. The graduation requirements for any given student are those stated in the university catalog extant when the student enters Oakland University unless the student chooses to be governed by the requirements shown in a subsequent catalog.

General Undergraduate Degree Requirements

Oakland University has established general undergraduate degree requirements applicable to all candidates for all undergraduate degrees. In order to earn a baccalaureate at Oakland University, a student must satisfy the following criteria:

1. **Residence Requirement:** A student must offer at least 32 credits successfully completed at Oakland University. The student also must take the last 8 (4 in the case of Bachelor of General Studies candidates) credits needed to complete the requirement for a baccalaureate in residence at Oakland University.
2. **Grade Point Average:** A student must have a cumulative grade point average in courses taken at Oakland University of at least 2.00.
3. **Credit Rules:** A student must have completed successfully at least 32 credits in courses at the 300 level or above. If a student has accumulated 62 semester hours of work from any institution(s), that student may not transfer any additional credits from a two-year institution.

4. **Writing Proficiency:** A student must demonstrate proficiency in writing. Proficiency may be demonstrated in two ways:
 - a. Successful completion of an essay test prepared and graded by the Department of Learning Skills. Students who do not achieve the proficiency standard will be counseled to take certain courses in English composition offered by the Department of Learning Skills, prior to another attempt at the essay test.
 - b. Transfer students will be deemed to have met the writing proficiency standard upon presentation of two college-level courses (at least 6 credits) in English composition.
5. **Electives:** A student must present at least 8 credits of free electives.
6. **Procedural Requirements:** A student must be in substantial compliance with all legal curricular requirements, have completed an application for degree card at the Office of the Registrar, and have paid the graduation service fee.
7. **Specific Requirements:** A student must fulfill all specific undergraduate degree requirements as stipulated by the various colleges, schools, and other academic units of the university empowered to present candidates for the undergraduate degree(s) over which they have authority. For further information concerning specific undergraduate degree requirements, consult the following areas in this catalog:
 - a. Bachelor of Arts and Bachelor of Science degrees in the College of Arts and Sciences, page 47.
 - b. Bachelor of Science in Management degree in the School of Economics and Management, page 215.
 - c. Bachelor of Science degree in elementary education, and Bachelor of Science degree in human resources development in the School of Education, pages 236 and 244.
 - d. Bachelor of Science degree in the School of Engineering, page 266.
 - e. Bachelor of Science in Nursing degree in the School of Nursing, page 283.
 - f. Bachelor of General Studies degree in the Center for General and Career Studies, page 288.
 - g. Bachelor of Science degrees in environmental health, medical physics, and medical technology in the Center for Health Sciences, pages 299-304.

Double Degrees and Double Majors

Under certain conditions a student may earn two baccalaureates or may earn a single baccalaureate with two majors. General restrictions which apply to the awarding of two degrees are:

1. The two degrees either must have separate designations (for example, Bachelor of Arts and Bachelor of Science), or
2. The two degrees must be earned in separate academic divisions (for example, the College of Arts and Sciences and the School of Engineering).

If a student at Oakland University wishes to pursue two Oakland University baccalaureates simultaneously, he/she must:

- a. Meet all specified requirements for both degree programs.
- b. Complete a minimum of 32 credits of work in residence at Oakland University beyond that required for one degree if the credit requirements are equal, or beyond that required for the degree requiring the greater number if the credit requirements are unequal. Of these, 16 credits must be at an advanced level (courses at 300 level or above).

If a student already holding a baccalaureate wishes to earn a second baccalaureate, he/she must:

- a. Receive written approval from the college or school concerned (and where appropriate from the department) as part of the admissions process to the second degree program.
- b. Meet all specific requirements for the second degree as stipulated by the college, school, or other academic unit in which the person is a candidate.
- c. Complete a minimum of 32 credits in residence at Oakland University.

A student holding a baccalaureate from Oakland University cannot have his/her undergraduate grade point average modified by additional work, nor can the student be a candidate for university or departmental honors.

A student who meets the specific requirements for each of two degree programs but who is ineligible to receive two degrees, due either to the general restrictions (1 and 2 above) or to an insufficient total number of credits earned, may have certified on his/her transcript that the single degree is awarded with two majors.

Course and Credit System

The unit of credit is the semester hour. One credit is equivalent to a total of three hours work per week including 50 minutes of scheduled instruction and the estimated time that an average student spends in outside preparation each week. Most Oakland University courses are 4 credits. Normally, a full academic load is 16 to 18 credits per semester. With his/her adviser's permission, a student who has completed 12 or more credits at Oakland may register for as many as 21 credits provided that his/her cumulative grade point average is at least 2.60. All other students may take more than 18 credits only as a result of a successful Petition of Exception.

Academic records are maintained in the Office of the Registrar. Reports of standing are mailed to a student's address of record at the end of each academic period. Transcripts of all credits earned may be obtained by completing a request at the Office of the Registrar or by writing that office. There is a small fee for this service.

Regulations Governing Courses

1. The credit-hour value of each course is the number in parentheses following the course title.
2. A course sequence joined by a hyphen (e.g., FRH 114-115) must be taken in the order indicated. The first course in such a sequence is regarded as a prerequisite to that following.
3. Course numbers separated by commas (e.g., HST 214, 215) indicate related courses, which may be taken in any order. Departmental or program requirements may govern the order in certain cases, however.
4. Course numbers 000 to 099 are reserved for courses specially designed to enrich academic skills. Not more than 16 credits in such courses and in tutorial work may be presented toward graduation requirements. Courses numbered 100 to 299 are introductory or intermediate undergraduate courses. Courses numbered 300 to 499 are advanced courses primarily for undergraduates. Courses numbered 500 and above are primarily for graduate students.
5. The registrar reserves the right to cancel any course in which there is insufficient registration.
6. It is the student's responsibility to complete all prerequisites prior to registering for a course with such requirements. Departments may waive prerequisites in accordance with university policy.
7. Some courses are cross-listed between departments. In such cases, the description of the course is listed only in one department. The listing in the other department simply notes that the course is identical with the course in the primary department. When registering, students should select the listing under which they wish to receive credit.

Course Credit

The terms used in stating degree requirements mean either to establish credit in a course by earning a passing grade in the course, by passing a competency examination, or by receiving transfer credit from another institution. In certain circumstances a requirement may be formally waived by a successful Petition of Exception.

Course Competency

Students may receive credit toward graduation designated as competency credit (graded on an S/N basis) on their transcripts for Oakland University courses, subject to the following provisions:

1. That they register for the course at registration with written permission of the department chairperson, dean, or program director of the academic unit responsible for the course.

2. That they pass an appropriate competency examination not more than six weeks after registration closes. A student may receive up to 60 semester hours of competency credit based upon nonclassroom experience. Competency credit will not be permitted for a course when a student has received credit for more advanced courses in the same area. The repeat course rule applies to the repeating of competency examinations.

Petition of Exception

Any student may request a waiver or modification of specific academic requirements. Students may obtain a Petition of Exception form in the office of the dean of the student's school or college. When the form has been completed, it should be signed by a faculty adviser in the student's major department or school. Petitions seeking modification of the normal requirements of a major in order to suit individual programs should be directed to the chairperson of the major department or school. Petitions seeking modification of general undergraduate degree requirements should be returned to the office of the dean of the student's school or college for referral to the appropriate committee on instruction. The student, the registrar, and the student's academic adviser or major department will receive a copy of the petition containing the action taken. Petitions of Exception relating to graduation requirements must be filed no later than the second week of the semester of intended graduation.

Change of Courses

Courses may be dropped at any time during the semester the student decides not to complete a course, in accordance with the grading policies described in the next section. The dropping of courses for which refund of fees is claimed must be processed in a drop-and-add form through the Office of the Registrar (see also Refund of Fees, page 19).

Grading System

1. The basic grading system at Oakland is a 31-point system of numerical grades from 1.0 through 4.0, by tenths, along with the nonnumerical grades W, WS, WN, I, P, S, and N.
2. The first two weeks of a semester (one week in spring or summer sessions) are a no-grade period for dropping and adding courses.
3. The meanings of the nonnumeric grades are as follows:
 - a. "W" is assigned by the registrar if a student withdraws officially from a course between the end of the no-grade period and the end of the refund period.
 - b. The registrar assigns a "W" in all courses if a student withdraws officially from the university at any time prior to the end of the semester.

- c. The instructor assigns a "WS" or "WN" in a course from which a student withdraws officially between the end of the refund period and one week before the beginning of the final examination period. "WS" is assigned if the student's performance at the time of withdrawal merits a grade of 2.0 or better; otherwise, a "WN" is assigned. To accomplish this assignment a student must obtain an appropriate form in the office of the department which offers the course from which the withdrawal is being made. The student takes the form to the instructor and has it completed. The student and the instructor each keep one copy of the completed form. The instructor records the grade on the final grade report.
 - d. The "I" grade is a temporary grade that may be given only in the last week of a course in which a student is unable to complete the required work because of severe hardship beyond the control of the student. The work must be completed within the first four weeks of the next semester in which a student registers. Extensions are permitted on request of the instructor to the dean of the school or college in which the course is offered. The "I" is changed to an "N" at the end of the four-week period if the work is not completed and an extension is not requested and approved. If more than three semesters intervene before the student next registers at Oakland, the "I" grade is changed to an "N."
 - e. The "P" grade is a temporary grade that may be given only in a course that cannot be completed in one semester. Prior approval must be obtained from the dean of the appropriate faculty to assign a "P" grade in a particular course. The "P" grade is given only for work that is satisfactory in every respect. "P" grades must be removed within two calendar years from the date of assignment. If this is not done, the "P" is changed to an "N."
 - f. The "N" grade is assigned by the instructor in any course from which a student does not officially withdraw prior to one week before the final examination period in the semester in which the student has registered for the course and for which the student does not receive credit. It is understood to mean that the student has completed the course unsuccessfully.
 - g. The grade of "S" is given in certain selected courses and is meant to imply 2.0 or better. Courses in which S/N grading is used must be approved by the appropriate Committee on Instruction.
 - h. The grade of "R" is a temporary grade assigned by the registrar in the absence of a grade from the instructor.
4. If none of the above applies, the course is considered to have been completed successfully, and the instructor assigns a

numerical grade from 1.0 to 4.0, inclusive, by tenths. The University Senate has approved the following conversion scheme for some external purposes:

3.6 - 4.0	A	2.0 - 2.9	C
3.0 - 3.5	B	1.0 - 1.9	D

5. All grades, other than the "WS" and "WN," including numerical grades and the nonnumeric grades S, W, N, I, and P, appear on a student's transcript. However, only numerical grades are used in the determination of the student's grade point average, which is computed accurately to two decimal places.

Auditing and Repeating Courses

Students may audit any course with permission of the instructor. Students may repeat courses up to two times with the last grade earned in the course (excluding "N" grades) being used in the computation of the grade point average.

Academic Honors

At the end of each fall and winter semester undergraduates who have achieved a semester grade point average of 3.00 or higher in no fewer than 12 hours of numerically graded university credits and who have received no N or WN grades will be recognized for their high academic achievement. Notices of commendation will be sent to undergraduates with grade point averages of 3.00 to 3.59. Notices of semester honors will be sent to undergraduates with grade point averages of 3.60 to 4.00. Both the commendation and semester honors awards will be recorded on the undergraduates' transcripts.

University Honors

The three levels of University Honors, Cum Laude, Magna Cum Laude, and Summa Cum Laude, may be awarded with the conferral of the baccalaureate with the following cumulative grade point averages:

3.60 to 3.74	Cum Laude
3.75 to 3.89	Magna Cum Laude
3.90 to 4.00	Summa Cum Laude

The awarding of the degree with University Honors will be based only on Oakland University credits, and the student must earn a minimum of 62 credits at Oakland to become eligible for University Honors.

Academic Probation and Dismissal

An undergraduate who does not make satisfactory progress toward a degree either by failing or withdrawing from courses will

be placed on probation. Students on probation who fail to meet the minimal standard of progress established by the University Senate will be dismissed from the university. A statement of the academic probation and dismissal policy can be found in the Schedule of Classes, the Student Handbook, and the Student Services Records Office.

Dismissal from the University

An undergraduate who is dismissed from the university for any reason does not retain the privileges of a registered student. A student who has been dismissed must apply for readmission through the Student Services Records Office unless he/she has been informed that readmission will not be considered.

Undergraduate Withdrawals

A student who leaves the university for any reason must follow the withdrawal procedure. Undergraduates withdrawing from the university must do so through the Student Services Records Office. When a student withdraws from the university after the second week of classes (first week in spring and summer sessions), a grade of "W" will be assigned in all courses.

Undergraduates who plan to return to the university should consult the readmission policy stated below.

Readmission

An undergraduate whose attendance at Oakland is interrupted may be required to make formal application for readmission. The regulations are:

1. Students whose attendance has been interrupted for a total of three or more fall and winter semesters must apply for readmission.
2. Students who withdraw from the university and who are not in good academic standing at the time of withdrawal must apply for readmission.
3. Students who have been dismissed from the university for any reason must apply for readmission.
4. All other undergraduates may return and register for classes without seeking formal readmission.

Students who are required to apply for readmission should request an application from the Student Services Records Office at least one month prior to the beginning of the semester the undergraduate expects to re-enter. (Failure to apply early could result in not being able to register for classes desired.) All undergraduates applying for readmission must pay a \$15 application processing fee.

COLLEGE OF ARTS AND SCIENCES

OFFICE OF THE DEAN

Reuben Torch, Dean

Robert E. Simmons, Associate Dean for Instruction

Melvin Chernov, Associate Dean and Director of the Honors College

The College of Arts and Sciences offers instruction leading to the degrees of Bachelor of Arts and Bachelor of Science and to the degrees of Master of Arts and Master of Science. Jointly with the School of Education it offers instruction leading to the degree of Master of Arts in Teaching.

REQUIREMENTS FOR THE DEGREES OF BACHELOR OF ARTS AND BACHELOR OF SCIENCE

I. General Requirements

A student must:

- A. Have completed 124 credits. No more than 8 credits in physical education will count toward a degree in the College of Arts and Sciences, except for students taking a secondary teaching minor in physical education, in which case a maximum of 20 credits in physical education will be allowed.
- B. Have completed at least 32 of these credits at Oakland University, of which at least 16 credits must be in his/her elected major.
- C. Have completed at least 32 credits in courses at the 300 level or above.
- D. Have taken the last 8 credits needed to complete baccalaureate requirements in residence at Oakland University.
- E. Have a cumulative grade point average of at least 2.00.
- F. Be in substantial compliance with all legal curricular requirements.

II. Requirement of Proficiency Certificate in English Composition

The student must satisfy this requirement as described on page 40.

III. The General Education Requirement

The student must complete the total number of general education credits required by his/her degree program and distributed as explained below. These credits must be chosen from the list of designated courses, except that courses from the student's major department will not be counted toward the general education requirement.

A. Degree Program Requirements:

1. Bachelor of Arts candidates must complete 40 credits.
2. Bachelor of Science candidates must complete 36 credits.
3. Bachelor of Arts or Bachelor of Science candidates with a secondary education teaching credential must complete 24 credits.

B. Required Credits in Distribution Fields:

Distribution Fields	Credits for B.A.	Credits for B.S.	B.A. or B.S. and Teaching Credential
1. Arts	4	4	4
2. History, Philosophy, Area Studies	8*	8*	4**
3. Language and Thought	8	8	4
4. Literature	4	4	4
5. Mathematical and Natural Sciences	8	8	4
6. Social Sciences	8	4	4

*4 credits in Western group and 4 credits in Non-Western group

**4 credits in Western group.

C. Distribution Fields and Designated Courses:

1. ARTS

Our visual and auditory environment constitutes an essential component of our cultural heritage. No civilization exists which has no form of music, art, or theatre. Familiarity with, and appreciation of, these forms of expression broaden our understanding of society and enrich our lives.

AH 100	Introduction to European Art I
AH 101	Introduction to European Art II
THA 100	Introduction to Theatre
MUS 100	Introduction to Music
MUS 250	World Music Survey I
MUS 350	World Music Survey II

2. HISTORY, PHILOSOPHY, AND AREA STUDIES

Knowledge of the historical developments which have shaped the modern world is an essential part of a general education. A comprehensive study of ancient or modern civilizations in the Western tradition is offered by the disciplines of history and

philosophy. This, together with the contrastive cultural study of a very different civilization, provides us with the perspectives which enhance our understanding of our own culture.

Western Group

HST 201, 202	Introduction to European History
HST 214, 215	Introduction to American History
HST 234, 235	British History
HST 291, 292	History of the Afro-American People
CLS 100	Introduction to Classical Civilization
PHL 101	Introduction to Philosophical Thinking
PHL 103	Introduction to Ethics
PHL 204	Ancient Greek Philosophy (beginnings to Aristotle)
PHL 205	Hellenistic and Medieval Philosophy (to Renaissance)
PHL 206	Early Modern Philosophy (to Kant)

Non-Western Group

AS 210	Introduction to China
AS 220	Introduction to Japan
AS 230	Introduction to Africa
AS 240	Introduction to India
AS 250	Introduction to Latin America
AS 260	Introduction to the Slavic World
PHL 250	Philosophies and Religions of Asia

3. LANGUAGE AND THOUGHT

Language both reflects and shapes human culture. The study of language as a means of communication, and the study of the relations between language and logic, perception, and judgment increases our understanding of the influence of language on human thought and behavior. Students may elect to fulfill the 8-credit requirement in Language and Thought in the following ways:

- A. Complete 8 credits in a foreign language
- B. Demonstrate foreign language proficiency equivalent to the completion of the second semester (115). (Successful completion of the proficiency test will exempt students from this distribution field requirement. If students desire credit for their foreign language proficiency, they should attempt a competency credit examination in accordance with university rules.)
- C. Complete 4 credits in ALS 176 or LIN 101 and 4 credits in one of the following:

SCN 207	Semantics
SCN 303	Introduction to Communication Theory
PHL 102	Introduction to Logic
PHL 170	Introduction to Formal Logic

4. LITERATURE

Through great literary works, we can move beyond individual experience and empathetically share the intellectual, emotional, and spiritual experience of others. The study of that imaginative combination of form and content which is a literary work cultivates sensitivity to language and awareness of the strengths and weaknesses of human beings. The study of literature offers a way of expanding our understanding of the wonder and anguish of human experience and of ordering and evaluating our individual place in that experience.

ENG 100	Masterpieces of World Literature
ENG 111	Modern Literature
ENG 105	Shakespeare
ENG 224	American Writers: The 19th Century
ENG 225	American Writers: The 20th Century
ENG 241	From Chaucer to Milton
ENG 242	From Classic to Romantic
CLS 203	Survey of Greek Literature
CLS 205	Survey of Roman Literature
LIT 281	Continental European Literature 1600-1850
LIT 282	Modern Continental Literature

5. MATHEMATICAL AND NATURAL SCIENCES

A basic knowledge of science and the mode of scientific inquiry, which necessarily includes familiarity with the mathematic means of quantification, is more fundamental for an individual in today's society than ever before. Because advances in the technical aspects of chemistry, biology, and physics frequently carry both moral and public policy implications, knowledge about the sciences is required of an informed citizenry.

MTH 104, 105	Elementary Functions, Trigonometry
MTH 121, 122	Introduction to Mathematics for Social Sciences
MTH 123	Introduction to Mathematics for Life Sciences (Students may not take MTH 104-105 and MTH 123.)
MTH 154, 155	Calculus
MTH 185	Mathematics — An Exploration into Undergraduate Topics
STA 225	Introduction to Probability and Statistics
BIO 104, 105	Biology of the Human
BIO 111, 113	Biology
CHM 100	Chemistry and Society

CHM 104	Introduction to Chemical Principles
CHM 114, 115	General Chemistry
PHY 101, 102	General Physics
PHY 104, 105	Astronomy
PHY 106, 107	Earth Sciences
PHY 127	Human Aspects of Physical Science
PHY 151, 152	Introduction to Physics

6. SOCIAL SCIENCES

Individual human behavior is influenced by other human beings and by the social institutions that have evolved as means of regulating varied behaviors. Each of the academic disciplines in the social sciences provides a unique perspective from which to examine the influence of social and cultural factors on individual and group attitudes, values, and behaviors.

SOC 100	Introduction to Sociology
AN 101	Evolution of Man and Culture
AN 102	Man in Culture and Society
ECN 100	Introduction to Political Economy
ECN 200	Introduction to Macroeconomics
ECN 225	American Economic Growth and Development
PS 100	Introduction to American Politics
PS 110	Contemporary Political Issues
PS 115	U.S. Foreign Policy
PS 131	Foreign Political Systems
PS 272, 273	Western Political Thought
PS 377	Communism
PSY 100	Foundations of Contemporary Psychology
PSY 130	Psychology and Society

D. Special Provisions:

1. The number of credits specified for each distribution field is to be regarded as a minimum for completion of that field, except that students transferring from other institutions may complete a 4-credit field requirement with a 3-credit transfer course, and an 8-credit field requirement with two 3-credit transfer courses. Such students must, however, complete the total minimum credit hours in general education (including the credit hours transferred) required for their degree program.
2. Transfer students holding an associate's degree from a community college participating in the MACRAO agreement with Oakland University will be considered as having fulfilled our general education requirements with one exception:

Course work in English composition is considered part of community college general education. English composition

(Learning Skills) is not part of the general education requirements at Oakland. Therefore, transfer students under the MACRAO agreement must complete two additional courses at Oakland approved by a faculty adviser and chosen from among those designated in the distribution fields.

3. Students with double majors which fall in different fields may offer course work from one major to fulfill a distribution field requirement, provided that the courses are designated as acceptable in that distribution field.
- 4a. The general education requirement may, alternatively, be satisfied by completion of 32 credits in the New Charter College program plus an additional 4 or 8 credits in the Language and Thought distribution field for B.S. or B.A. candidates, or
 - b. Completion of the general education requirements specified by the Honors College program.

IV. Requirement of a Department Major or an Independent Major

The student must fulfill all requirements of his/her elected major as described in the departmental entries. The student may also satisfy this requirement by completing an independent major as described below. A cumulative grade point average of 2.00 in the major or independent major is required for graduation.

A. The Major

The majors offered in the College of Arts and Sciences are listed below. For specific requirements, see the department entries.

Art history, page 55
 Biology, page 60
 Chemistry, page 70
 Chinese language and civilization, page 121
 Communication arts, page 81
 Economics, page 212
 English, page 91
 History, page 98
 Linguistics, page 108
 Mathematics, page 113
 French, page 121
 German, page 121
 Russian, page 121
 Russian language and civilization, page 122

Spanish, page 121
 Latin American languages and civilization, page 122
 Music, page 138
 Philosophy, page 150
 Physics, page 157
 Political science, page 163
 Public administration and public policy, page 164
 Psychology, page 170
 Sociology, page 177
 Anthropology, page 177
 Sociology and anthropology, page 177
 Social studies, page 207

The College of Arts and Sciences offers a variety of programs for secondary teaching majors. For a list of departments offering these majors, see page 242. Requirements for these majors are found under the department entries.

There are no college regulations governing admission to major standing or retention in major standing. Each department controls its own procedures in these areas. Students should establish and maintain close contact with faculty advisers in the department in which they wish to major; students who fail to do so risk delay in graduating.

B. Independent Major

An independent major may be offered in lieu of a department major in partial fulfillment of the degree requirements. The regulations are as follows:

1. Students may be admitted to the independent major program only after they have completed at least 32 credits; transfer students with 32 or more credits may be admitted to the program with their first semester as a probationary period.
2. Students must submit the application for admission to the independent major program to the Committee on Instruction, College of Arts and Sciences, before completing 90 credits toward graduation.
3. Students offering the independent major must satisfy all graduation requirements, apart from the major, exactly as they are listed in the undergraduate catalog.
4. An independent major must comprise not less than 40 nor more than 60 credits, at least 32 of which must be in courses at or above the 300 level.
5. At least 75 percent of the credits in an independent major must be in departmental courses offered in the College of Arts and Sciences.
6. The application for admission to the program must be prepared in consultation with an adviser authorized for that purpose by the college; the student's program is valid only upon issuance of a Certificate of Admission to the Independent Major Program by the Committee on Instruction.
7. No change in the program as prescribed by the Certificate of Admission is valid unless the Committee on Instruction has approved the modification in writing.

Inquiries about the independent major program should be addressed to Robert E. Simmons, associate dean for instruction, College of Arts and Sciences.

SPECIAL INSTRUCTIONAL PROGRAMS OF THE COLLEGE

The Minor

Minors are not required by the College of Arts and Sciences for baccalaureate programs. They are required, however, of prospective secondary school teachers seeking certification by the Department of Education of the state of Michigan. For a list of the departments which offer secondary teaching minors see page 242. The requirements for these minors can be found under the department entries.

Interdepartmental Programs and Concentrations

The college offers a number of interdepartmental programs and concentrations which the student may choose to pursue in addition to a department major. These concentrations are described in department entries, in the Area Studies entry on page 186, or in the interdepartmental programs entries on page 197.

PROGRAM-PLANNING AND COUNSELING GUIDELINES

Every student is responsible for drawing up an appropriate academic program and for fulfilling every requirement for the degree. Faculty advisers and academic counselors are obligated to assist students in doing so, but the responsibility for fulfilling requirements remains with the student.

The college suggests that students should:

1. Become thoroughly familiar with all requirements of the degree program.
2. Consult an adviser in the major department every semester to plan the semester's schedule and learn of any changes in requirements.
3. Maintain their own records concerning course work, grades and credits achieved, and requirements completed.
4. Seek clarification of any ambiguities in the requirements from a departmental adviser or from the office of the dean of the College of Arts and Sciences.

DEPARTMENT OF ART AND ART HISTORY

CHAIRPERSON: Carl F. Barnes, Jr.

PROFESSORS: Carl F. Barnes, Jr. (Art History and Archaeology), John B. Cameron (Art History)

ASSOCIATE PROFESSOR: John L. Beardman (Studio Art)

VISITING INSTRUCTORS: Janice G. Schimmelman (Art History), Richard O. Swain (Art History)

Art history is an ideal curriculum for students who wish to investigate a broad range of humanistic disciplines since art is studied in its historical context in terms of the cultural, economic, philosophical, political, religious, social, and technological conditions which determine content and form. The art history program is structured to provide both majors and nonmajors with a thorough introduction to the visual arts accomplishments of various cultures throughout history. The art history program is strengthened by the use of visiting lecturers in special fields, by group visits to the Detroit Institute of Arts and to other public and private collections of art in the Detroit metropolitan area, and through study of special exhibitions of art historical interest in Oakland's Meadow Brook Art Gallery. The department cooperates with the concentrations in American studies and in archaeology, and with the South Asian and East Asian programs in area studies.

The department offers a program of study leading to the Bachelor of Arts degree with a liberal arts major in art history. This program is intended for students who wish directed study in the field of art history and for students who contemplate a career in one of the fields for which art history is a basis: aesthetics and criticism, archaeology, architecture, college teaching, directorship of special library collections, editorial work in art publishing firms, fine arts conservation, museum curatorship, and urban design.

Requirements for the Liberal Arts Major in Art History

A total of 40 credits in art history courses, distributed as follows, are required to complete the major.

1. AH 100, 101, and 104
2. 12 credits from the following courses. At least one course

must be selected from each category:

Non-Western: AH 203, 300, 301

Ancient/Medieval: AH 312, 314, 322, 326

Renaissance/Baroque: AH 330, 340

American/Modern: AH 350, 363, 364, 365, 366

3. 12 elective credits from AH courses

4. AH 490

Majors are advised that departmental faculty will not recommend for graduate work anyone who has not completed, in addition to the above requirements, AH 480 and at least one year of college-level German or French.

Requirements for the Secondary Teaching Minor in Art

A total of 20 credits in art history and studio art courses, distributed as follows, are required to complete the minor. For additional information, consult with the School of Education.

1. AH 100 and 101

2. 4 credits in studio art

3. 8 credits in art history

ART HISTORY COURSE OFFERINGS

AH 100 Introduction to European Art I (4)

History and analysis of the visual arts of western Europe from prehistoric times until the Renaissance, ca. A.D. 1400.

AH 101 Introduction to European Art II (4)

History and analysis of the visual arts of western Europe from the Renaissance, ca. A.D. 1400, until the present.

AH 104 Introduction to Asian Art (4)

History and analysis of the visual arts of Asia, especially those of China, India, and Japan.

AH 203 Buddhist Art (4)

The stylistic, iconographical, sectarian, and historical aspects of Buddhist architecture, sculpture, and painting in Asia from the earliest examples in India through Zen painting in Japan.

AH 210 Art as Advertising and Propaganda (4)

Exploration of the use of art for economic, political, and religious propaganda in the western world with emphasis on the development of art as advertisement since the 19th century.

AH 215 Great Masters of Painting (4)

The paintings and significance of selected artists in Europe and the United States from Leonardo da Vinci to Andy Warhol.

AH 216 Art Historical Archaeology (4)

The history and methodology of archaeology as an aspect of art historical investigation and knowledge.

AH 260 History of Photography (4)

The development of still photography as an art and its relationship to other visual arts since ca. A.D. 1830.

AH 290 Readings in Art History (2)

Specific reading projects in art history, art criticism, connoisseurship, and conservation intended for but not limited to the non-art history major. Graded S/N.

Prerequisite: Permission of instructor.

AH 300 Chinese Art (4)

The development of architecture, sculpture, and painting in China from the Shang Dynasty, ca. 1550 B.C., until the founding of the Chinese Republic, A.D. 1912.

Prerequisite: AH 104.

AH 301 Japanese Art (4)

The development of architecture, sculpture, and painting in Japan from the fifth to the 19th century A.D.

Prerequisite: AH 104.

AH 312 Greek Art (4)

The development of architecture, sculpture, and painting in the pre-Hellenic Aegean civilizations and in Classical Greece from ca. 3000 B.C. until the period of Roman domination in the Mediterranean area, ca. 100 B.C.

Prerequisite: AH 100.

AH 314 Roman Art (4)

The development of architecture, sculpture, and painting in Etruria and in the Roman Republic and Empire from ca. 600 B.C. until the relocation of the capital at Constantinople in A.D. 330.

Prerequisite: AH 100.

AH 322 Early Medieval, Byzantine, and Romanesque Art (4)

The development of architecture, sculpture, and painting in Christian Europe from A.D. 330 through the apex of monasticism, ca. A.D. 1150.

Prerequisite: AH 100.

AH 326 Gothic Art (4)

The development of architecture, sculpture, and painting in western Europe from ca. A.D. 1150 through the period of the crusades and medieval urbanism, ca. A.D. 1400.

Prerequisite: AH 100.

AH 330 Renaissance Art (4)

The development of architecture, sculpture, and painting in western Europe during the Renaissance and Reformation from A.D. 1400 to A.D. 1600.

Prerequisite: AH 101.

AH 340 Baroque Art (4)

The development of architecture, sculpture, and painting in western Europe and colonial South America during the period of absolute monarchy and the Counter Reformation from A.D. 1600 to A.D. 1800.

Prerequisite: AH 101.

AH 350 American Art (4)

The development of architecture, sculpture, and painting in the United States from the American Revolution, A.D. 1776, until World War I, A.D. 1914.

Prerequisite: AH 101.

AH 355 Michigan Architecture (4)

The development of the commercial, domestic, industrial, public, and

religious architecture of Michigan from the period of early settlement until the present.

Prerequisite: AH 363.

AH 363 Modern Architecture and Urban Design (4)

The development of architecture and urban design in Europe and in the United States from the Industrial Revolution, ca. A.D. 1760, until the present. Identical with EGR 363.

Prerequisite: AH 101.

AH 364 Modern Art I (4)

The development of sculpture and painting in Europe from the French Revolution, A.D. 1789, until the last Impressionism exhibition, A.D. 1886.

Prerequisite: AH 101.

AH 365 Modern Art II (4)

The development of sculpture and painting in Europe and in the United States from the last Impressionism exhibition, A.D. 1886, until World War II, A.D. 1940.

Prerequisite: AH 101.

AH 366 Modern Art III (4)

The development of sculpture and painting and related media in Europe and in the United States from World War II, A.D. 1940, until the present.

Prerequisite: AH 101.

AH 390 Topics in Art History (4)

Specific topics in art history for which no regular course offerings exist. Topic, instructor, and prerequisite will be announced prior to each offering.

Prerequisite: Permission of instructor.

AH 480 The Bibliography and Methodology of Art History (4)

The history and criticism of art as disciplines from classical antiquity to the present, with emphasis on the principal approaches to the study of art since A.D. 1500. Students will read selections from the major contributors to these disciplines.

Prerequisite: 12 credits of art history or permission of instructor.

AH 490 Problems in Art History (4 or 8)

Seminar in specific subject areas of, or approaches to, art history. May be taken in different semesters under different instructors for a total of 8 credits or, with permission of instructor and department chairperson, may be taken in one semester for a total of 8 credits.

Prerequisite: 12 credits of art history and permission of instructor.

Studio Art

The departmental program of study leading to the Bachelor of Arts degree with a liberal arts major in studio art has been temporarily suspended, and no new candidates for this major will be accepted during the 1977-1978 academic year. However, the department will offer the following introductory courses, open without prerequisite, in studio art.

STUDIO ART COURSE OFFERINGS

SA 100 Introduction to Two-Dimensional Media (5)

Introduction to a wide range of ideas and attitudes prevalent in contemporary art and the exploration of the possibilities they present for the

making of art rather than on any specific technical training. Emphasis is on conceptualization.

SA 101 Introduction to Three-Dimensional Media (5)

Introduction to a wide range of ideas and attitudes prevalent in contemporary art and the exploration of the possibilities they present for the making of art rather than on any specific technical training. Emphasis is on conceptualization.

SA 107 Drawing Skills I (3)

Introduction to the tools and methods of drawing as a means to observe the physical world accurately and to develop visual ideas more clearly. Emphasis is placed on skill development.

SA 108 Figure Drawing Skills I (3)

Traditional approaches to figure drawing, including anatomy, line, and shading as a means to depicting the figure in illusionistic space. Emphasis is placed on skill development.

Prerequisite: SA 107.

DEPARTMENT OF BIOLOGICAL SCIENCES

CHAIRPERSON: Nalin J. Unakar

PROFESSORS: Francis M. Butterworth, William C. Forbes, V. Everett Kinsey, John R. Reddan, V.N. Reddy, Reuben Torch, Nalin J. Unakar, Walter L. Wilson

ASSOCIATE PROFESSORS: John D. Cowlshaw, Esther M. Goudsmit, Moon J. Pak, Michael V. Riley, Arun K. Roy

ASSISTANT PROFESSORS: Thomas B. Friedman, Egbert W. Henry, R. Douglas Hunter, Paul A. Ketchum, Charles B. Lindemann, Brian P. Livermore, Virinder K. Moudgil, Asish C. Nag, John T. Romeo, Barry S. Winkler

ADJUNCT PROFESSOR: Clifford V. Harding

ADJUNCT ASSOCIATE PROFESSORS: Nasirul Haque, James R. Wells

ADJUNCT ASSISTANT PROFESSORS: Frank J. Giblin, Kenneth Hightower

The Department of Biological Sciences offers programs of study leading to the degrees of Bachelor of Arts, Bachelor of Science, and Master of Science. The undergraduate programs prepare the student for graduate studies in the life sciences, laboratory and research in industries concerned with biological materials, professional careers in medicine, dentistry, nursing or other allied health areas, or science teaching in junior and senior high schools. This liberal arts program in biology is particularly well suited to the needs of the premedical student. For further information on the graduate program in the department, see the *Oakland University Graduate Study Catalog*.

The Department of Biological Sciences offers a diversified selection of courses and research programs in cell biology, biochemistry, physiology, morphology, genetics, botany, ecology, aquatic biology, invertebrate zoology, developmental biology, microbiology, plant physiology, and evolutionary biology. The student selects courses that suit his/her goals and interests and also has the opportunity to become involved in a research program. Since modern biology requires physiochemical insight, training in chemistry, physics, and mathematics is also required.

Requirements for the Bachelor of Arts Degree with a Major in Biology

Forty credits in biology (from BIO 111 and above) are required, including at least seven lecture courses. Corresponding lecture and lab courses should normally be taken simultaneously. In

addition, 15 credits of chemistry (CHM 114, 115, 117, 118, 203, and 206), 10 credits of physics (two semesters of general physics and lab), and at least 8 credits of mathematics (MTH 123, STA 225; or MTH 123, 154; or MTH 154, STA 226; or MTH 154, 155) are required. The choice of chemistry, math, and physics should be made with care. Students planning to enter graduate or professional school should plan to take courses beyond the minimum requirements, such as CHM 204, 207, MTH 154, 155 and PHY 151, 152 (instead of PHY 101, 102). In addition, a lack of laboratories or of 300- and 400-level biology courses may seriously weaken a student's chance to enter post-graduate programs.

Requirements for the Bachelor of Science Degree with a Major in Biology

Forty credits in biology (from BIO 111 and above) are required, including at least seven lecture courses. Corresponding lecture and lab courses should normally be taken simultaneously. In addition, two years of chemistry (CHM 114, 115, 117, 118, 203, 204, 206, and 207), mathematics through integral calculus (MTH 155), and a one-year calculus-requiring general physics course and lab (PHY 151, 152, and 158) are required. Finally, in addition to the formal course requirements, the student must complete one of the following three alternatives: a senior paper based upon research performed under BIO 490, a senior paper based upon a literature search on a research-oriented topic taken as BIO 405, or a comprehensive exam, testing breadth of knowledge in biology, and ability to express oneself in clear, scientific prose.

Requirements for the Secondary Teaching Major in Biology

Thirty-five credits in biology (from BIO 111 and above) are required including at least six lecture courses. One year of general chemistry and associated labs (CHM 114, 115, 117, 118), two semesters of mathematics above MTH 123 (for example: MTH 123 and STA 225 or MTH 123 and MTH 154), and ED 344, 345, 428 (winter only), and 455 are required. A minor is required (see page 242). Minors in chemistry, physics, or a group minor in chemistry and physics (CHM 114, 115, 117, 118, 203, 206; PHY 101, 102, 158) are recommended. Apprentice college teaching (BIO 497) is recommended as a preliminary classroom experience prior to the internship (ED 455). Choice of courses should be made in consultation with an academic adviser in the biology department. The following courses are recommended: BIO 111, 112, 113, 114, Anatomy and Physiology, Botany, Microbiology, Ecology, Developmental Biology, Genetics, Evolution, and Field Biology. The following biology laboratories should be taken: BIO 238, 282, 324, 342, 390.

Requirements for the Secondary Teaching Minor in Biology

Twenty credits in biology (from BIO 111 and above) are required.

Department Honors

Department honors may be granted to students who show high academic achievement and excellence in either independent research or in teaching assistance.

The specific requirements are:

1. 3.20 grade point average minimum overall and 3.50 grade point average minimum in BIO courses
2. at least one 400-level BIO lecture course (BIO 405, 455, 490, and 497 do not qualify)
3. demonstrated excellence in one of the following two service roles:
 - a. assisting in teaching laboratory course(s) (either for pay or credit)
 - b. performing independent laboratory study or serving as a laboratory research assistant

COURSE OFFERINGS

The following courses are designed particularly for nonscience majors and are not counted toward the biology major or minor requirements.

BIO 104 **Biology of the Human (4)**

The biology of man. Cells, tissues, organs, conduction, contraction, and circulation of blood and lymph and breathing. Offered fall and winter semesters.

BIO 105 **Biology of the Human (4)**

Digestion, excretion, the endocrine system, and reproduction will be discussed. Offered fall and winter semesters.

Prerequisite: BIO 104.

The following courses are designed particularly for the biology major and minor and for other majors in the sciences.

BIO 111 **Biology (4)**

Subjects covered are at the level of molecular and cell biology: cell ultrastructure, enzymology, metabolism, genetics, cell division, and chemical embryology. Emphasis is placed on several basic biological concepts, facts upon which these concepts are based, and the directions which present research is taking. A year of high school chemistry is strongly recommended. BIO 113 may be taken before BIO 111. Offered fall semester.

BIO 112 **Biology Laboratory (1)**

To accompany BIO 111.

BIO 113 **Biology (4)**

Designed to complement BIO 111 by taking an organismic approach to biology. The structure and functions of plants and animals will be pre-

sented on an introductory level and will include: nutrient acquisition, gas exchange, internal transport, excretion, chemical and nervous control, reproduction, and behavior. A section on ecology and evolution will be followed by a synoptic view of the major phyla of plants and animals. Offered winter semester.

BIO 114 Biology Laboratory (1)

To accompany BIO 113.

BIO 205 Human Anatomy (4)

The integration of organs into systems and systems into the organism. Selected aspects of developmental, comparative, and microanatomy also will be discussed. Relevant to students engaged in health sciences, biological science, and liberal arts studies.

Prerequisite: BIO 111.

BIO 206 Human Anatomy Laboratory (1)

To accompany BIO 205.

BIO 207 Human Physiology (4)

A detailed study of general physiological principles and mechanisms with emphasis on systemic physiology. An introduction to the physical principles important to understanding physiological processes will be given. Normal physiology of individual organ systems will be explored, with stress on the role each plays in the human homeostatic balance.

Prerequisite: BIO 111.

BIO 208 Human Physiology Laboratory (1)

To accompany BIO 207.

BIO 221 Physiology (4)

A detailed study of general physiological principles. Primary emphasis will be focused on the following topics: characterization of the internal environment, bio-energetics, transport of material across the cell membrane, osmoregulation, respiration, conduction, contraction, and circulation.

Prerequisite: BIO 113.

BIO 222 Anatomy and Physiology Laboratory (1)

A detailed study of vertebrate anatomy and physiology. To accompany BIO 221.

BIO 223 Histology (4)

The microscopic anatomy and histochemistry of vertebrate tissues and organs in relation to tissue function.

Prerequisite: BIO 113.

BIO 224 Histology Laboratory (2)

To accompany BIO 223.

BIO 225 Elementary Biophysics and Cellular Biochemistry (4)

The principles and techniques of molecular biology which are basic to discussions in the intermediate and advanced courses. Topics include: structure and function of macromolecules, cellular organization, biological energy, molecular genetics, and related techniques. Offered fall semester.

Prerequisite: One year of inorganic chemistry.

**BIO 226 Elementary Biophysics and Cellular
Biochemistry Laboratory (1)**

To accompany BIO 225.

BIO 231 Introduction to Medical Microbiology (4)

An integrated survey of the principles of microbiology as they apply to infectious diseases and their control. Topics include bacterial, mycotic, protozoan, and viral infections; immunology; epidemiology; pathogenic mechanisms; antimicrobial agents; and chemotherapy. Required of students in the nursing program.
Prerequisite: BIO 205.

BIO 237 Botany (4)

A course in plant biology including topics on gross and microscopic structure, physiological processes, reproduction, and development. Diversity within the plant kingdom and evolutionary history are also discussed. Offered fall semester.
Prerequisite: BIO 113.

BIO 238 Botany Laboratory (1)

To accompany BIO 237.

BIO 239 Ecology and Man (2)

The ethical, social, and technical implications of current ecological problems will be explored through readings and discussions. Topics covered will include: human population growth, world food supplies, energy resources, pollution, urban development, and land use. Offered winter semester.
Prerequisite: Sophomore standing and one lab science course.

BIO 241 Plant Morphology (4)

Structure, reproductive mechanisms, and evolutionary relationships of the plant groups. Ultrastructure of cells and their walls. Preparation of plant materials for microscopic examination. Cytochemistry and histogenesis of selected specimens. Offered winter semester.
Prerequisite: BIO 113.

BIO 242 Plant Morphology Laboratory (1)

To accompany BIO 241.

BIO 243 Plant Physiology (4)

Basic principles of the major physiological processes of plants. Emphasis is placed on hormonal relationships, inorganic nutrition, water relations, metabolism, photosynthesis, and tropisms. The importance of data obtained from the use of specialized plant research techniques — electron microscopy, spectrophotometry, ultracentrifugation, and gaseous treatments — will constitute a significant input to the content of the respective physiological subject areas.
Prerequisite: BIO 113 and permission of instructor.

BIO 244 Plant Physiology Laboratory (1)

To accompany BIO 243.

BIO 247 Invertebrate Zoology (4)

Invertebrates comprise a large part of the earth's population and have vast potential as research material. Lectures will stress metabolism, neural functioning, reproduction, and adaptations to environmental conditions.
Prerequisite: BIO 111, 113. Corequisite: BIO 248.

BIO 248 Invertebrate Zoology Laboratory (1)

A survey of the functional anatomy of the major invertebrate phyla. Living material will be observed whenever possible.
Corequisite: BIO 247.

BIO 249 Endocrinology (4)

An integrated study of the vertebrate endocrine systems with emphasis on their interrelationship, control, and mechanism of action. Offered winter semester.

Prerequisite: BIO 221 or 225.

BIO 250 Endocrinology Laboratory (2)

To accompany BIO 249. Individual research projects.

Prerequisite: Permission of instructor.

BIO 257 Vertebrate Zoology (5)

A comparative study: gross and histological anatomy, taxonomy, unique physiological adaptations to habitats, evolution, and paleontology. Includes laboratory experience.

Prerequisite: BIO 111, 113, or permission of instructor.

BIO 281 General Microbiology (4)

An introduction to the science of studying small organisms and viruses. Topics discussed include microbial metabolism, growth, genetics, classification, and the specialized techniques used to study microorganisms. The relationships of the pathogenic microorganisms and viruses to man and the involvement of microorganisms in the nutrient cycles of the earth are presented.

Prerequisite: BIO 113, CHM 115.

BIO 282 General Microbiology Laboratory (1)

To accompany BIO 281.

Prerequisite: Permission of instructor.

BIO 301 Ecology (5)

Basic ecological concepts, energy and materials flow, growth and regulation of populations, chemical ecology, and environmental biology. Includes laboratory experience. Offered fall semester.

Prerequisite: BIO 113 and 114.

BIO 303 Field Biology (4)

An ecologic and taxonomic study of the flora and fauna of Oakland University's setting. Soil, climatic, and biological factors will be recognized. Aims include appreciation of a variety of habitats, competency in use of illustrated handbooks and keys, and skills in collecting, preserving, and identifying.

Prerequisite: BIO 113 and 114.

BIO 309 Parasitology (4)

A survey of parasitic relationships: taxonomy and anatomy of involved organisms, life cycles, nutrition, pathology, immunology, and preventive methods. Opportunity for individual projects. Offered fall and winter semesters.

BIO 310 Parasitology Laboratory (1)

Corequisite: BIO 309.

BIO 323 Developmental Biology (4)

The principles of embryology of vertebrates with emphasis on humans. A consideration of events in the progressive development of the egg into the adult organism. The physiological aspects of morphogenesis, differentiation, growth, and regeneration will be included.

Prerequisite: BIO 111 and 113. Recommended: BIO 324.

BIO 324 Developmental Biology Laboratory (1)

A series of exercises on frog and chick development using live material

and prepared slides.
Corequisite: BIO 323.

BIO 331 Advanced Microbiology (4)

A study of the classification, morphology, and physiology of microorganisms. This class is directly correlated with BIO 332, which is a corequisite.

Prerequisite: BIO 281 and CHM 203.

BIO 332 Advanced Microbiology Laboratory (2)

Selective enrichment, isolation, and characterization of microorganisms from natural sources.

Corequisite: BIO 331.

BIO 341 Genetics (4)

The physical and chemical basis of inheritance. Selected topics in human genetics, microbial genetics, biochemical genetics, and cytogenetics. Two lab options are available; see BIO 342 and 345. Offered winter semester.

Prerequisite: BIO 111, 112, 113, 114; BIO 225 recommended.

BIO 342 Genetics Laboratory (1)

A series of short experiments to demonstrate basic genetic principles to accompany BIO 341.

BIO 343 Aquatic Biology (4)

A general study of energy flow and biomass production up the trophic series, including energy transfer and limiting factors at each level. The finite nature of aquatic resources and their exploitation in relation to the future protein requirements of man will be explained and examined. Offered fall semester.

Prerequisite: BIO 111, 113, and junior standing.

BIO 345 Experimental Genetics (2)

An innovative approach to learning genetics where the student working on an individual research project not only will learn some of the basic principles of genetics but also will obtain preliminary experience in biological research. To be offered with BIO 341.

BIO 350 Physiology of the Central Nervous System (2)

A course on the functional organization and integrative operation of the central nervous system. Topics include neuronal activity, synaptic transmission, regional network properties, organization of cerebral function, sensation, and control of motor activity.

Prerequisite: Introductory biology course or equivalent.

BIO 355 Visual Physiology (2)

A course primarily on the structure and function of the vertebrate visual system. Topics include optical properties of the eye: absorption of light energy by photo-pigments, transduction processes in photoreceptor cells, transmission and encoding of visual information through the retina, lateral geniculate body, visual cortex and associative structures, dark and light adaption, and color vision.

Prerequisite: BIO 221 and permission of instructor.

BIO 361 Medical Microbiology and Immunology (4)

Consideration of the major infectious diseases in terms of their etiology, epidemiology, pathogenesis, diagnosis, and control. The basic concepts of immunology will be presented as well as their practical applications. Topics will include blood group antigens and antibodies, autoimmune phenomenon, and the immunobiology of cancer and tissue transplanta-

tion. Required of students in the medical technology program.

Prerequisite: BIO 281. Corequisite: BIO 362.

BIO 362 Medical Microbiology and Immunology Laboratory (2)

Corequisite: BIO 361.

BIO 371 Hematology (2)

Overview of blood components, with emphasis on cell characteristics, clotting mechanisms, and clinical features of major ailments. Emphasis on laboratory techniques: cell counting, staining smears, sedimentation, hematocrit, osmotic fragility, coagulation time. Understanding of and adeptness with these techniques required.

Prerequisite: BIO 111 and 113.

BIO 373 Field Botany (4)

A local flora course in the identification of vascular plants occurring naturally in Michigan. Primary emphasis is on flowering plants, although ferns and coniferous species are also treated. Includes field trips to representative natural areas in southeastern Michigan.

Prerequisite: BIO 111 and 113.

BIO 387 Evolution and Systematics (4)

Exploration of the processes producing direction and order in evolution and increasing the diversity of life through the formation of new species. Among topics to be covered: origin of variability, differentiation of populations, speciation, phylogenetic concepts, chemical ecological relationships, co-evolution, and biochemical systematics.

Prerequisite: BIO 341 recommended.

BIO 390 Laboratory Techniques in Biological Sciences (4)

Laboratory techniques will cover a broad spectrum of the current research assay methods normally used in the biological sciences. Students may concentrate on developing competence in areas of their own special interest.

Prerequisite: Four semesters of natural science and permission of instructor.

BIO 405 Special Topics (2, 3, or 4)

Prerequisite: Permission of instructor.

BIO 407 Cellular Biochemistry (4)

An advanced level discussion on cellular control mechanisms emphasizing recent developments in the biochemistry of proteins and nucleic acids.

Prerequisite: BIO 225, CHM 204, and PHY 102.

BIO 408 Cellular Biochemistry Laboratory (1)

To accompany BIO 407. An introduction to modern research techniques in biochemistry. The laboratory work will include: different chromatographic techniques (paper, column, thin layers, etc.), electrophoresis and immunoelectrophoresis, ultracentrifugation and cell fractionation, isolation and density gradient analysis of the nucleic acids, etc.

BIO 411 Experimental Embryology (4)

Lectures and student seminars on current topics in gametogenesis, fertilization, and development. Emphasis is on the critical evaluation of current and classical publications. Offered winter semester.

Prerequisite: BIO 323 and permission of instructor.

BIO 412 Laboratory in Experimental Embryology (1 or 2)

The development of a variety of living embryos will be followed. When the stages of normal development have been observed, an experimental

analysis of some aspect of embryogenesis will be undertaken.
Corequisite: BIO 411.

BIO 415 Differentiation (4)

Advanced topics in developmental biology and a consideration of the theories relating to the control of differentiation and development.
Prerequisite: BIO 323 and 324.

BIO 425 Biophysics (4)

An examination of the relationship of biology to the other sciences. Organisms as hierarchical, open systems; thermodynamic, optical, and electrical properties of biosystems. Offered winter semester.
Prerequisite: BIO 225 or equivalent, calculus, and general physics.

BIO 426 Biophysics Laboratory (1)

To accompany BIO 425.

BIO 427 Human Genetics (4)

Key aspects of classical and molecular genetics of humans will be considered. Topics will be: inborn errors of metabolism, cytogenetics, somatic cell genetics, biochemical genetics, immunogenetics, and the genetics of cancer.
Prerequisite: BIO 341 and permission of instructor.

BIO 429 Cytochemistry (4)

A survey of techniques currently used in microscopy to analyze the distribution and quantity of specific chemicals within cells and their organelles. Techniques included are: specific staining reactions, enzyme digestion, metabolic inhibition, and autoradiography.
Prerequisite: BIO 223 and 224. Corequisite: BIO 430.

BIO 430 Cytochemistry Laboratory (2)

Individual research projects employing cytochemical techniques to study and compare the chemical compositions of several types of cells.
Corequisite: BIO 429.

BIO 431 Cellular Motility (4)

A survey of the role and mechanism of cell movement in living systems. An introduction to applicable principles of physics and chemistry will be provided. Special consideration will be given to developmental movements (cell migration), cell division (mitosis), and the movement of microorganisms.
Prerequisite: BIO 111, BIO 221, PHY 101, and CHM 114.

BIO 435 Developmental Genetics (4)

An integrated discussion of the concepts of modern aspects of genetics derived from molecular and microbial systems, and their application to the problems of development in multicellular organisms. Offered fall semester.
Prerequisite: BIO 225, 226, 323, 341, and 342.

BIO 436 Developmental Genetics Laboratory (1)

To accompany BIO 435.

BIO 437 Virology (4)

Molecular biology of viruses, predominantly bacterial.
Prerequisite: BIO 225, 331, or 341.

BIO 438 Virology Laboratory (1)

To accompany BIO 437.

BIO 441 Microbial Genetics (4)

A discussion of the genetics of microbial systems, including molds, bac-

teria, protozoa, and viruses.

Prerequisite: BIO 331 and 341.

BIO 442 Microbial Genetics Laboratory (1)

To accompany BIO 441.

BIO 445 Ultrastructure (4)

A consideration of the fine structure of cells and cell products as revealed by electron microscopy and other procedures. Offered winter semester.

Prerequisite: BIO 223 and permission of instructor.

BIO 446 Ultrastructure Laboratory (2)

To accompany BIO 445.

BIO 455 Seminar (1)

Discussion of recent publications in the biological sciences.

BIO 463 Cell Biology (4)

Prerequisite: BIO 223 and permission of instructor.

BIO 464 Cell Biology Laboratory (1)

To accompany BIO 463.

BIO 471 Advanced Physiology — Nerve (4)

Review and analysis of the modern concepts of membrane excitation phenomena of nerve and synapse. Electrophysiological phenomena discussed most at cellular and molecular levels. Offered fall semester in alternate years.

Prerequisite: BIO 221 and permission of instructor.

BIO 472 Advanced Physiology Laboratory (1)

To accompany BIO 471. An introduction to research techniques in electrophysiology. Work will include: use of oscilloscope, amplifiers, and stimulator; extracellular potential recording technique; and microelectrode technique.

BIO 473 Advanced Physiology — Muscle (4)

Review and analysis of the modern concepts of muscular activity and molecular mechanism of contraction. The discussions will include the ultrastructural correlation of muscle function and mechanics, biochemical approaches to elucidate energetics of muscle contraction, and theories of molecular basis of muscular contraction. Offered fall semester in alternate years.

Prerequisite: BIO 221 and permission of instructor.

BIO 474 Advanced Physiology Laboratory (1)

To accompany BIO 473. An introduction to research techniques in muscle physiology. Work will include: neuromuscular transmission study, isometric force measurements, isotonic lever design problems, length-tension and force-velocity relations, stress-strain relations of series elastic component, contractile properties of isolated actomyosin system, and glycerinated muscle fiber.

BIO 490 Individual Laboratory Work (2, 3, or 4)

Prerequisite: Permission of instructor.

BIO 497 Apprentice College Teaching (2)

Assisting in presenting a course, usually a laboratory course, to undergraduates.

Prerequisite: Permission of instructor.

DEPARTMENT OF CHEMISTRY

CHAIRPERSON: Paul Tomboulion

PROFESSORS: Gottfried Brieger, Kenneth M. Harmon, Lewis N. Pino, Paul Tomboulion

ASSOCIATE PROFESSORS: Julien Genyeva, Steven R. Miller, Frederick W. Obear, Joel W. Russell, Peter Schmidt, Michael D. Sevilla, Robert L. Stern, Craig Taylor

ASSISTANT PROFESSORS: Denis Callewaert, Christine S. Sloane, Donald C. Young

The Oakland University chemistry programs offer students the laboratories and equipment typically found in larger universities while retaining the strong emphasis on undergraduate education and informality of student-faculty relations characteristic of smaller liberal arts colleges. Research opportunities are available to qualified undergraduates. The department offers highly professional chemistry programs while retaining the liberal arts dedication to developing the highest intellectual and creative potential of its students. The Department of Chemistry offers programs of study leading to the degrees of Bachelor of Arts, Bachelor of Science, and Master of Science.

Requirements for the Bachelor of Science Degree with a Major in Chemistry

This program provides excellent professional preparation either for graduate study or for industrial work. Well-prepared students who regularly attend the spring sessions may also obtain the degree of Master of Science with a major in chemistry in four calendar years.

Forty-eight credits in chemistry are required. These must include the basic courses CHM 114, 115, 117, 118, 217, 218, 234, and 235, or their equivalents; the intermediate courses, CHM 312, 327, 344, 345, 347, and 349; two advanced lecture courses in different areas; and 4 credits in advanced laboratory courses. In mathematics and physics 26 credits are required. These must include MTH 154, 155, and 254; PHY 151, 152, and 158; or their equivalents; and one additional approved MTH, APM, or PHY course at the 200 level or higher. GRM 114-115 or RUS 114-115 are recommended for students planning to go on to graduate study and research in chemistry. Graduate-level courses in chemistry are available to qualified undergraduates.

Requirements for the Bachelor of Arts Degree with a Major in Chemistry

This curriculum is designed for students who prefer to plan much of their own program. It should be selected by chemistry students with strong interests in biochemistry, chemical physics, medicine, environmental studies, and technical-business or technical-legal careers.

Thirty-eight credits in chemistry are required. These must include the basic courses CHM 114, 115, 117, 118, 203, 204, 206, 207 (or 218), 217, or their equivalents; intermediate courses CHM 327, 344, and 347; and at least one other lecture course and three other laboratory credits in chemistry at the 300 level or higher. Also, MTH 154 and 155, PHY 151, 152, and 158, or their equivalents, are required.

Requirements for the Secondary Teaching Major in Chemistry

Thirty-two credits in chemistry are required. These must include CHM 114, 115, 117, 118, 203, 204, 206, 207, 217, 344, and 497, or their equivalents. Also, MTH 154 and 155 are required, as are ED 344, 345, 428, and 455. A minor is required. A group biology-physics minor, consisting of 12 credits in physics and 12 credits in biology, is recommended. Admission to major standing must be attained at least one semester prior to registering for ED 455.

Requirements for the Secondary Teaching Minor in Chemistry

Twenty credits in chemistry courses are required.

Departmental Honors

Departmental honors may be awarded to graduating seniors in chemistry who have been recommended for honors by their research advisers and have completed all required science courses with consistently high grades.

American Chemical Society Certification

The Department of Chemistry faculty, facilities, and curriculum meet the criteria of the American Chemical Society. Thus, the department is empowered to certify chemistry students as eligible for membership in the society. Certification is granted to students who have successfully completed the requirements for the Bachelor of Science major in chemistry. Foreign language study is recommended.

Admission to Major Standing

In order to be considered for a degree with a major in chemistry, the student must be admitted to major standing by the department at least three semesters prior to graduation. Students should make application at the department office. A student will be admitted to major standing after successful completion of a total of 30 credits in chemistry, physics, and mathematics, including CHM 217, MTH 155, and PHY 151.

Environmental Concentrations

By a suitable choice of courses in the liberal arts (B.A.) chemistry major and a minimum of 20 credits in appropriate environmental studies courses, a student may complete a concentration in environmental studies or environmental health. Consult the program director or departmental advisers for details.

Biochemistry and Premedical Options

Students majoring in chemistry who wish to prepare themselves for careers in biochemistry may emphasize this area by selecting appropriate electives within the B.A. or the B.S. major curriculum.

A concentration in premedical studies may be achieved by adding 15 credits in biology to a regular chemistry major program.

Consult a chemistry faculty adviser when planning one of these options.

Special Options

Students majoring in chemistry may also emphasize one or more of the applied fields of chemistry, such as: industrial chemistry or chemical physics, either through selecting appropriate courses in addition to the regular major curriculum or by developing an individualized program of study through the modified major procedure. Consult departmental advisers for details.

Placement in Introductory Chemistry Courses

The various introductory courses (CHM 101, 104, 114, and 124) are designed for students in different majors and with different levels of mathematical and physical science preparation. In order to assure the best choice of course, each student must take the Chemistry Placement Test before registering for any of these courses. Placement is based on the results of this test as well as high school science and mathematics experience. Consult the department or class schedule for additional details and the schedule for the tests.

UNDERGRADUATE COURSE OFFERINGS

Credit will not be allowed for more than one course from each of the following pairs: CHM 206 and 218, 203 and 234, 204 and 235. Credit will not be allowed in major and minor programs for the following courses: CHM 100, 101, 104, 201, and 497 (except for secondary education).

CHM 100 Chemistry and Society (4)

For nonscience students. A study of the effects of chemicals and radiation on the total environment, the role of chemistry in modern society, the chemist's view of nature, and the responsibility of the scientist to society.

CHM 101 Basic Chemistry (4)

Basic chemical facts and concepts providing background and problem-solving skills in general chemistry. Intended especially for students needing additional preparation before enrolling in CHM 104 or 114. Prerequisite: Chemistry Placement Test.

CHM 104 Introduction to Chemical Principles (4)

Students learn selected principles related to molecular structure, solution chemistry, stoichiometry, nomenclature, properties of elements, acid-base and oxidation-reduction chemistry, thermochemistry, and equilibrium. CHM 104-201 constitutes a complete two-semester sequence for students desiring an integrated program in general, organic, and biological chemistry. Recommended preparation is two years of high school mathematics, including algebra, and one year of high school science.

Prerequisite: Placement by Chemistry Placement Test, or CHM 101.

CHM 114-115 General Chemistry (4 each)

A study of the basic concepts of chemical theory together with the development of problem-solving skills necessary to deal with quantitative aspects of stoichiometry, states of matter, elementary atomic and molecular structure, thermochemistry, equilibrium, and kinetics of reactions. CHM 114-115 are prerequisite to all other departmental courses, except CHM 201. Recommended preparation is three years of high school mathematics and one year of high school chemistry.

Prerequisite: Placement by Chemistry Placement Test or CHM 101. Corequisite: MTH 104 or higher.

CHM 117-118 Chemistry Laboratory (1 each)

Experiments illustrating fundamental chemical principles and modern laboratory techniques, such as analytical methods, separation studies, qualitative and instrumental analysis.

Corequisite: CHM 114-115.

CHM 124-125 General Chemistry (Honors) (4 each)

Review of the basic concepts and principles of quantitative problem solving as in CHM 114-115, augmented by in-depth studies of aspects of chemistry of current interest. Calculus will be used as needed. Recommended preparation is three years of high school mathematics, one year of high school chemistry, and one year of high school physics.

Prerequisite: Placement by Chemistry Placement Test. Corequisite: MTH 154-155.

CHM 127-128 Chemistry Laboratory (Honors) (1 each)

Selected experiments emphasizing modern laboratory practice. Corequisite: CHM 124-125.

CHM 201 Introduction to Organic and Biological Chemistry (4)

A brief study of the structure and reactivity of organic molecules, emphasizing applications to the biochemical functioning of carbohydrates, proteins, lipids, and nucleic acids. CHM 201 is not applicable as chemistry credit for biology, chemistry, or physics majors; premedical students; or secondary-education minors in chemistry.

Prerequisite: CHM 104.

CHM 203-204 Organic Chemistry (4 each)

Study of functional groups, organic nomenclature, structure, and reactions. Stereochemistry, mechanisms of reactions, synthetic pathways, and applications are included.

Prerequisite: CHM 115.

CHM 206-207 Organic Chemistry Laboratory (1 each)

Training in the basic techniques of synthesis, degradation, separation, and identification of organic substances. Some experience with natural products included.

Prerequisite: CHM 118. Corequisite: CHM 203-204.

CHM 217 Introductory Analytical Chemistry Laboratory (2)

Laboratory practice in the fundamentals of gravimetry, titrimetry, polarography, spectrophotometry, and complex equilibrium systems.

Prerequisite: CHM 118 or 207.

CHM 218 Introductory Synthesis Laboratory (2)

Preparation of organic and inorganic compounds with emphasis on laboratory techniques and skills. Methods of purification, separation, and handling of materials. Simple applications of instrumental methods (IR, UV, NMR, and GC), and computer file-searching in identification of compounds.

Prerequisite: CHM 217 and 234.

CHM 234-235 Structure and Reactivity (4 each)

A comprehensive introduction to organic chemistry. Functional groups, reaction mechanisms, stereochemistry rearrangements, polymers, and natural products.

Prerequisite: CHM 115.

CHM 240 Chemical Literature and Writing (1)

Introduction to the format and organization of standard chemical literature. Practice in writing technical reports and proposals and preparing visual and graphic presentation materials.

Prerequisite: CHM 115 and 203.

CHM 241 Computer Techniques for Chemistry (2)

Programming of computers to solve problems of properties of gases, reaction rates, complex equilibria, spectroscopic analysis, and molecular orbital calculations.

Prerequisite: CHM 115.

CHM 290 Introduction to Research (1, 2, or 4)

Introduction to laboratory research for students with no previous experience in research. May be repeated for credit. Graded S/N.

Prerequisite: Permission of instructor.

CHM 312 Inorganic Chemistry (4)

Overview of the chemistry of the elements, with emphasis on ionic and covalent bonding, acid-base chemistry, nonaqueous solvent systems, de-

scriptive chemistry of the main group, transition metal and lanthanide elements. Introduction to ligand field theory, organometallic and bioinorganic chemistry.

Prerequisite: CHM 344.

CHM 327 Electronic Measurements and Instrumentation Laboratory (2)

Introduction to the basic components of electronic measuring devices and their uses in analog devices and digital circuits. Special consideration of the electronic components of atomic absorption and infrared spectrometers and applications of these techniques to chemical analysis.

Prerequisite or corequisite: CHM 217.

CHM 341 Mathematical Techniques for Chemistry (1)

Study and practice in applications of calculus to chemical problems.

Prerequisite: CHM 115 and MTH 155. Corequisite: CHM 344.

CHM 344 Physical Chemistry I (4)

Macroscopic studies of thermodynamics, equilibria, transport phenomena, and kinetics of chemical systems. Students will predict properties and behaviors of selected systems using data from the literature. CHM 341 is strongly recommended as a corequisite for students needing additional mathematical preparation.

Prerequisite: CHM 115, MTH 155, and PHY 152.

CHM 345 Physical Chemistry II (4)

Microscopic studies of chemical systems with basic principles of quantum and statistical mechanics, and properties related to molecular structure.

Prerequisite: CHM 344.

CHM 347 Instrumental Techniques Laboratory (1)

UV-visible and NMR spectroscopy and thermal measurement techniques with applications to physical and thermodynamic properties of substances and to chemical kinetics.

Prerequisite: CHM 327 and 344.

CHM 349 Synthesis Techniques Laboratory (1)

Multi-step syntheses, separation, purification, and characterization of a selected set of compounds. Vacuum-line, inert-atmosphere, and nonaqueous solvent techniques included.

Prerequisite: CHM 207 or 218, 327. Corequisite: CHM 347.

CHM 351 Biochemistry (4)

Molecular biology and chemistry, including nucleic acids, proteins, enzymes, and lipids. Metabolism of biomolecules and structure-function relationships stressed.

Prerequisite: CHM 204 or 235.

CHM 357 Biochemistry Laboratory (2)

Training in the techniques of extraction, separation, identification, and measurement of activity of substances of biological importance.

Prerequisite or corequisite: CHM 351.

CHM 372 Air Chemistry (4)

Identical with ENV 372.

CHM 373 Water Resources (4)

Identical with ENV 373.

CHM 405 Selected Topics (1,2,4, or 6)

Advanced study in special areas: seminars, laboratory work, and read-

ings. May be repeated for credit.

Prerequisite: Permission of instructor.

CHM 413 Advanced Inorganic Chemistry (4)

Chemical applications of group theory with special emphasis on inorganic and organo-metallic chemistry. MO theory and VB theory, introduction to ligand-field theory, and molecular vibrational and electronic spectroscopy.

Prerequisite: CHM 312 and 345.

CHM 422 Advanced Analytical Chemistry (4)

Detailed treatment of theory and applications of modern analytical methods.

Prerequisite: CHM 217 and 344.

**CHM 427 Advanced Physical-Analytical Techniques
Laboratory (1)**

Special thermal measurements, gas and liquid chromatography, mass spectrometry, coulometry, polarography, and anodic stripping voltammetry.

Prerequisite: CHM 347.

CHM 429 Physical-Analytical Projects Laboratory (1)

Special experimental projects using magnetic susceptibility, trace gas analysis, matrix isolation, ESR, radiochemical techniques, cyclic voltammetry, and chronopotentiometry.

Prerequisite: CHM 427.

CHM 434 Advanced Organic Chemistry (4)

A third semester of organic chemistry, stressing modern topics in synthesis and physical organic chemistry. Strongly recommended for students planning graduate study.

Prerequisite: CHM 235 (or CHM 204 with permission of instructor).

CHM 444 Advanced Physical Chemistry (4)

Application of quantum mechanics and statistical mechanics to chemical kinetics, molecular structure, and molecular spectroscopy. Strongly recommended for students planning graduate study.

Prerequisite: CHM 345.

CHM 452 Advanced Biochemistry (4)

Advanced treatment of selected topics including molecular genetics, immunochemistry, molecular oncology, neurochemistry, and cellular regulation.

Prerequisite: CHM 351 or BIO 407.

CHM 458 Biochemistry Projects (2)

Project-oriented instruction in biochemical laboratory techniques.

Prerequisite: Permission of instructor.

CHM 467 Macromolecular Laboratory (2)

Introduction to the synthesis and physical characterization of synthetic polymers.

Prerequisite: CHM 347, and 207 or 218.

CHM 487 Advanced Preparations (2 or 4)

Specialized laboratory work in selected areas emphasizing advanced techniques.

Prerequisite: Permission of instructor.

CHM 490 Research (1,2,4,6, or 8)

Laboratory practice in research for undergraduates. May be repeated for credit. Graded S/N.

Prerequisite: Permission of instructor.

CHM 497 Apprentice College Teaching (2 or 4)

Directed participation in the teaching of selected undergraduate chemistry courses. May be repeated for credit. Graded S/N.

Prerequisite: Permission of instructor.



**DEPARTMENT OF
CLASSICAL LANGUAGES
AND LITERATURES**

The departmental programs of study leading to the Bachelor of Arts degree with liberal arts majors in classical languages, Latin, and classical civilization and the secondary teaching major in Latin have been temporarily suspended. No new candidates for these majors will be accepted during the 1977-78 academic year.

Some courses in other departments which are cross-listed with classics will be offered from time to time, but instruction in classics, Latin, or Greek will not be offered on any regular basis.

COURSE OFFERINGS**CLS 100 Introduction to Classical Civilization (4)**

Survey of the artistic, literary, philosophical, and institutional heritage left to the modern world by ancient Greece and Rome.

CLS 102 Studies in Vocabulary and Etymology (4)

A basic course in vocabulary building. The origin of scientific and literary terms; foreign phrases in current use; borrowing of words into English from other languages, particularly Latin and Greek; the relationship between meaning and culture; and meaning and context.

CLS 130, 131 The Dynamics of Ancient Civilization (4 each)

A comparative examination of the major ancient societies in light of the origins, characteristics, and development of their political institutions, and the responses of the various societies to foreign groups and ideas. CLS 130 covers Egypt, Mesopotamia, Israel, and Greece. CLS 131 covers Rome and the Mediterranean. Identical with HST 230 and 231, respectively.

CLS 150 Introduction to Greek and Roman Archaeology (4)

A general introduction to the literary, cultural, and historical importance of classical Greek and Roman archaeology to our modern understanding of classical antiquity.

CLS 203 Survey of Greek Literature (4)

Survey of the major writers of Greece. All works in translation.

CLS 204 Classical Greek Philosophy (4)

Identical with PHL 204.

CLS 205 Survey of Roman Literature (4)

Survey of the major writers of Rome. All works in translation.

CLS 211 The Bible as Literature (4)

A study of the types of literature found in the Old and New Testaments. Identical with ENG 211 and REL 211.

CLS 300 Topics in Classical Literature (4)

Examination of the origin, development, and influence of specific classical genres, including epic, lyric, tragic, and comic poetry, satire, oratory, and the ancient novel.

- CLS 310 The Structure of the Indo-European Languages (4)**
A comprehensive investigation of the structure of the Indo-European languages with particular emphasis on Greek, Latin, and Sanskrit.
- CLS 312 Classical Mythology (4)**
The principal Greek and Roman myths and their uses in classical and post-classical art and literature. Offered winter semester. Identical with ENG 312.
- CLS 314 Roman Art (4)**
Identical with AH 314.
- CLS 317 The Classical Tradition (4)**
A study of the classical influence on Western culture. While some attention is given to the visual arts, the main emphasis is on the classical traditions in Western literature.
- CLS 322 Greek Art (4)**
Identical with AH 312.
- CLS 337 Hellenic Greece (4)**
Greek history from the Bronze Age to the time of Alexander the Great. Identical with HST 337.
- CLS 339 Republican Rome (4)**
Roman history from the regal period to the end of the Republic. Identical with HST 339.
- CLS 340 Imperial Rome (4)**
Roman history from the principate of Augustus to the fall of the western empire. Identical with HST 340.
- CLS 350 Problems of Translation (4)**
Identical with ENG 300.
- CLS 401 Study of a Major Philosopher (4)**
Identical with PHIL 401.
- CLS 490 Directed Reading in Classical Civilization (4, 8, or 12)**
Independent study for senior classical civilization majors only in areas not covered in regular course offerings.
- GRK 114-115 Elementary Greek (4 each)**
Forms and grammatical structures of classical Greek, together with simple connected reading.
- GRK 214-215 Intermediate Greek (4 each)**
Review of grammar, training in translation from and into Greek, and the reading of simple literary works, including selections from Plato, Euripides, and Homer.
Prerequisite: GRK 115.
- GRK 320 Selections from Greek Literature (4)**
A reading course, offered every semester as a tutorial. May be taken for one or more semesters.
Prerequisite: GRK 215.
- GRK 480 Advanced Greek (4)**
Tutorial study of individual authors, selected themes, or problems. May be taken for one or more semesters.
Prerequisite: GRK 320.

GRK 490 Independent Study: Greek (4)

Individual reading and research for advanced classics majors. Taught by arrangement.

Prerequisite: Permission of instructor.

LTN 114-115 Elementary Latin (4 each)

Forms and grammatical structures of classical Latin, together with simple connected reading. Designed for students with no prior knowledge of Latin.

LTN 214-215 Intermediate Latin (4 each)

Review of grammar, training in translation from and into Latin, and the reading of single literary works, including selections from Vergil and medieval or Renaissance Latin.

Prerequisite: LTN 115.

LTN 300 Topics in Latin Language (4)

Areas of study, such as Latin composition or grammar, selected by the instructor. Offered winter semester.

Prerequisite: LTN 215.

LTN 320 Selections from Latin Literature (4)

A reading course, offered every semester as a tutorial. May be taken for one or more semesters.

Prerequisite: LTN 215.

LTN 480 Advanced Latin (4)

Tutorial study of individual authors, selected themes, or problems. May be taken for one or more semesters.

Prerequisite: LTN 320.

LTN 490 Independent Study: Latin (4)

Individual reading and research for advanced classics majors. Taught by arrangement.

Prerequisite: Permission of instructor.

DEPARTMENT OF COMMUNICATION ARTS

CHAIRPERSON: Donald C. Hildum

PROFESSORS: Donald C. Hildum, William White (Director, Journalism Program)

ASSOCIATE PROFESSOR: Adeline Hirschfeld-Medalia

ASSISTANT PROFESSOR: J. Harold Ellens

ADJUNCT ASSISTANT PROFESSORS: Thomas A. Aston, William W. Connellan

VISITING LECTURERS: Sharon Brown, Robert A. Dearth, R. Hugh Dundas, Berl Falbaum, Martha Ferrara, Peter Hicks, David Robert Kanter, Walter Koste, James Llewellyn, Letitia J. Myers, Melvyn Newman, Edward Noble, Katherine Parrish, Karen Seelhoff, Dann Shelton, Fred Thompson, James R. Tompkins III, Dean Warner, Vaughn Whited

The Department of Communication Arts offers programs of study leading to the degree of Bachelor of Arts with the opportunity to concentrate in several areas. Courses are available in communication theory, public and interpersonal communication, journalism, theatre, oral interpretation, mass media analysis and production, and speech education. The Department of Communication Arts stands ready to serve the nonspeech major and the general Oakland University student. Communication training can enhance almost any career and life in general. There are many specialized careers which welcome students with communication knowledge, e.g. journalism, media, theatre, public relations, advertising, and teaching.

Requirements for the Liberal Arts Major in Communication Arts

The major consists of a minimum of 36 credits in courses labeled SCN, JRN, and THA, including SCN 201 or 202, and 303. At least 20 credits of the total must be at the 300 or 400 level including at least 8 credits at the 400 level. No more than a total of 12 credits from among SCN and THA 490, 491, and 497, JRN 404 and 490, may be counted toward the major.

Requirements for the Modified Major with a Linguistics Concentration

Twenty-four credits in SCN, JRN, or THA, and 20 credits in

linguistics. SCN 303, and SCN 201 or 202, are required. For linguistics requirements, see page 109.

Requirements for the Secondary Teaching Minor in Communication Arts

Twenty credits in SCN, JRN, or THA courses, including either SCN 201 or 202, and SCN 321. Any student with voice or articulation problems which would handicap his/her performance as a speech teacher will be expected to include THA 230 in his/her program.

Requirements for the Major in Journalism

1. Twenty credits in journalism, including JRN 200, 300, 403, and 404; and any two of the following 2-credit courses: JRN 210, 211, 212, 220, 221, 230, 231.
2. Eight credits chosen from the following: SCN 201, 207, 285, 301, 303, 311, 371, 373, 403.
3. Corequisites as follows:
 - a. 8 credits chosen from HST 201, 202, 214, 215
 - b. 8 credits chosen from ENG 100, 105, 111, 211, 224, 225, 241
 - c. 8 credits: PS 100 and any one of PS 110, 205, 241
 - d. 4 credits in either ECN 100 or 200
 - e. 4 credits chosen from SOC 100, AN 101, 102

Requirements for the Concentration in Journalism

Twenty credits in journalism courses, including JRN 404. Communication arts majors may not count credits toward the major and this concentration simultaneously.

Requirements for the Concentration in Theatre Arts

Twenty-four credits, including THA 100 and 20 additional credits drawn from THA or courses approved by the adviser in dance, English, music, or literature in translation. At least 8 of the 20 credits must be at the 300 level or above. Only 4 credits each of THA 490 and 491 may be counted toward the concentration.

COURSE OFFERINGS IN SPEECH COMMUNICATION

SCN 150 Introduction to Visual Media (4)

Identical with ENG 150.

SCN 172 Media Hardware (4)

A working knowledge of the instruments used in mass media: operation, maintenance, and malfunctions. Recommended for education majors.

SCN 200 Topics in Speech Communication (4)

Topics and problems selected by the instructor, often an opportunity for personnel in other disciplines to offer courses in specialized interest or on topics of current relevance.

SCN 201 Public Speaking (4)

Theory and practice in public address: adaptations required by particular goals, audiences, and occasions; videotaped student speeches; and classroom interactions.

SCN 202 Group Dynamics and Communication (4)

Group dynamics, discussion, and problem solving; influences of group structure, norms, roles, leadership, and climate on the processes of group communication, and collaborative decision-making.

SCN 207 Semantics (4)

Identical with LIN 207.

SCN 273 Introduction to Cinematography (4)

The essential elements of film as a medium, its capabilities, and limitations. Practical application in studio and/or field work.

Prerequisite: SCN 172.

SCN 274 Introduction to Television Production (4)

The essential elements of television as a medium, its capabilities and limitations. Practical experience in studio and/or field work.

Prerequisite: SCN 172.

SCN 280 Broadcast Announcing (4)

Techniques of speaking before a microphone and of editing and reading copy. Practical experience includes recording and critique of various styles of delivery.

Prerequisite: THA 230.

SCN 281 Broadcast Announcing Laboratory (1)

Announcing or other broadcast performance on campus radio station. May be repeated for a total of 2 credits. Graded S/N.

Prerequisite: SCN 280 (may be taken concurrently).

SCN 285 Introduction to Broadcasting (4)

A survey of public and commercial radio and television, including their public service, educational, and religious functions; and the history, economics, influence, and social control of broadcasting.

SCN 301 Persuasion (4)

Analysis of persuasion in current society, psychological bases of persuasion, ethical considerations, and distinctions between debate and persuasive argument.

Prerequisite: SCN 201.

SCN 303 Introduction to Communication Theory (4)

A theoretical study of communication in its broadest sense, in relation to individual learning and knowledge and group interaction.

Prerequisite: Sophomore standing.

SCN 304 Oral and Written Communication in Organizations (4)

Communication theory and practice within organizational systems.

SCN 305 Interpersonal Communication (4)

The elements, purposes, and patterns of interpersonal communication

and their effects; practical experience in interviewing, decision-making, and tutoring.

Prerequisite: SCN 202.

SCN 307 Debate Laboratory (2)

Practice in formal debate. May be repeated for a maximum of 4 credits.

Prerequisite: SCN 201.

SCN 308 Forensics Laboratory (2)

Practice for forensic festival or competitive events such as public address and oral interpretation. Not repeatable.

Prerequisite: SCN 201.

SCN 310 Philosophy of Rhetoric (4)

Identical with PHL 310.

SCN 311 Rhetoric and Public Address (4)

An advanced course in public speaking, emphasizing the content, arrangement, and style of public address with application in the construction and delivery of public speeches.

Prerequisite: SCN 201.

SCN 320 Speech Communication for the Elementary Teacher (4)

Linguistic development in children (emotional, physical, and cognitive) relating to symbol-using behavior and appropriate instructional methods.

SCN 321 Speech Communication for the Secondary Teacher (4)

Principles and practices to improve the speech habits of the teacher, to supply special skills for classroom and professional use, and to assist prospective teachers in acquiring techniques for speech improvement in the classroom.

SCN 371 Forms and Effects of Mass Communication (4)

Identical with SOC 371.

SCN 373 Social Control of Mass Media (4)

Identical with SOC 473.

SCN 402 Small Groups (4)

Identical with SOC 402.

SCN 403 Communicative Networks (4)

The patterns of contact and information transfer in human groups, ranging from the sociometric patterns of small groups, to the formal and informal networks of organization and the large scale exchanges of mass societies.

Prerequisite: SCN 303.

SCN 430 Phonetics (4)

Identical with LIN 401.

SCN 471 Workshop in Contemporary Communication (4)

A bridge between academic learning and professional applications in speech communication forms and media. Included within the practicum-seminar format of the workshop will be field work, observation, and lecture-demonstrations with selected professionals in and from a variety of job settings.

Prerequisite: Permission of instructor.

SCN 480 Special Topics Seminar (4)

Group study of topics of special interest chosen by departmental faculty and students. May be repeated for credit with the instructor's permission. Prerequisite: Three SCN courses.

SCN 490 Independent Study (2, 4, or 8)

Special research projects in speech communication. Prerequisite: Permission of instructor.

SCN 491 Internship (4, 8, or 12)

Practical experience working with professionals in a variety of performing arts and mass communication settings. Prerequisite: Permission of supervising faculty.

SCN 497 Apprentice College Teaching (2 or 4)

Assisting in the teaching of an undergraduate course in speech communication and participating in discussions with the supervising faculty member on the principles, methods, and problems of such teaching. Prerequisite: Junior standing and permission of instructor.

COURSE OFFERINGS IN JOURNALISM**JRN 200 Newswriting (4)**

Training in the practical aspects of news gathering, interviewing, and basic newswriting techniques; a discussion of the various journalism media. Prerequisite: Completion of English proficiency requirement.

JRN 210 Investigative Reporting (2)

Gathering information through wide reading and interviewing, writing objective in-depth news reports; and background on social, political, and economic subjects of current interest and concern. Prerequisite: JRN 200.

JRN 211 Public Affairs Reporting (2)

News coverage of federal, state, and local criminal and civil court trials; legislative bodies, city, county, and other government agencies; labor and stock market news. Prerequisite: JRN 200 and PS 100.

JRN 212 Feature Writing (2)

Practice in writing newspaper and magazine nonfiction features, such as human interest stories, biographical and personality sketches, how-to-do-it articles, and other forms. A study of the purposes, styles, various types, and techniques of the feature story. Prerequisite: JRN 200.

JRN 220 Editorial Writing (2)

Preparing and writing newspaper opinion and commentary usually found on the editorial page; a study of the forms and techniques of editorials and the editorial page. Prerequisite: JRN 200.

JRN 221 Reviewing: Books, Theatre, Movies (2)

Writing newspaper reviews of the literary, visual, and performing arts from recent publications, live productions, films, and television. Prerequisite: JRN 200 and ENG 100, 111, 201, 207, 209, 224, or 225.

JRN 230 Radio-Television News (2)

Fundamentals and techniques of preparing news for broadcasting, especially the different demands of electronic journalism from those of the

print media.

Prerequisite: JRN 200.

JRN 231 Public Relations and the Media (2)

A study of the function of agency, industrial, business, and institutional relations with the public through newspapers, radio, television, and other media, especially concerning press information; preparation of copy; and some attention to employee publications.

Prerequisite: JRN 200.

JRN 240 Journalism Laboratory (2)

Work in on-campus or off-campus publications under the direction of an instructor; the course may be repeated once.

Prerequisite: JRN 200.

JRN 300 Newspaper Editing (4)

Principles and practices of the newspaper copydesk: copy reading, headline writing, makeup, and typography; preparing copy for the printer; some attention to the new and developing devices in the print shop, such as those involving the computer.

Prerequisite: JRN 200.

JRN 330 News Photography (2)

Fundamentals of black and white photographic production; practice in taking still pictures of people and events for use in newspapers and news magazines; dark room laboratory work in developing photos.

Prerequisite: JRN 200.

JRN 331 Media Management (2)

Business, corporation, and legal problems in the front office operation of weekly and daily newspapers; industrial and employee magazines; and radio and television stations.

Prerequisite: JRN 200.

JRN 403 Law of the Press (4)

State and Federal laws dealing with libel, contempt of court, right of privacy, copyright, and other legal matters affecting newspapers, radio and television, and other media.

Prerequisite: JRN 300.

JRN 404 Journalism Internship (4)

A full- or part-time internship on a weekly or daily newspaper, radio, or television station, or with a public relations office for one semester. Open only to students in the journalism program, usually in the senior year. May be repeated once, but not in the same medium.

Prerequisite: JRN 200, 300, and two other JRN courses.

JRN 480 Special Topics in Journalism (4)

Various specialties offered to students. Subjects change from semester to semester, with some opportunity for independent study.

Prerequisite: JRN 200.

JRN 490 Independent Study (2 or 4)

Individual research projects in journalism.

Prerequisite: Permission of instructor.

COURSE OFFERINGS IN THEATRE ARTS

THA 100 Introduction to Theatre (4)

Introduction to all aspects of the theatre, including its place and function in society and world art; its history, production, dramatic literature, and criticism.

THA 200 Topics in Theatre Arts (4)

Topics and problems, selected by the instructor, as temporary or experimental additions to the curriculum.

THA 230 Voice and Articulation (4)

Theory and application in voice, articulation, and pronunciation.

THA 261 Technical Laboratory (4)

Survey of techniques of scenery and costume construction, and lighting, including proper usage of tools and hardware in these three areas. Twenty hours of work on a major production is required. Recommended after THA 100.

THA 267 Fundamentals of Acting (4)

Basic theories of acting techniques ranging from improvisation to Stanislavski with emphasis on performance. Connections between styles and specific cultures will be made.

THA 268 Theatre History (4)

History of the Western theatre from its primitive origins through the 18th century, including its dramatists, stages, productions, and acting. Includes the reading of a few representative plays.

THA 269 Theatre History II (4)

Continuation of THA 268 to the present. Includes a brief look at the theatre of the Orient. A few representative plays will be read.

THA 341 Topics in World Drama (4)

Identical with LIT 341.

THA 342 Continental European Drama I (4)

Identical with LIT 342.

THA 343 Continental European Drama II (4)

Identical with LIT 343.

THA 346 Non-Western Theatre and Dramatic Literature (4)

Identical with LIT 346.

THA 350 Oral Interpretation (4)

Oral expression of literature—prose, poetry, and drama—based on intellectual, emotional, and aesthetic analysis.

THA 362 Technical Design Laboratory (4)

A basic knowledge of drafting and rendering for stage and costume will be covered as well as the development of lighting plots. Twenty hours of work on a major production is required.

Prerequisite: THA 261.

THA 363 Practicum in Rehearsal and Performance (2 or 4)

Participation in a student theatre production, giving major emphasis to the development of a running log that concentrates on character development, design conception and execution, or prompt script. May be repeated for a total of 12 credits.

THA 366 Introduction to Costuming and Makeup (4)

Theory and practicum.

THA 367 Advanced Acting (4)

Further development of the material covered in THA 267 with each student performing in a major production and providing a research paper on a given acting style.

Prerequisite: THA 267.

THA 420 Improvisations and Theatre Games (4)

Group interaction experiences such as improvisation, simulation, role-playing, sociodrama, creative dramatics, story and readers theatre, and educational games. Includes application of these techniques for group leadership, teaching, and theatre performance.

Prerequisite: THA 267.

THA 450 Readers, Chamber, and Media Theatre (4)

Group forms of oral interpretation. Intensifying meaning through added movement, media, and music.

Prerequisite: THA 267 or 350.

THA 460 Theatre Production for School and Community (4)

Theatre production coordination, including such aspects as choice of scripts, casting, direction, staging, lighting, costuming, box office, and publicity.

Prerequisite: THA 261, 267, and 363.

THA 462 Direction Practicum for the Stage, Film, Television (4)

An exploration into the different methods of direction necessary in each of the three media. Scenarios will be developed utilizing students from THA 267.

Prerequisite: THA 261, 267, 363, and 367 or 420.

THA 464 Costume Design (4)

Introduction to costume history, drafting, cutting, and construction, as well as the technique of rendering.

Prerequisite: THA 261, 267, 363, and 366.

THA 466 Advanced Stage Design (4)

The concept of stage design, rendering, and drafting.

Prerequisite: THA 261, 267, 362, and 363.

THA 480 Special Topics Seminar (4)

Group study of topics of special interest chosen by departmental faculty and students.

Prerequisite: Three theatre arts courses.

THA 490 Independent Study (2, 4, or 8)

Special research projects in theatre arts.

Prerequisite: Permission of instructor.

THA 491 Internship (4, 8, or 12)

Practical experience working with professionals in a variety of performing arts settings.

Prerequisite: Permission of supervising faculty.

THA 497 Apprentice College Teaching (4)

Assisting in the teaching of an undergraduate course in theatre, and discussions with the supervising faculty member on the principles, methods, and problems of such teaching.

Prerequisite: Junior standing and permission of instructor.

**DEPARTMENT OF
ECONOMICS**

CHAIRPERSON: Eleftherios N. Botsas

PROFESSORS: Eleftherios N. Botsas, Karl D. Gregory, Robbin R. Hough, Siddheshwar Mittra, Norton C. Seeber

ASSOCIATE PROFESSORS: David P. Doane, John E. Tower

ASSISTANT PROFESSORS: Nancy S. Barry, Alice C. Gorlin, Douglas D. Gregory, Kenneth B. Moberg, Socrates D. Tountas

ADJUNCT PROFESSOR: Theodore O. Yntema

VISITING ASSISTANT PROFESSOR: Christos C. Paraskevopoulos

The curriculum for the liberal arts major in economics combines an emphasis on the concepts and tools of economic analysis, a broad general education, and the freedom to take several courses in other areas of interest to the student. The student learns to apply economic analysis to major problems that face the nation and the world today.

The program leading to a Bachelor of Arts degree with a major in economics is an integral part of the programs of the School of Economics and Management. The requirements for the major in economics, the requirements for a concentration in economics or international economics, and the descriptions of the courses offered in economics are found in the School of Economics and Management's section of this catalog, page 212.

DEPARTMENT OF ENGLISH

CHAIRPERSON: Joseph W. DeMent

PROFESSORS: Maurice F. Brown, John P. Cutts, Joseph W. DeMent, Peter G. Evarts (English and Learning Skills), Thomas Fitzsimmons, James F. Hoyle, Donald E. Morse, Gertrude M. White

ASSOCIATE PROFESSORS: Herbert Appleman, Robert L. Donald, Jane D. Eberwein, Robert T. Eberwein, Nigel Hampton, David W. Mascitelli, Brian F. Murphy, Joan G. Rosen, Helen J. Schwartz

ASSISTANT PROFESSOR: Daniel P. Armstrong

ASSOCIATED FACULTY: Professor William Schwab (Linguistics and English), Associate Professor Daniel H. Fullmer (Linguistics and English)

The first concern of the department is the reading and writing of the English language. The course of reading is founded on the masterpieces of British and American literature that should be familiar to English-speaking persons. The department believes that clear, intellectually honest, and resourceful writing is best taught as part of the study of good literature in the same language. The faculty is composed of scholars and teachers in literary history, in the theory and criticism of literature and other arts (such as film) that employ language and literary forms, in linguistics, in creative and expository writing, and in the teaching of English. Undergraduate English studies are effective preparation for many careers in business, writing and communication arts, government service, teaching, law, and the ministry, and for the imaginative dimension of life itself.

Suggestions for a variety of major programs, for interdepartmental concentrations, and for English and language arts concentrations and minors are available and fully described in the pamphlet, *Undergraduate Programs Offered by the Department*. All prospective students, majors or not, should pick up a copy in the office of the department. The department also publishes an *Advising Memo*, available in preregistration periods. This document fully describes forthcoming offerings. Frequent consultation with a faculty adviser of the Department of English is necessary to the selection of a program appropriate to the individual student's interests and his/her post-college aims.

Listed below are undergraduate programs of study leading to the degree of Bachelor of Arts with a major in English, a major in English for teaching on the secondary level, a major with

concentrations, and a secondary teaching minor in English. The department offers programs leading to the degrees of Master of Arts in English and (in cooperation with the School of Education) Master of Arts in the Teaching of English. Programs and course offerings in these programs are fully described in the *Oakland University Graduate Study Catalog*.

The Liberal Arts Major in English

ENG 140 (to be taken in either semester of the first year) and 36 additional credits selected from offerings in English are required. Of these, at least 20 credits must be taken at the 300 level or above, and at least 4 of these must be in a 400-level seminar. Only one course at the 100 level (in addition to ENG 140) will be accepted for credit toward the major. Individual students must plan their programs in consultation with faculty advisers in English.

Secondary Teaching Major in English

The program requires 40 credits in English, including ENG 140, 210, 241, 242, either 224 or 225, either 376 or 377, and 498 (a list of acceptable equivalents is available in the English Department office). Of the remaining 12 credits, 8 must be taken at the 300 level or above. An additional 8 credits in cognate fields, which must include one course in the teaching of reading at the secondary level, and one course in speech, oral interpretation, or acting, are required. Students are also required to take ED 344, 345, 428, and 455. Highly recommended are an additional 4 credits in speech, reading, linguistics, or English composition. ENG 498 is offered only during the winter semester and ED 428 and 455 only during the fall semester. Students may enroll in ED 428 and 455 only if their grade point average in English is 3.00 or higher.

The English Major with a Special Concentration

Modified majors and English majors with add-on concentrations are being developed and current information is available in *Undergraduate Programs Offered by the Department of English*. The modified English/linguistics major, requiring 24 credits in English and American literature, including ENG 140, and 20 credits in linguistics, is listed under linguistics offerings. The department cooperates to aid students planning to combine an English major with preprofessional concentrations such as journalism, prelaw, religious studies, and medicine. Other concentrations, such as English/American studies, are being developed.

Secondary Teaching Minor in English

Required for a minor are 20 credits drawn from offerings in En-

glish, including ENG 140. Of these credits, 12 should be selected from the list of courses required in the teaching major (described above). The North Central Accreditation Association requires 24 credits for a minor in English.

UNDERGRADUATE COURSE OFFERINGS

Courses numbered in the 100's (with the exception of English 140) are directed to the needs of students seeking nontechnical liberally-oriented courses for fulfillment of the university's distribution requirements or for use in minors and particular concentrations. Courses on the 200 level offer broad introductions to literary materials and approaches basic to the study of English. Reading is often extensive, and the classes are conducted primarily through lecture. Lecture 300 level courses offer more intensive investigations into particular areas of English studies. These courses, the core of the program for majors, are open to advanced students according to their own special needs and their preparations in related disciplines. Courses in the theory and methods of literary history, criticism, and research, applied to problems presented by a specific topic or writer, are offered at the 400 level. They are designed for upperclass majors. Graduate courses on the 500 level are open to senior majors by permission of the instructor and the chairperson of the department.

ENG 100 Masterpieces of World Literature (4)

A survey acquainting the student with some of the great books of the world. Classics in various traditions.

ENG 105 Shakespeare (4)

A general introduction to representative dramatic works of Shakespeare. The course is designed for students seeking an English elective or a course to satisfy the distribution requirement in literature.

ENG 111 Modern Literature (4)

A general introduction to some phase of modern literature. Sample offerings might be: modern drama, modern American fiction, or continental literature. Designed for students seeking an English elective or a course to satisfy the distribution requirement in literature.

ENG 120 Current Topics in Literature (4)

Literature concerning an issue or an area of contemporary concern. The topic, to be announced at preregistration, will be in an area such as science fiction, popular literature, literature and the urban experience, or the contemporary artist and society.

ENG 140 Introduction to Literary Studies (4)

Practice in the techniques of reading literature and introduction to important basic concepts of criticism and commentary. Required of majors and minors in English.

ENG 150 Introduction to Visual Media (4)

Identical with SCN 150.

ENG 200 Topics in Literature and Language (4)

Topics or problems selected by the instructor.

ENG 201 Poetry (4)

Introduction to the analysis and enjoyment of poetry. Reading, lecture, and discussion, with opportunity for creative work.

ENG 202 Epic (4)

Introduction to the analysis and enjoyment of the epic. Reading, lecture, and discussion, with opportunity for creative work.

ENG 207 Drama (4)

Introduction to the analysis and enjoyment of drama. Reading, lecture, and discussion, with opportunity for creative work.

ENG 208 Prose Forms: Nonfiction (4)

The course focus alternates between biography and autobiography in one semester and discursive prose forms like the essay in the next. Writing assignments offer opportunity for creative work in the form.

ENG 209 Fiction (4)

Introduction to the informed enjoyment of fiction. Emphasis on only one form (e.g. the short story or novel) at the discretion of the instructor.

ENG 210 Fundamentals of Exposition (4)

A systematic approach to writing designed to enhance the student's own writing skills and also his/her ability to teach writing.

ENG 211 The Bible as Literature (4)

Identical with CLS 211 and REL 211.

ENG 212 Business and Technical Writing (4)

Instruction, practice, and critique in the writing of business communications (letters, memoranda, reports, and technical communications).

ENG 213 Writing Laboratory (2)

Small group or individual instruction to improve writing skills and styles in ways applicable to college work as well as career goals.

Prerequisite: Writing proficiency certificate, LS 101, or equivalent transfer courses accepted by the university.

ENG 224 American Writers: The 19th Century (4)

An introduction to American literature of the last century with emphasis on writers such as Hawthorne, Melville, Whitman, and Twain, who form the core of the American literary tradition.

ENG 225 American Writers: The 20th Century (4)

A selective survey of modern and post-modern American writers, with attention to major works in several genres by such writers as Dreiser, Faulkner, Ellison, and Stevens.

ENG 240 Varieties of Literary Experience (4)

This course teaches the future elementary school teacher how to distinguish and analyze various types of literature as short stories, poems, and folktales. Attention to possible applications of materials and concepts to the teaching of language arts.

ENG 241 From Chaucer to Milton (4)

A representative selection of works in English literature from the 14th to the mid-17th century.

ENG 242 From Classic to Romantic (4)

Representative works in English literature from 1650 to early 19th century.

ENG 250 Film: A Literary Approach (4)

Exploration of the dramatic and narrative content of classic and modern films, treating such elements as theme, motif, symbol, imagery, structure, and characterization, and cultural and philosophical implications.

ENG 285 Interdisciplinary Issues (4)

The relationship of literature and literary study to one of the following disciplines: science, philosophy, psychology, religion, or the visual arts. The second area will vary from semester to semester.

ENG 300 Special Topics in Literature and Language (4)

Special problems or topics selected by the instructor.

ENG 301 Studies in Literary Kinds (4)

The study of a single literary kind, whether genre (such as novel, lyric, or drama) or mode (such as tragedy or comedy).

ENG 307 Modern Drama (4)

Studies in English, American, and Continental drama since Ibsen.

ENG 308 Playwriting (4)

A study of plays from various periods and theatrical styles, and an exploration of principles and techniques of dramatic writings. The last half of the course will be devoted exclusively to student scripts. Enrollment limited to 20.

Prerequisite: Permission of instructor.

ENG 309 Scriptwriting (4)

A study of screen plays and films, exploring principles and techniques of dramatic writing, with emphasis on problems posed by a primarily visual medium. The last half of the course will be devoted to student scripts. Enrollment limited to 20.

Prerequisite: Permission of instructor.

ENG 310 Workshop in Writing (4)

Intermediate-level workshop for apprentice writers in fictive or discursive modes. Workshop may be in poetry, essay, fiction, etc., the emphasis varying from semester to semester.

Prerequisite: ENG 201, 207, 208, 209, or 210, or permission of instructor.

ENG 311 Chaucer (4)

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

ENG 312 Classical Mythology (4)

Identical with CLS 312.

ENG 313 Myth in Literature (4)

Study of the mythic content and/or structure of literature.

ENG 315 Shakespeare (4)

Reading and discussion of a representative selection of the plays and poetry.

ENG 316 Milton (4)

His major poetry, with emphasis on *Paradise Lost* and some attention to his prose.

ENG 317 Early American Literature (4)

Studies in American literature before 1820. The course may concentrate on a type or movement within the period.

ENG 320 Development of American Poetry (4)

An introduction to American poetry, with emphasis on the 17th to the 19th centuries.

ENG 322 19th Century American Fiction (4)

Selected readings in representative writers of the period.

ENG 324 Issues in American Literature (4)

Study of literary works ranging across period and/or genre in their relation to a central issue, theme, or problem in American literature. Representative topics are romanticism, the puritan tradition, American humor, and the writer and American society.

ENG 332 Modern American Fiction (4)

Readings in American fiction from Henry James to the present.

ENG 333 Modern Poetry (4)

Studies in the poetry of the first half of the 20th century.

ENG 340 Writing Now: Experimental Form (4)

Verbal arts in contemporary contexts. Writing and related arts — any or all combinations. Consideration of theory and some emphasis on praxis.

ENG 341 Selected Ethnic Literature (4)

Reading and critical analysis of representative selections from American ethnic literature. Special attention to groupings such as American-Jewish and Native American at discretion of instructor. Relation of ethnic literatures to dominant national and international literary traditions considered.

ENG 342 Black American Writers (4)

A study of black literary figures and of the black experience in literature.

ENG 350 Topics in Film (4)

Topic or problem to be selected by the instructor.

Prerequisite: A course in film.

ENG 353 Old English Language and Literature (4)

The literature of England from the beginning to the Norman Conquest. Primary focus on the Old English lyric and epic. An introduction to the language of the Anglo-Saxons, balanced with readings in modern translation.

ENG 354 Medieval Literature (4)

Studies in English literature from the Norman Conquest to 1500, excluding Chaucer. Ballad, drama, romance, and lyrics.

ENG 355 Literature of the English Renaissance (4)

Selected poetry, prose, and drama; the Renaissance (roughly 1550-1660) as a historical and cultural phenomenon. The emphasis may vary from semester to semester at the instructor's discretion.

ENG 367 The Restoration and 18th Century (4)

Studies in English literature from 1660 to 1800. Representative authors may include Dryden, Congreve, Swift, Pope, Johnson, Richardson, and Fielding.

ENG 369 The English Novel (4)

A study of representative English novels.

ENG 370 The Romantic Period (4)

Literature of the Romantic period with emphasis on major poets such as

Wordsworth, Coleridge, Keats.

ENG 371 Victorian Literature (4)

Selected writers of the middle and late 19th century. Emphasis may be on fiction, poetry, prose, or the drama at the discretion of the instructor.

ENG 375 Modern Literature (4)

Modern British, American, and/or Continental literature, with concentration on the work of a small number of writers.

ENG 376 History of the English Language (4)

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

ENG 377 Modern English Grammar (4)

A survey of English structure, especially of syntax, with descriptions based on the work of important contemporary scholars.

ENG 380 Analytical and Persuasive Writing (4)

A practical course in analytical writing designed for preprofessional students. Emphasis will be placed on persuasion, argumentation, organization, and style.

ENG 390 Literary Theory and Critical Methods (4)

Studies in modern critical methods, with particular emphasis on formal analysis, structuralism, and myth criticism. Practical application of critical approaches and techniques.

ENG 391 History of Literary Criticism (4)

The development of literary criticism, presented as a survey with emphasis on major theorists. Significant applications of theory examined.

ENG 392 History and Theory of Film Criticism (4)

Study of major critical approaches to film.

ENG 400 Advanced Topics in Literature and Language (4)

Advanced topics and problems selected by the instructor.
Prerequisite: Four courses in English.

ENG 401 Studies in Literary Kinds (4)

The study of a single literary kind, whether genre (such as novel, lyric, or drama) or mode (such as tragedy or comedy).
Prerequisite: Four courses in English.

ENG 410 Imaginative Writing (4)

Designed for potential writers of fiction, poetry, and/or drama. The course may focus on one kind of writing, and the approach may shift from semester to semester.
Prerequisite: Permission of instructor.

ENG 451 Major American Writers (4)

Studies in one or two American writers to be selected by the instructor.
Prerequisite: Four courses in English.

ENG 452 Major British Writers (4)

Studies in one or two British writers to be selected by the instructor.
Prerequisite: Four courses in English.

ENG 453 Seminar: Studies in a Major Author (4)

Devoted to the in-depth study of the work of a single writer in English or American literature, to be selected by the instructor.
Prerequisite: Four courses in English.

ENG 465 Shakespeare (4)

Analysis of four or five of the plays.

Prerequisite: Four courses in English.

ENG 490 Advanced Criticism (4)

Studies in criticism, often concentrating on a single school.

Prerequisite: Four courses in English.

**ENG 498 The Theories of Teaching Literature,
Language, and Composition (4)**

Designed for the future teacher of English, this course focuses on materials and methods appropriate for the teaching of English in junior and senior high schools. Offered only during winter semester.

Prerequisite: English secondary education majors only.

ENG 499 Independent Reading (2 or 4)

A proposed course of study must be submitted to the prospective instructor in the semester preceding that in which the independent study is to be taken. Only two 499's may be credited toward the major. May be elected on an S/N basis.

Prerequisite: Four courses in English.



DEPARTMENT OF HISTORY

CHAIRPERSON: John Barnard

PROFESSORS: Charles W. Akers, John Barnard, Richard M. Brace, Melvin Chernov, Robert C. Hawes, George T. Matthews, W. Patrick Strauss, S. Bernard Thomas

ASSOCIATE PROFESSORS: De Witt S. Dykes, Jr., Leonardas V. Gerulaitis, James D. Graham, Gerald C. Heberle, Joseph A. Klaitis, Roy A. Kotynek, Paul M. Michaud, Colin A. Palmer, Anne H. Tripp, Richard P. Tucker

ASSISTANT PROFESSORS: Mary C. Karasch, Lawrence D. Orton, Carl R. Osthaus, I. Michael Solomon

The study of history at the undergraduate level has traditionally been considered one of the major paths to informed and effective citizenship. Its emphasis on broad knowledge, critical reading, careful judgment, and precise writing offers excellent preprofessional preparation for many careers in business, government service, law, the ministry, journalism, and library and museum service. Oakland's teacher training program draws on history in the elementary education major and minor concentrations in history/social science, in the secondary teaching major in social studies, and in the secondary teaching minor in history. Careers in college teaching and other forms of professional historical scholarship usually require postgraduate training, toward which solid work in the undergraduate major is extremely important. Students interested in achieving a Ph.D. in history should bear in mind that most graduate schools require demonstration of competence in one or two modern foreign languages. Every history major should plan his/her course of study in close consultation with a faculty adviser.

The Department of History's undergraduate program leads to a Bachelor of Arts degree. The Department of History offers a Master of Arts program, which is described in the *Oakland University Graduate Study Catalog*. The department offers courses on both the undergraduate and graduate levels at night, and students can complete either the B.A. or the M.A. program entirely at night.

Requirements for the Major in History

The major in history, unless it is combined with an area studies concentration, requires 40 credits in history courses. At least 16 of these credits must be in courses numbered 300 or above. No

more than 8 credits in HST 100, and no more than 16 credits in independent study (HST 391, HST 491) may be counted toward the history major. The special history major with an area studies concentration requires 24 credits in history courses.

Requirements for the Secondary Teaching Minor in History

The secondary teaching minor requires the completion of 20 credits in history courses, including HST 214 and 215.

Graduation Honors in History

Majors who wish to be considered for departmental honors must submit an application to the History Honors Committee together with a paper prepared in connection with regular course work and significantly more ambitious in research and bibliographic scope than a book review. The committee will want the original of the paper, with the instructor's comments and grade. There is no statutory lower grade point limit for honors, but the award is seldom made to students with less than a 3.50 average in their history courses.

Course Prerequisites

- 100-299 Introductory and survey courses with no prerequisites.
- 300-399 More advanced courses with the general prerequisite of English Proficiency Certification plus any special requirements listed beneath the courses.
- 400-499 Research courses on the most advanced undergraduate level with a general prerequisite of 20 credits in HST courses plus any special requirements listed beneath the courses.

COURSE OFFERINGS

HST 100 Topics in History (4)

An introductory course to enable students to sample various historical problems and to develop critical judgment regarding the nature and use of historical evidence. Recommended for students with little or no background in college level history. May be repeated once for a total of 8 credits. Offered each semester.

HST 125 War and Revolution in the 20th Century: Studies of History through Films (2)

An introductory course to enable students to develop critical judgment regarding the interpretation of documentary and feature films as historical sources. Offered every year.

HST 137 European Witchcraft (4)

A scholarly investigation of European witchcraft, including its history in England and New England. Offered every year.

HST 201, 202 Introduction to European History (4 each)

HST 201 (Europe, 500-1715) surveys the Middle Ages, Renaissance, Reformation, and the early modern period through the era of Louis XIV. HST 202 (Europe, 1715-present) surveys European history from the Enlightenment to the modern age of industrialism, nationalism, and global conflict. Both classes offered each semester.

HST 208 Europe since 1939 (4)

An introduction to recent European history from the beginning of World War II through the Cold War, the movement for Western European integration, the resurgence of Western European power and influence, and corresponding transformations of Eastern Europe.

HST 214, 215 Introduction to American History (4 each)

HST 214 is a survey of American political, economic, and social history from the colonial period through the Reconstruction era. HST 215 is a survey of American industrial growth, agricultural protest, experiments with imperialism, domestic reform, and world leadership from 1876 to the present. Both classes offered each semester.

HST 218 History of Michigan (4)

A survey of the political, economic, and social history of the state from the Indian and French settlement to the present. Offered in alternate years.

HST 219 United States since 1945 (4)

A survey of American political, economic, and social history since World War II. Offered every year.

HST 220 Modern American Culture (4)

A survey of the cultural history of the United States from the 19th century to the present. Emphasizes the concurrent development of mass popular culture and avant-garde movements. Offered each year.

HST 230, 231 The Dynamics of Ancient Civilization (4 each)

Identical with CLS 130, 131.

HST 234, 235 Introduction to English History (4 each)

HST 234 surveys English history from the Middle Ages to the Glorious Revolution of 1688; it will emphasize constitutional development and the Common Law. HST 235 surveys English history from 1688 to the present; it will emphasize political, social, economic, and legal development.

HST 250 History of Russia (4)

An introduction to the political, social, and intellectual history of Russia and the Soviet Union from the Kievan State to the Brezhnev era. Offered every year.

HST 254 Eastern European History (4)

The historical development of the peoples and states of East-Central Europe and the Balkans — Poland, Ukraine, Czechoslovakia, Hungary, Rumania, Yugoslavia, and Bulgaria — from the Middle Ages to the present, with emphasis on the period since World War II.

HST 261, 262 Introduction to Latin American History (4 each)

HST 261 is a survey of pre-Columbian and colonial Latin America to 1825, stressing the Hispanization of the society, its socio-economic institutions, the influence of the Enlightenment, and the achievement of political independence. Offered fall semester. HST 262 surveys the national period of Latin America from 1825 to the present, emphasizing the problems of nation building and modernization, the emergence of nationalism and

militarism, and the roots of social revolutionary ferment. Offered winter semester.

HST 277, 278 Survey of Japanese History (4 each)

HST 277 is a survey of Japanese history from the pre-Buddhist period to the Tokugawas, with discussion of cultural and intellectual developments. Offered fall semester. HST 278 is a survey of modern Japanese history emphasizing Japan's response to the West, with special study comparing the Japanese and Chinese experiences. Offered winter semester.

HST 280 History of Southeast Asia (4)

The struggle of Southeast Asian nations to achieve independence, unity, and prosperity in the 20th century. Each year the course concentrates on two or three countries, such as Vietnam, Indonesia, the Philippines, and Thailand.

HST 282 Introduction to the History of India (4)

A survey of the history of India from the earliest emergence of a recognizable Indian identity during the second millennium B.C. until the establishment of the Republic of India in 1948. Offered fall semester.

HST 286, 287 Survey of African History (4 each)

HST 286 surveys the history of Africa from earliest times to 1800, emphasizing the development of African cultural, political, and economic systems. Offered fall semester. HST 287 surveys the African resistance and accommodation to the European colonial rule since 1800, focusing on the struggles of the African people to establish their cultural, political, and economic independence. Offered winter semester.

HST 291, 292 History of the Afro-American People (4 each)

HST 291 surveys the Afro-American experience from the African background through the Civil War period. Offered fall semester. HST 292 surveys the post-Civil War experience of the Afro-American people. Offered winter semester.

HST 302 History of the American Worker in the 20th Century (4)

The economic, social, and political history of the American work force with emphasis on the history of organized labor. Offered in alternate years.

HST 303 American Constitutional History (4)

Origins and development of American constitutional doctrine and interpretation from the colonial period to the present, emphasizing constitutional controversy and change.

HST 306 Colonial and Revolutionary America (4)

The transplantation of European society to continental North America; the subsequent development of political, economic, and social institutions in the colonies; the Anglo-French struggle for the continent; and the American Revolution. Offered fall semester.

HST 307 American Religious History (4)

A study of American religious history, including such topics as religious elements in immigration, the separation of church and state, denominationalism and sectarianism, religion and nationalism, religious leadership, and religion as a social force. Offered winter semester. Identical with REL 307.

HST 310 The Young Republic and the Age of Jackson, 1787-1850 (4)

The making of the Constitution, the social, political, and economic development of the new nation and the subsequent forces affecting expansion, social protest, and sectionalism to 1850. Offered in alternate years.

HST 312 The Civil War and Reconstruction, 1850-1876 (4)

The origins of secession, the wartime problems of the Union and the Confederacy, the principal military campaigns, the Reconstruction era and the creation of a new union, and the significance of the Civil War and Reconstruction in American history. Offered each year.

HST 313 American History, 1876-1900 (4)

The New South, industrial consolidation, the origins of the modern labor movement, the rise of the city, immigration, agrarian protest movements, the businessman's philosophy, and the challenge to *laissez faire*. Offered in alternate years.

HST 314 American History, 1900-1928 (4)

The social, political, and economic developments in the United States during the progressive era and the decade of the 1920's. Offered in alternate years.

HST 315 American History since 1928 (4)

The myth of the New Era, the social and political impact of the Great Depression, New Deal programs and radical alternatives, the isolationist-internationalist debate, modern Republicanism, and the New Frontier. Offered in alternate years.

HST 316 The American Mind to 1860 (4)

The history of American thought from the colonial period to the Civil War, emphasizing New England Puritanism, the transition from colonies to provinces, the era of the American Revolution, and the origins of modern America.

HST 317 The American Mind since 1860 (4)

Major intellectual trends in the United States from the Civil War to the present, including such topics as ideological conflict during the Civil War and Reconstruction, the impact of evolutionary thought, and responses to industrialization and urbanization.

HST 318 Topics in American Social History (4)

Selected topics in the history of popular beliefs, social structure and organization, and the process of social change, including movements of reform.

HST 319 History of the American South (4)

The South from colonial times to the 1960's, emphasizing the transition from the agrarian, slave South of the antebellum period to the modern South of the 20th century. Offered winter semester.

HST 320 U. S. Diplomatic History to 1898 (4)

The origins, formulation, and development of American foreign policy and diplomacy from the Revolution to the Spanish-American War, including neutrality and isolationism, the Monroe Doctrine, Manifest Destiny, and the Civil War. Offered in alternate years.

HST 321 U. S. Diplomatic History since 1898 (4)

American foreign policy and diplomacy from the Spanish-American War to the present, including American imperialism, Caribbean and Far

Eastern policies, involvement in the world wars and the Cold War, and nuclear diplomacy. Offered each year.

HST 322 The Social History of American Education (4)

The educational impact of school, family, and church on American social and cultural life from the colonial period to the present. Offered in alternate years.

HST 323 Topics in Afro-American History (4)

The economic, social, and political activities, status, organizations, and institutions of Afro-American people, emphasizing the 20th century.

HST 325 Medieval Europe (4)

The European Middle Ages from about A.D. 400 to 1300, with special emphasis on intellectual developments. Offered in alternate years.

HST 326 The Italian Renaissance (4)

The European Renaissance period, with special emphasis on the Italian experience. Offered in alternate years.

HST 327 The Northern Renaissance (4)

European humanism, with special emphasis on the Lowlands, France, and Germany. Offered in alternate years.

HST 328 Europe in the 16th Century (4)

A comparative analysis of European societies: the varieties of humanism; the Reformation; the structure of the Renaissance state; political rebellion and social revolution; dynastic and ideological warfare; the effects of overseas expansion upon Europe. Offered in alternate years.

HST 329 Europe in the 17th Century (4)

A comparative analysis of European societies; the articulation of absolutism and constitutionalism, the emergence of the European states system, the origins and impact of modern science, the culture of the baroque, and the development of commercial capitalism. Offered in alternate years.

HST 334 Victorian and Edwardian England (4)

The political, cultural, and intellectual life of England from 1837 to the outbreak of World War I.

HST 335 20th Century Britain (4)

The British adjustment to global wars, the later industrial revolution, mass democracy, and social change.

HST 337 Hellenic Greece (4)

Identical with CLS 337.

HST 339 Republican Rome (4)

Identical with CLS 339.

HST 340 Imperial Rome (4)

Identical with CLS 340.

HST 341 Europe since 1914 (4)

An analysis of Europe in world perspective since World War I. Offered each year.

HST 342 The Origins of Modern Germany (4)

The ancient and medieval roots of German civilization, the political fortunes of the Holy Roman Empire, the development of the concept of German nationality, and the rise of the German nation-state in the 19th century.

HST 343 Germany since 1870 (4)

The history of the German nation-state, concentrating on constitutional and political developments in their social context.

HST 345 France since 1789 (4)

The political development of modern France as a nation-state and the cultural and economic movements connected with French public life. Offered each year.

HST 347 Tools of Historical Research (4)

A course to acquaint students of history with the auxiliary sciences of that discipline, with special emphasis on historical bibliography and the use of the library. Offered in alternate years.

Prerequisite: Junior standing.

HST 348 Europe in the 18th Century (4)

A comparative analysis of European societies: the old regime in Europe, beginnings of industrial development, the Enlightenment as a political and social movement, reform under monarchy and the emergence of democratic ideologies, and the French Revolution. Offered in alternate years.

HST 349 France in the Age of Absolutism and Enlightenment (4)

The ancien regime in France from the end of the wars of religion to the beginning of the Revolution (1589-1789). Offered in alternate years.

HST 350 The European Mind to 1700 (4)

The main developments in European thought from the God-oriented world views of the Middle Ages to the development of scientific concepts in the 17th century. Emphasis will be on the reading of original materials. Offered in alternate years.

HST 351 The European Mind since 1700 (4)

European intellectual movements since the 18th-century Enlightenment, emphasizing the impact of evolutionary, utilitarian, and existentialist theories and the criticism of traditional rationalist assumptions. Emphasis will be on the reading of original materials. Offered in alternate years.

HST 352 Kiev and Muscovy (4)

Russian history from the ninth to the 17th century: the origins of the Kievan state and society, the struggle against the steppes, and the formation of a centralized Russia under the leadership of Moscow. Offered every third year.

Prerequisite: HST 250.

HST 353 Imperial Russia (4)

Russian history from Peter the Great to the Bolshevik Revolution: the growth of Russian national power, westernization, serfdom, and revolution. Offered in alternate years.

Prerequisite: HST 250.

HST 354 Soviet Russia (4)

Russia and the Soviet Union from 1917 to the present: revolution and civil war, collectivization and industrialization, Stalinism, World War II, de-Stalinization, the Soviet Union and the world communist movement. Offered in alternate years.

Prerequisite: HST 250.

HST 359 Russian Intellectual History to Peter the Great (4)

Main intellectual and cultural developments in Russia prior to Peter the Great. The Russian Church and religious thought, literature, and the development of political ideology will be emphasized. Offered in alternate years.

Prerequisite: HST 250.

HST 360 Russian Intellectual History since Peter the Great (4)

Main intellectual and cultural developments since Peter the Great, with emphasis on the 19th century. Particular attention is devoted to the slavophiles, the westernizers, the populists and socialists, and several of the great realistic writers. Offered in alternate years.

Prerequisite: HST 250.

HST 363 History of Southern South America (4)

The social, political, and economic history of Argentina, Brazil, and Chile in the 19th and 20th centuries; frontier expansion and Indian warfare; slavery and Empire in Brazil; regionalism and nationalism; industrialization and urbanization; and international relations. Offered each year.

HST 365 The Response to European Colonialism (4)

A comparative examination of the responses of the peoples of Africa and Latin America to European expansion, with emphasis on such themes as acculturation, resistance movements, nationalism, and modernization. Offered in alternate years.

Prerequisite: AS 230 or 250.

HST 366 Slavery and Race Relations in the New World (4)

A comparative approach to the study of slavery in North America, Latin America, and the Caribbean, and to the present state of race relations in these areas. Offered in alternate years.

HST 367 History of Mexico (4)

The scope and achievements of pre-Columbian civilizations, the Spanish Conquest, the emergence of a multiracial society, the achievement of political independence and nation-building in the 20th century. Offered in alternate years.

HST 370 China: Beginnings through Han, to 220 A.D. (4)

The history of China from most ancient times until the downfall of the Han Dynasty in 220 A.D.

HST 371 China: From the Three Kingdoms through Ming, 220-1644 (4)

The history of China to the eve of the Manchu conquest in 1644.

HST 373 China: The Final (Ch'ing) Imperial Phase, 1644-1912 (4)

China under Manchu rule, from the conquest to the collapse of the Confucian imperial order in the early 20th century.

HST 374 China: The Nationalist Republican Period, 1912-1949 (4)

Revolutionary nationalism and political, social, and cultural change under the Chinese Republic from the warlord era to the establishment of the Communist-led People's Republic in 1949, and post-1949 developments in Nationalist-ruled Taiwan.

HST 375 Topics in Chinese Intellectual History (4)

A historical investigation of selected periods and problems in the intellec-

tual history of China. Content will vary each semester. Offered each year.

**HST 376 History of Chinese Communism:
1921 to the Present (4)**

The revolutionary history of the Chinese Communist movement from its beginning in 1921 to its accession to power in 1949, and the major lines of development under the Chinese People's Republic since 1949.

HST 381 History of Early India (4)

The history of India from the most ancient times to the coming of the Mughals in the early years of the 16th century. Offered winter semester in alternate years.

**HST 383 British Imperialism and Hindu Nationalism in India,
1740-1947 (4)**

India's successful struggle to gain independence from British imperialism, and its continuing struggle to achieve social and economic justice.

HST 386 Contemporary African History (4)

Colonial and postcolonial economic development, political ideologies, and social problems of contemporary Africa. Topics include resistance and revolutionary movements, styles of leadership, and building of nations. Offered in alternate years.

Prerequisite: AS 230 or HST 287.

HST 387 Northwestern Africa (The Maghrib) since 1830 (4)

The Maghrib from the time of the French occupation to the present. Offered at irregular intervals.

HST 391 Directed Readings in History (4, 8, or 12)

Independent but directed readings designed for junior and senior majors in fields of history in which advanced courses are not available. Offered each semester.

Prerequisite: Permission of instructor.

HST 400 Seminar: Advanced Topics in History (4)

Reading, research, and discussion on a selected historical topic or period. Since topics will vary from semester to semester, students should consult the schedule of classes every semester. Offered each year. May be repeated for credit.

HST 481 Seminar in Historiography (4)

Reading and research in topics analyzing the literature of historical inquiry and writing from the Greeks to the present. Offered irregularly.

HST 491 Directed Research in History (4, 8, or 12)

Directed individual research designed for advanced history majors. Offered each semester.

Prerequisite: Permission of instructor.

DEPARTMENT OF LINGUISTICS

CHAIRPERSON: William Schwab

PROFESSOR: William Schwab (Linguistics and English)

ASSOCIATE PROFESSOR: Daniel H. Fullmer (Linguistics and English)

ASSISTANT PROFESSOR: Peter J. Binkert (Linguistics and Classics),
Gayle H. Partmann (Linguistics and Sociology and Anthropology)

ASSOCIATED FACULTY: Professor, Donald C. Hildum (Communication Arts and Linguistics); Associate Professors, John W. Barthel (German and Linguistics), Carlo Coppola (Hindi-Urdu and Linguistics), Don Iodice (French and Linguistics)

Linguistics is concerned with the objective study of language, language history, comparison of languages, and with theories about human languages and their implications in language acquisition and learning theory. As recent research has indicated, linguistics plays a pivotal role in studies dealing with the nature of the mind. Rapid expansion of knowledge in linguistics has involved such fields as anthropology, computer and information science, language teaching, speech pathology, sociology, and dialectology, and has produced the new disciplines of biolinguistics, mathematical linguistics, psycholinguistics, and sociolinguistics as exciting and viable fields.

The Department of Linguistics offers a cross-disciplinary liberal arts major in linguistics leading to the Bachelor of Arts degree, a modified liberal arts major in linguistics with a concentration in computer and information science, and concentrations in linguistics on a joint basis with other departments in the College of Arts and Sciences.

The department also offers a secondary teaching major in language arts with a specialization in teaching English to native speakers (12 credits) or to speakers of other languages (14 to 16 credits). The first specialization includes the study of social and geographical dialects in the U.S. and the relationship of language to culture and subcultures. The second specialization includes the study of bilingualism and the sociological aspects of cross-cultural interaction. Both programs include the study of literature (16 credits), which provides an introduction to the methods of literary analysis, the foundation for the critical reading of literature and exposition, and a survey of important American and English authors.

Requirements for the Liberal Arts Major

1. 28 credits in linguistics courses, including LIN 101 and 201 (or LIN 301 and a LIN elective), LIN 302, and LIN 403 or 404. Only 12 of these credits may be in ALS courses.
2. 12 credits in a cognate area — anthropology, classical languages, computer and information science, English, modern languages, philosophy, psychology, sociology, or communication arts.
3. Fourth semester proficiency in a modern or classical foreign language. If the cognate area is in a foreign language, the language proficiency requirement must be met in a different language.

Requirements for Modified Major with Concentration in Computer and Information Science

1. 24 credits in linguistics courses, including LIN 101 and 201 (or LIN 301 and a LIN elective), LIN 302, and LIN 403 or 404. Only 8 of these credits may be in ALS courses.
2. 16 credits in CIS, including CIS 120, 121, 220, and 385, and one elective.
3. PHL 370.

Secondary Teaching Major in Language Arts with a Minor in English

1. Core Program: 28 credits in the language arts core program to include LIN 101 and either LIN 207 or ALS 176 (or LIN 301 and an ALS or LIN elective), ENG 210, ED 338, LIN 404, ENG 498, and one SCN elective.
2. Specializations:
 - a. Teaching English to native speakers of English: 12 credits in ALS or LIN courses to include ALS 276 or 376, LIN 277, and ALS 420, or
 - b. Teaching English to speakers of other languages: 12 to 14 credits in ALS or LIN courses to include ALS 328 or 376, LIN 401, and ALS 428 (ALS 429 optional).
3. Literature: 16 credits in literature to include ENG 140, 224 or 225, 241, and one ENG elective in literature.
4. 24 credits in education to include: ED 344, 345, 428, and 455.
5. The above English courses provide a 24-credit minor in English in accordance with the North Central Accreditation Association. It includes ENG 140, 210, 224 or 225, 241, 498, and one ENG elective in literature.

Concentrations in Linguistics

Students may elect a modified major in anthropology, classical languages, communication arts, English, modern languages, philosophy, psychology, or sociology, and may concentrate in linguistics at the same time.

Requirements:

1. 20 credits in LIN or ALS courses to include:
 - a. LIN 101 and ALS 176 (or LIN 301 and an elective)
 - b. For a major in:

Anthropology	ALS 276
Classical languages	LIN 302
Communication arts	LIN 401
English	LIN 277
Modern languages	ALS 320
Philosophy	LIN 207
Psychology	ALS 335
Sociology	ALS 376
 - c. 8 credits of electives chosen so that at least two of the five ALS or LIN courses are at the 300 or 400 levels.
2. For requirements in the modified majors, consult the appropriate department.

COURSE OFFERINGS IN APPLIED LANGUAGE STUDIES

ALS 176 The Humanity of Language (4)

An introduction to the interrelationships of language and other cultural subsystems. Linguistic knowledge, the child's acquisition of language, sound and writing systems, meaning and communication, language and social groups are among the topics discussed.

ALS 200 Techniques for Effective Reading (2)

A practical approach to techniques of critical reading for better comprehension through the study of linguistic and other patterns, as well as meaning, in college-level assignments. The examination of reading techniques is supplemented by frequent exercises.

ALS 220 Practical Uses of Language (4)

A linguistic approach to the control of language: modern concepts of grammar, variation of sentence form and meaning, social variants, orthography, and punctuation from a linguistic perspective. Frequent exercises to improve the student's sensitivities to his/her use of language.

ALS 260 Bilingualistics (4)

The biology of language: animal communication and evolution of man's capacity for language, development of language in normal and abnormal children, anatomy of vocal and auditory apparatus, disorders of speech and hearing, and genetic aspects of language.

ALS 276 Language in Culture (4)

Language viewed as cultural behavior, its system, acquisition, and use; its relation to history, attitudes, and behavior; standard languages; social dialects; pidgins; and creoles. Identical with AN 276.

Prerequisite: One course in ALS, LIN, or AN 102.

ALS 320 Applied Linguistics (4)

A series of sections in French, German, Russian, and Spanish are offered

in this course. Identical with FRH, GRM, RUS, and SPN 320.

ALS 328 Bilingualism (4)

A survey of cultural and psycholinguistic aspects of bilingualism. Topics include bilingualism and intelligence, bilingual-bicultural education, maintenance of individual and communal bilingualism. The course will examine world-wide examples, but will be of special relevance to minority language groups in the U. S.

ALS 334 Language Development in Children (4)

Language acquisition in normal and abnormal children: stages of the acquisition process, the role of the environment, the relationship between language and the development of other skills, language acquisition in children with sensory and psychological disorders, and the relationship between language, reading, and writing.

ALS 335 Psycholinguistics (4)

A study of the psychology of language, the accommodation between the cognitive and physical structure of human beings and the structure of language, the nature of the language learning process, and the consequences of language use. Identical with PSY 335.

Prerequisite: One course in ALS or LIN and one course in PSY.

ALS 360 Neurolinguistics (4)

The neurology of language: essentials of neuroanatomy; neurological mechanisms underlying language; aphasia and kindred disorders of speech; the relationship of language to memory, intelligence, and cognition; language and mental retardation and psychological disorders.

ALS 376 Sociolinguistics (4)

Language in its social context: intrasocietal variation; social evaluation of language varieties (style, dialect) as an influence in language change; and the choice of a language variety as an index of group solidarity, social ideology, and individual attitudes. Identical with SOC 376.

Prerequisite: One course in ALS or LIN or SOC.

ALS 420 Linguistics and Reading (4)

A study of the English writing system: a close examination of spelling and morphology, ambiguity, dialect interference, and derivational vocabulary.

Prerequisite: LIN 101 and ALS 176, or LIN 301.

ALS 428 The Teaching of English as a Second Language (4)

A study of modern techniques of teaching pronunciation, grammar, and vocabulary. The preparation and use of language tests and laboratory techniques.

Prerequisite: LIN 101 and ALS 176, or LIN 301.

ALS 429 Practicum (2 or 4)

Supervised practical experience in some area of applied linguistics, such as working with nonnative speakers of English, tutoring, or other appropriate field work or internship, to be approved by the Department of Linguistics.

Prerequisite: By permission only.

COURSE OFFERINGS IN LINGUISTICS**LIN 101 Introduction to the Structure of Language (4)**

A basic approach to the modern study of language as rule-governed behavior, including the components of grammar, historical change in language, language acquisition, and language universals.

LIN 200 Topics in Linguistics (4)

Topics and problems selected by the instructor.

LIN 201 The Development of Linguistics (4)

An introduction to linguistic theory, basic concepts of linguistic science and techniques for analyzing language, with approaches representing early, as well as modern, schools of linguistic thought.

Prerequisite: LIN 101.

LIN 207 Semantics (4)

The study of meaning, which involves the relation between speaker, the language, and the real, or imagined, world. Attention is given to modern theories about the organization of thought. Identical with SCN 207.

LIN 277 Sound Patterns of American English (4)

The fundamentals of articulatory phonetics with studies in American social and geographic dialects.

LIN 301 Linguistic Structures (4)

An introduction to synchronic linguistic analysis, with structural problems in natural languages.

LIN 302 Historical Linguistics (4)

Diachronic linguistic analysis: language change, dialect geography, establishment of genealogical relationships, the reconstruction of earlier stages of languages and the relationship of language change to synchronic analysis.

Prerequisite: LIN 101 and ALS 176, or LIN 301.

LIN 401 Phonetics (4)

An introduction to articulatory and acoustic descriptions of spoken language, and training in the recognition and production of sounds found in languages other than English. Identical with SCN 430.

Prerequisite: LIN 101 and ALS 176, or LIN 301.

LIN 403 Phonological Theory (4)

A presentation of theory and application of phonological analysis with emphasis on original work.

Prerequisite: LIN 101 and ALS 176, or LIN 301.

LIN 404 Syntactic Theory (4)

A presentation of theory and application of morphological and syntactic analysis, with emphasis on original work.

Prerequisite: LIN 101 and ALS 176, or LIN 301.

LIN 407 Semantic Theory (4)

An inquiry into contemporary efforts to formulate and articulate a theory of meaning adequate for the analysis of natural language, with emphasis on the relation between syntactic and semantic analysis.

Prerequisite: LIN 101 and ALS 176, or LIN 301.

LIN 410 Studies in the Structure of a Language (4)

A study of the structural aspects of an individual language to be determined by the instructor. Among the languages for study are French, German, Hindi-Urdu, and Sanskrit.

Prerequisite: LIN 101 and ALS 176, or LIN 301.

LIN 480 Seminar in Linguistics (4)

Topics and problems selected by the instructor.

Prerequisite: LIN 101 and ALS 176, or LIN 301.

LIN 490 Independent Study (2 or 4)

Special research projects in linguistics.

Prerequisite: Permission of Department of Linguistics.

**DEPARTMENT OF
MATHEMATICAL SCIENCES**

CHAIRPERSON: Louis R. Bragg**PROFESSORS:** Harvey J. Arnold, Louis R. Bragg, John W. Dettman, Ronald A. DeVore, George F. Feeman, William C. Hoffman, G. Philip Johnson, Donald G. Malm, James H. McKay, Harvey A. Smith**ASSOCIATE PROFESSORS:** J. Curtis Chipman, Jon Froemke, Louis J. Nachman, Irwin Schochetman, Yel-Chiang Wu**ASSISTANT PROFESSORS:** Charles C. Cheng, Roderick J. Dunn, Jr., Richard E. Ewing, Jerrold W. Grossman, Richard K. Molnar, Subbaiah Perla, Bradley R. Sands, Sze-kai J. Tsui**VISITING ASSISTANT PROFESSOR:** Douglas C. McMahon

The Department of Mathematical Sciences offers programs of study leading to the degrees of Bachelor of Arts with a major in mathematics, Bachelor of Science with a major in mathematical sciences, Master of Arts in mathematics, and Master of Arts in Teaching in mathematics. Students preparing for secondary teaching can be certified in either the B.A. or B.S. program. In addition, the department offers courses which are required or are recommended as electives in other programs of the university. For further information on graduate programs of the department, see the *Oakland University Graduate Study Catalog*.

Whether in the B.A. or B.S. program, students are encouraged to elect a variety of applied courses both inside and outside the department. The greater the familiarity with applications of mathematics, the greater will be the possibilities of employment in a world which is becoming more mathematics-oriented each year. Concentrations or minors, or possibly even second majors, are available in computer science, the life sciences, the physical sciences, engineering, economics and management, the social sciences, and linguistics. Mathematics majors are advised to speak to department faculty before planning their programs.

Proficiency Examinations

Well-prepared freshmen who intend to major in mathematics should plan to take MTH 154 as early as possible. The department offers a proficiency exam during orientation, registration, and the first week of classes to place students in the appropriate MTH courses. MTH 101 through 105 are sequentially arranged so that each is a prerequisite for the next in the sequence. These courses

are open only to students who place into them via the proficiency exam. These courses also form prerequisites for regular courses as follow:

COURSE	PREREQUISITE
MTH 121 or 123	MTH 102
MTH 122	MTH 103 and MTH 121
MTH 154	MTH 104 with MTH 105 as a corequisite
MTH 185	MTH 102

Requirements for the Bachelor of Arts Degree with a Major in Mathematics

1. A minimum of 40 credits is required. These must include MTH 154, 155, 254, 275, 351, 475; one of STA 226, APM 255, or APM 263; and three additional courses labeled APM, MOR, MTH, or STA and numbered above 300, including at least one course numbered above 400 other than MTH 414. MTH 414, however, can count toward the major.
2. Five courses outside the Department of Mathematical Sciences in areas related to mathematics. It is recommended that at least two of these be in science.

Requirements for the Bachelor of Science Degree with a Major in Mathematical Sciences

1. A minimum of 44 credits labeled MTH, APM, MOR, or STA.
 - a. These must include MTH 154, 155, 254, 275, and APM 331-332.
 - b. One of the following applied options at the upper level must be chosen:
 1. Applicable Analysis and Mathematical Modeling: APM 255, 335, APM 431 or 435, APM 455, and one elective.
 2. Operations Research: STA 226, MOR 342, 442, 443, and one elective.
 3. Statistics: STA 226, 325, 427, STA 326 or 425 or 428, and one elective.

The elective in the applied option must be chosen from STA 226, APM 255, APM 263, or courses numbered above 300 and labeled APM, MOR, MTH, or STA, but MTH 414 may not be counted toward the major.

2. 16 credits in an area related to the student's option outside the Department of Mathematical Sciences.

Requirements for Secondary Teaching Certification in Mathematics

Students interested in secondary education certification must either complete the B.A. or B.S. program in mathematics and

include MTH 361 as an elective and must satisfy all of the education course requirements (ED 344, 345, 428, and 455). Students must take ED 428 before ED 455. In addition, they must expand the corequirement into a certifiable teaching minor.

Requirements for the Secondary Teaching Minor in Mathematics

To qualify for the secondary teaching minor in mathematics, a student must take 20 credits of course work in the department. Only MTH 154, 155, and courses with at least MTH 155 as a prerequisite may be used to satisfy this requirement. It is recommended that the student select his/her courses from among MTH 154, 155, 254, 361; APM 255, 263, 331, 332; STA 226 and 325; and MOR 322 and 342.

In addition to the field experiences required for secondary education certification (tutoring in ED 428 and student teaching in ED 455), other field experiences are available in several areas of community service. Interested students should consult the department chairperson for detailed information.

Concentration in Computer and Information Science for Mathematics Majors

Students interested in a concentration in computer and information science with a mathematics major must take four 4-credit courses labeled CIS, including one 300-level CIS course. CIS 209 and 409 may not be used.

COURSE OFFERINGS

Courses are indicated by the following letter designations:

MTH — Mathematics

APM — Applicable Analysis and Mathematical Modeling

STA — Statistics

MOR — Mathematical Methods of Operations Research

MTE — Mathematics for Elementary Education Majors

MTH 101 College Arithmetic (2)

A half-semester study of whole numbers, fractions and decimals, signed numbers, powers and exponents, roots and radicals, simple equations, and problem solving.

MTH 102 College Algebra I (2)

A half-semester study of sets, real numbers, absolute value, order relations, inequalities, \mathbb{R}^2 and the plane, graphs, and linear and quadratic functions.

MTH 103 College Algebra II (2)

A half-semester study of monomials, binomials, polynomials, factoring, roots of polynomial equations, quadratic equations, and complex numbers.

MTH 104 Elementary Functions (2)

A half-semester study of functions, graphs of functions, polynomial functions, rational functions, inverse functions, and exponential and log functions.

MTH 105 Trigonometry (2)

A half-semester study of angles and angular measures, trig functions, graphs, trig identities, inverse trig functions, and trigonometric equations.

MTH 121-122 Introductory Mathematics for the Social Sciences (4 each)

Elementary set theory, number systems, functions, linear systems, linear programming, matrices, and the basic concepts, theorems, and applications of calculus.

MTH 123 Introductory Mathematics for the Life Sciences (4)

Emphasis on topics from algebra, trigonometry, and the theory of functions with applications to problems in biology.

MTH 154-155 Calculus (5 each)

A comprehensive study of analytic geometry, limits, differentiation, and integration of functions of one real variable. Each is offered fall and winter semester.

MTH 185 Mathematics — An Exploration into Undergraduate Topics (4)

Topics selected from probability, calculus, linear algebra, group theory, number theory, abstract algebra, topology, projective geometry, logic, and foundations. The student will be expected to acquire familiarity and experience with abstract reasoning as it is applied in various areas of mathematics.

MTH 190-191 Topics in Mathematics (2 each)

Intended to provide the superior student with an introduction to the type of abstract reasoning used in advanced courses in mathematics. Enrollment is limited to students in MTH 154-155 respectively. MTH 190 is offered fall semester, MTH 191 offered winter semester.

Prerequisite: Permission of department.

MTH 254 Multivariable Calculus (4)

A study of vectors, polar coordinates, three-dimensional geometry, differential calculus of functions of several variables, exact differential equations, multiple integrals, line and surface integrals, and vector fields. Offered fall and winter semesters.

Prerequisite: MTH 155.

MTH 275 Linear Algebra (4)

A study of vector spaces, matrices, linear equations, determinants, characteristic values and vectors, and functions of matrices. Emphasis on rigorous proofs and abstractions.

Corequisite: MTH 254.

MTH 290 Independent Study (2 or 4)

Reading or research on some mathematical topic. Open only to sophomores.

Prerequisite: Written permission of department.

MTH 351 Introduction to Analysis (4)

A rigorous introduction to sets, sequences, series, topology of the real line, functions, continuity, uniform convergence, differentiation,

Riemann integration, and Fundamental Theorem of Calculus.
Prerequisite: MTH 275.

MTH 352 Complex Variables (4)

A study of analytic functions of a complex variable including differentiation and integration, series representations, the theory of residues, and applications.
Prerequisite: MTH 254.

MTH 361 Geometric Structures (4)

A study of topics from Euclidean geometry, projective geometry, non-Euclidean geometry, and transformation geometry.
Prerequisite: MTH 275.

MTH 372 Number Theory (4)

Number-Theoretic functions, diophantine equations, congruences, and quadratic residues.
Prerequisite: MTH 254.

MTH 405 Special Topics (2 or 4)

Advanced study of some topic in mathematics. May be taken more than once.
Prerequisite: Permission of department.

MTH 414 History of Mathematics (4)

Mathematics from ancient to modern times, its growth, development, and place in human culture.
Prerequisite: MTH 351.

MTH 415 Foundations of Mathematics (4)

An examination of the logical foundations of mathematics including analysis of the axiomatic method, basic set theory, cardinal and ordinal numbers, and the axiom of choice.
Prerequisite: MTH 351.

MTH 416 Concepts of Geometry (4)

A development of geometry from an algebraic and metric viewpoint, concentrating on Euclidean geometry.
Prerequisite: MTH 275.

MTH 453 Multivariable Analysis (4)

The topology of \mathbb{R}^n , curves in \mathbb{R}^n , derivatives and differentials, Lagrange multipliers, Taylor's formula, inverse and implicit function theorems, manifolds, multiple integrals, multilinear forms, differential forms, and closed and exact forms.
Prerequisite: MTH 351.

MTH 461 General Topology (4)

A study of topological spaces and continuous functions. Separation and countability properties, connectedness, compactness, and local properties.
Prerequisite: MTH 351.

MTH 465 Differential Geometry (4)

Theory of curves and surfaces in Euclidean space with an introduction to the theory of matrix Lie groups.
Prerequisite: MTH 351.

MTH 475-476 Abstract Algebra (4 each)

Algebra of sets and mappings, groups, and homomorphisms, rings and ideals, factorization and divisibility, vector spaces, linear transforma-

tions, fields, and field extensions.
Prerequisite: MTH 275.

MTH 490 Independent Study (2 or 4)

Research on some mathematical topic.
Prerequisite: Permission of department.

MTH 497 Apprentice College Teaching (2 or 4)

Open to any well-qualified upperclassperson who obtains consent of a faculty member to assist in presenting a regular college course. The apprentice should be capable of assuming limited classroom teaching duties.
Prerequisite: Permission of department.

Applicable Analysis and Mathematical Modeling

APM 255 Linear Algebra and Differential Equations (4)

An introduction to linear equations and matrices, vectors, independence of vectors and functions, eigenvalues and eigenvectors, first order differential equations, linear differential equations, Laplace transforms, series methods, and boundary value problems.
Prerequisite: MTH 155.

APM 263 Discrete Mathematics (4)

An introduction to discrete mathematical structures with particular emphasis on their application to computer and information science. Topics will be drawn from the areas of set theory and relations, Boolean algebras, strings, and graphs. Some prior programming experience is recommended.
Prerequisite: MTH 155.

APM 331-332 Applied Analysis and Matrix Theory (4 each)

The limit concept, differential calculus of \mathbb{R}^n , integration in \mathbb{R}^n , advanced topics in infinite series, matrix algebra, linear equations, determinants, eigenvalues and eigenvectors, computational techniques, Jordan forms, special matrices, quadratic forms.
Prerequisite: MTH 254, and MTH 275 or APM 255.

APM 335-336 Introduction to Numerical Analysis (4 each)

An introduction to mathematical methods appropriate to computer work. Topics treated include interpolation, approximation, quadrature, solution of differential equations, and matrix computation.
Prerequisite: MTH 254, and MTH 275 or APM 255.

APM 431 Elements of Partial Differential Equations (4)

Derivation of partial differential equations of physics, characteristic surfaces and classification, Fourier methods, Laplace transforms, orthogonal functions, initial and boundary value problems, the Riemann method, and numerical methods.
Prerequisite: APM 331 or MTH 351.

APM 435 Introduction to Mathematical Science (4)

The algebraic structures of scientific phenomena. Differential equations and dynamical systems. Partial differential equations of the physical and life sciences. Introduction to mathematical modeling.
Prerequisite: APM 255.

APM 455 Intermediate Ordinary Differential Equations (4)

Review of elementary techniques, existence and uniqueness theory, series methods, systems of equations, oscillation and comparison

theorems, Sturm-Liouville Theory, stability theory, and applications.
Prerequisite: APM 331 or MTH 351.

APM 463 Graph Theory and Combinatorial Mathematics (4)

An introductory course in combinatorics. Topics covered will include techniques of enumeration, fundamental concepts of graph theory, applications to transport networks, matching theory, and block design.
Prerequisite: MTH 254.

Statistics

STA 225 Introduction to Probability and Statistics (4)

Elementary set theory, sample spaces, combinatorics, random variables, Chebyshev's inequality, Bernoulli trials, binomial distribution, joint distributions, and introduction to statistics.
Prerequisite: MTH 123.

STA 226 Applied Statistics (4)

Introduction to statistics as applied to the physical, biological, and social sciences and to engineering. Applications of special distributions and nonparametric techniques. Regression analysis and analysis of variance.
Prerequisite: MTH 122 or 154.

STA 325-326 Statistical Methods and Experimental Design (4 each)

Hypothesis testing and estimation, analysis of variance, multiple comparison techniques, nonparametric and sequential techniques, randomized blocks, Latin squares, factorial designs, nonlinear estimation, and time series analysis.
Prerequisite: STA 226.

STA 425 Elements of Stochastic Processes (4)

Random walk models, Markov chains and processes, birth and death processes, queueing processes, diffusion processes, and non-Markov processes.
Prerequisite: STA 226 and APM 331.

STA 427-428 Introduction to Mathematical Statistics (4 each)

The distribution of random variables, conditional probability and stochastic independence, special distributions, functions of random variables, interval estimation, sufficient statistics and completeness, point estimation, tests of hypothesis, and analysis of variance.
Prerequisite: APM 331 or MTH 351.

Operations Research

MOR 322 Mathematical Models in the Social Sciences (4)

Formulation in mathematical terms of phenomena from the social sciences, solution of the resulting mathematical problems, and the interpretation of results. Models will be drawn from economic theory, ecology, theoretical sociology, and management science.
Prerequisite: MTH 122 or 154.

MOR 342 Introduction to Operations Research (4)

Topics will be drawn from areas such as inventory control, dynamic programming, Markov decision problems, waiting-line phenomena, transport networks and assignment problems, game theory, Boolean analysis, and scheduling problems.
Prerequisite: MTH 254 and STA 226, or MTH 122 and ECN 304 with 3.0 or better.

MOR 442-443 Mathematical Methods of Operations Research (4 each)

Decision problems in operations research, classical optimization techniques, mathematical programming, queueing theory, game theory and decision making, and graphs and networks.

Prerequisite: APM 331-332.

Mathematics for Elementary Education Majors**MTE 310 The Integers (2)**

Ordinary and exotic algorithms for addition, subtraction, multiplication, and division. Radix Theory, historical numeration systems. Mathematics laboratory project. Enrollment is limited to majors in elementary education.

Prerequisite: MTH 102.

MTE 311 The Rationals (2)

The divisibility properties of the integers, primes, composites, units, and the division algorithm. Rational numbers, equivalence of rational numbers, and operations on rational numbers. Various representations, including decimals, for rational numbers and algorithms for operating with these representations. Mathematics laboratory project. Enrollment is limited to majors in elementary education.

Prerequisite: MTE 310.

MTE 312 Intuitive Euclidean Geometry (2)

Basic notions: points, lines, planes, angles, parallelism and perpendicularity, elementary geometry of the triangle, similarity, circles and regular polygons, and figures in three-space. Mathematics laboratory project. Enrollment is limited to majors in elementary education.

Prerequisite: MTE 311.

MTE 313 Geometry, Statistics, Probability (2)

Length, area, and volume. Measures of central tendency and dispersion, graphical representation, the addition and multiplication principles of counting, and probabilities of simple events. Mathematics laboratory project. Enrollment is limited to majors in elementary education.

Prerequisite: MTE 311.

MTE 317 Vector Geometry (4)

Geometry of the plane and space studied by means of vectorial ideas, independence of a set of vectors, and linear transformations. Mathematics laboratory project. Enrollment limited to majors in elementary education.

Prerequisite: MTE 312.

MTE 410 Elementary School Mathematics and the Computer (4)

Selected topics in mathematics useful to elementary school teachers in line with current curriculum developments. Computer-assisted programs will be emphasized. Enrollment is limited to majors in elementary education.

Prerequisite: MTE 311.

MTE 418 Theory of Equations (4)

Solution of equations in one unknown. Descartes' rule of signs, intermediate value theorem, Euclidean algorithm for polynomials, basic numerical methods for finding roots using the computer, and systems of equations. Enrollment is limited to majors in elementary education.

Prerequisite: MTE 410 or prior programming experience.

**DEPARTMENT OF
MODERN LANGUAGES
AND LITERATURES**

CHAIRPERSON: Jack R. Moeller

PROFESSORS: Alfred J. DuBruck (French), Helen Kovach-Tarakanov (Russian), Carmine R. Linsalata (Spanish and Italian), Richard A. Mazzara (French), Jack R. Moeller (German), Robert E. Simmons (German), Norman Susskind (French), Amitendranath Tagore (Chinese)

ASSOCIATE PROFESSORS: John W. Barthel (German), William C. Bryant (Spanish), Dolores M. Burdick (French), Carlo Coppola (Hindi-Urdu), Renate Gerulaitis (German), Dmytro Ijewliw (Russian), Don R. Iodice (French), William D. Jaymes (French), Kathryn McArdle (Spanish), Munibur Rahman (Hindi-Urdu), Carmen Urla (Spanish)

ASSISTANT PROFESSOR: John Marney (Chinese)

The Department of Modern Languages and Literatures offers programs leading to the Bachelor of Arts degree.

The aim of the modern language curriculum is to help students acquire competence in the language of a given country or countries and, through the study of literature and civilization, to acquaint them with the cultural background of the country or countries. It also prepares students for graduate work, teaching at the secondary and elementary levels, and careers in the business world or government service.

Students whose main interests lie in fields other than foreign languages and cultures may wish to investigate the advantages of combining them with competence in this field. There are standard concentrations, for example, in economics/management or linguistics. Other majors such as political science, English, art, and music are enriched by the knowledge of a foreign language and culture. Students interested in study or work abroad, graduate study, or nonacademic careers should obtain assistance from special advisers in the department familiar with the possibilities in these areas.

The selection of a foreign language to study should be a reasoned one. It is usually best to continue with a language begun in high school. However, if students wish to learn one not widely taught at the secondary level, they should not hesitate to change. Those who need advice about these choices are asked to consult with a member of the department.

Placement Examinations

A placement test is administered by the Undergraduate Advisement and Counseling Office. Students who enter Oakland with previous work in French, German, Russian, or Spanish, and who wish to continue the study of one of these languages, should take the appropriate placement test during summer orientation. Students are urged to consult with the department's advising office about the results of the examination and placement in the proper course at the proper level.

Requirements for the Liberal Arts Major in a Modern Language

The requirement is 32 credits beyond course number 216 in the chosen language, culture, and literature, including the courses numbered 314, 316, 318, 370, and 380 in the chosen language. Two collateral courses are required: one course in history or civilization and one course numbered LIT 281 or 282. Students planning to do graduate work are strongly urged to study a second foreign language recommended by the department.

Requirements for the Liberal Arts Major in a Modern Language with Concentrations in Linguistics, Theatre Arts, and Economics and Management

Modified majors are available in French, German, Russian, Spanish, and Chinese with the above concentrations. The requirement in French, German, Russian, and Spanish is 24 credits beyond 216. In Chinese the requirement is 16 credits beyond CHE 216, plus 12 credits in Chinese area studies including AS 210 and 490. For concentration requirements, see Linguistics, page 109; Theatre Arts, page 82; and Economics and Management, page 221.

Requirements for the Liberal Arts Major in Chinese Language and Civilization

The requirement in Chinese for this major is 16 credits beyond CHE 216, selected from departmental offerings in consultation with an adviser. Twenty credits in East Asian area studies, including AS 490, are also required. See East Asian area studies program, page 188.

Requirements for the Liberal Arts Major in Latin American Language and Civilization

Requirements in Spanish are 24 credits beyond SPN 216. An alternative language requirement for this major is 16 credits in Spanish beyond SPN 216 plus course work in French through FRH 214. Twenty credits are required in Latin American area studies courses including AS 490. See Latin American area studies program, page 191.

Requirements for the Liberal Arts Major in Russian Language and Civilization

Requirements are 16 credits in Russian language and civilization beyond RUS 216, and 20 credits in Slavic area studies courses, including AS 490. See Slavic area studies, page 190.

Requirements for the Secondary Teaching Major in a Modern Language

Teaching majors are available in French, German, Russian, and Spanish. The requirement is 30 credits beyond 216 in the chosen language, culture, and literature, including the courses numbered 314, 316, 318, 370, 380, and 408. The course numbered 320 is highly recommended. Two collateral courses are required: one course in history or civilization and one course numbered LIT 281 or 282. In addition, 24 credits in education are required: ED 344, 345, 428, and 455.

Translation Program

Students may qualify for a translation certificate by completing language courses numbered 355, 455, and 491, and may then become candidates for the American Translators Association Accreditation Test.

Requirements for the Secondary Teaching Minor in a Modern Language

The requirement is 20 credits in one language. Of these credits, 16 must be beyond the 216 level, including 314, 316, and 370.

Requirements for an Elementary Teaching Concentration in a Modern Language

For students who wish to teach a foreign language in the elementary grades or at the junior high school level, the requirement is 36 credits in one language including elementary and intermediate courses. For complete details on other requirements, including courses in education, see page 236.

Departmental Honors

Departmental honors in a foreign language may be awarded to graduating seniors who maintain a minimum grade point average set by the department and complete projects of high quality. Students wishing to work for departmental honors should see their adviser for details no later than three semesters before they intend to graduate.

Admission to Major Standing

In order to be considered for graduation with a Bachelor of Arts degree with a major in a foreign language, the student must be admitted to major standing by the department. Normally a student should apply for major standing after having attained 56 credits and no later than three semesters before graduation. Admission to major standing is granted after successful completion of 314 and 370. A student should apply at the department office.

COURSE OFFERINGS

Chinese Language and Literature

CHE 111-112 Introduction to Oral Chinese (1 each)

A two-semester sequence of practice in listening to and speaking Chinese, including supervised laboratory work and drill sessions. To be taken in conjunction with CHE 114-115. Required of majors. CHE 111 must be taken first.

CHE 114-115 Introduction to Chinese (4 each)

A two-semester sequence in the fundamentals of modern Mandarin Chinese (kuo-yu). A beginning course intended for students who have had no more than one year of secondary-school level preparation. CHE 114 must be taken first.

CHE 201 Introduction to Chinese Calligraphy (2)

Beginning instruction in basic Chinese brush writing in the regular style ("Kai-shu"). Designed for students of Chinese and Japanese languages but also of value to students of Oriental art.
Prerequisite: CHE 114 or JPN 114.

CHE 211-212 Second Year Oral Chinese (1 each)

A two-semester sequence continuing the work in CHE 111-112. To be taken in conjunction with CHE 214-215 only. Required of majors. CHE 211 must be taken first.
Prerequisite: CHE 111-112.

CHE 214-215 Second Year Chinese (4 each)

A two-semester sequence continuing the work of CHE 114-115, with the addition of cultural and literary readings. CHE 214 must be taken first.
Prerequisite: One year of college Chinese or equivalent.

CHE 216 Basic Chinese Conversation (2)

The course is designed to develop the student's ability to organize and express ideas in Chinese with a minimum of inhibition.
Prerequisite: CHE 115.

CHE 310 Literary Chinese (4)

Studies based upon literary texts of Confucius, Mo Tzu, etc.
Prerequisite: CHE 215.

CHE 312 Advanced Pai-hua (4)

This will be an intensive course in spoken colloquial Chinese, with emphasis on grammatical constructions and sentence patterns.
Prerequisite: CHE 215.

CHE 316 Intermediate Chinese Conversation (2)

The course provides a transition between the carefully structured drills of other intermediate courses and free manipulation of the spoken language.
Prerequisite: CHE 215.

CHE 320 Readings in Chinese Newspapers (4)

Selections from newspapers of mainland China, Taiwan, and Southeast Asia.
Prerequisite: CHE 215.

CHE 330 Readings in Chinese Political Essays (4)

Studies in the documentary style of Chinese, selected mainly from writings of 20th-century political leaders of China.
Prerequisite: CHE 215.

CHE 340 20th Century Chinese Literature (4)

Studies in the modern pai-hua literature, including short stories, poems, essays, and pamphlets.
Prerequisite: CHE 215.

CHE 410 Chinese Fiction and Drama (4)

Studies in texts and criticism of fiction and drama, modern or classical.
Prerequisite: CHE 310 or 312.

CHE 421 Selected Classical Texts (4)

Studies of texts in advanced literary Chinese.
Prerequisite: CHE 310.

CHE 431 Classical Chinese Stories (4)

Studies of selected stories from different classical Chinese sources.
Prerequisite: CHE 310.

CHE 440 Chinese Poetry (4)

Selections from either classical T'ang and Sung Dynasty poems or from the post-May-fourth movement of poetry.
Prerequisite: CHE 310.

**CHE 490 Directed Readings and Research in Chinese
(2, 4, or 8)**

For students with a high degree of competence in the language. May be conducted either in literary or in modern Chinese. May be taken for one or more semesters.
Prerequisite: Permission of instructor.

French Language and Literature**FRH 111-112 Introduction to Oral French (1 each)**

A two-semester sequence of practice in listening to and speaking French, including supervised laboratory work and drill sessions. To be taken only in conjunction with FRH 114-115. Required of majors. FRH 111 must be taken first.

FRH 114-115 Introduction to French (4 each)

A two-semester sequence in the fundamentals of French. A beginning course for students who have had no more than one year of secondary-school level preparation. FRH 114 must be taken first.

FRH 211-212 Second Year Oral French (1 each)

A two-semester sequence continuing the work of FRH 111-112. To be taken only in conjunction with FRH 214-215. Required of majors. FRH 211 must be taken first.

FRH 214-215 Second Year French (4 each)

A two-semester sequence continuing the work of FRH 114-115, with the addition of cultural and literary readings. FRH 214 must be taken first. Prerequisite: FRH 114-115.

FRH 216 Basic French Conversation (2)

The course is designed to develop the student's ability to organize and express ideas in French with a minimum of inhibition. Prerequisite: FRH 115.

FRH 290 Directed Readings in French (2 or 4)

A reading course for nonmajors interested in research in a particular area. Approximately 50 hours of reading per credit; one conference weekly with the instructor. May be repeated for credit once. Prerequisite: FRH 215.

FRH 313 French Phonetics (2)

Group and individualized practice in the sound system of French, with specific reference to interference from English. Both written and laboratory work required. Prerequisite: FRH 215.

FRH 314 French Grammar Review (2)

Review of French grammar. Offered fall semester. Prerequisite: FRH 215.

FRH 316 Intermediate French Conversation (2)

Provides a transition between the carefully structured drills of other intermediate courses and free manipulation of the spoken language. Offered winter semester. Prerequisite: FRH 215.

FRH 318 French Composition (2)

Practice in written composition. Techniques of textual analysis and exposition are introduced. Offered winter semester. Prerequisite: FRH 314.

FRH 320 Applied Linguistics of French (4)

Treats the essential linguistic principles which impact on foreign language learning: phonological, morphological, and syntactic interference; sound/spelling correspondences; and language learning, error analysis, and remediation. Language-specific drills and exercises included. Identical with ALS 320. Offered in alternate years. Prerequisite: FRH 215.

FRH 350 French Theatre (4)

The study of French plays from various periods, with the production of a play as a continuing class project. Lectures and discussions in French. Prerequisite: FRH 215.

FRH 351 French Civilization (4)

An overview of contemporary life, education, and socio-economic conditions in France and other French-speaking countries. Conducted in French. Offered in alternate years.

Prerequisite: FRH 215.

FRH 355 Translating French (4)

Translation from French to English of a wide variety of materials, ranging from commercial and technical to literary. Individual students may choose the areas they wish to emphasize. Study of both languages will facilitate the conversion of French into accurate, idiomatic English. Offered winter semester.

Prerequisite: FRH 314.

FRH 369 Field Experience in Teaching French in the Lower Grades (2 or 4)

Provides supervised experience in teaching French in the elementary school. Graded S/N. May be repeated for credit once. Does not carry credit toward departmental major.

Prerequisite: FRH 214.

FRH 370 Introduction to French Literature (4)

A sampling of critical approaches to the study of selected masterpieces of French literature. Conducted in French. Offered fall semester.

Prerequisite: FRH 215.

FRH 380 Survey of French Literature (4)

A survey of the highlights of French literature. Intended to supplement the work of FRH 370. Conducted in French. Offered winter semester.

Prerequisite: FRH 370.

FRH 404 French Films (4)

This course introduces the student to French culture and thought via the cinematic medium. Lecture, film viewing, and discussion.

Prerequisite: Permission of instructor.

FRH 408 Advanced Oral Practice in French (2)

Practice in speaking at an advanced level, which may include style and delivery appropriate to formal and informal speaking situations. Course work may include oral presentations, self-recording, and critique.

Prerequisite: FRH 316.

FRH 413 From the Middle Ages through the 16th Century (4)

A study of works in all genres by leading French authors of the period. Conducted in French.

Prerequisite: FRH 370 and 380.

FRH 415 The 17th and 18th Centuries (4)

A study of works in all genres by leading French authors of the period. Conducted in French.

Prerequisite: FRH 370 and 380.

FRH 417 The 19th Century (4)

A study of works in all genres by leading French authors of the period. Conducted in French.

Prerequisite: FRH 370 and 380.

FRH 418 The 20th Century (4)

A study of works in all genres by leading French authors of the period.

Conducted in French.

Prerequisite: FRH 370 and 380.

FRH 419 "Third World" Literature of European Expression (4)

A study of works in all genres by leading authors from the area or areas covered who write in French.

Prerequisite: FRH 370 and 380.

FRH 455 Translation into French (4)

Translation from English into French of a wide variety of materials ranging from commercial and technical to literary. Individual students may choose to emphasize areas of interest. Offered fall semester.

Prerequisite: FRH 314, 318, and 355.

FRH 480 Seminar in French Literature (4)

Study of individual authors, selected themes, or critical problems.

Prerequisite: Permission of department.

FRH 490 Independent Reading and Research (2, 4, or 8)

Directed individual research and reading designed for advanced French majors. May be taken for one or more semesters.

Prerequisite: Permission of department.

FRH 491 Independent Translation Project (4 or 8)

Directed annotated translation from French into English of a major work in the student's field.

Prerequisite: FRH 355 and 455 and permission of department.

German Language and Literature

GRM 111-112 Introduction to Oral German (1 each)

A two-semester sequence of practice in listening to and speaking German, including supervised laboratory work and drill sessions. To be taken only in conjunction with GRM 114-115. Required of majors. GRM 111 must be taken first.

GRM 114-115 Introduction to German (4 each)

A two-semester sequence in the fundamentals of German. A beginning course for students who have had no more than one year of secondary-school level preparation. GRM 114 must be taken first.

GRM 211-212 Second Year Oral German (1 each)

A two-semester sequence continuing the work of GRM 111-112. To be taken only in conjunction with GRM 214-215. Required of majors. GRM 211 must be taken first.

Prerequisite: GRM 111-112.

GRM 214-215 Second Year German (4 each)

A two-semester sequence continuing the work of GRM 114-115, with the addition of cultural and literary readings. GRM 214 must be taken first.

Prerequisite: GRM 114-115.

GRM 216 Basic German Conversation (2)

The course is designed to develop the student's ability to organize and express ideas in German with a minimum of inhibition.

Prerequisite: GRM 115.

GRM 290 Directed Readings in German (2 or 4)

A reading course for nonmajors interested in research in a particular area. Approximately 50 hours of reading per credit; one conference

weekly with the instructor. May be repeated for credit once.
Prerequisite: GRM 215.

GRM 314 German Grammar Review (2)

Review of German grammar. Offered fall semester.
Prerequisite: GRM 215.

GRM 316 Intermediate German Conversation (2)

Provides a transition between the carefully structured drills of other intermediate courses and free manipulation of the spoken language. Offered winter semester.
Prerequisite: GRM 215.

GRM 318 German Composition (2)

Practice in written composition. Techniques of textual analysis and exposition are introduced. Offered winter semester.
Prerequisite: GRM 314.

GRM 320 Applied Linguistics of German (4)

Treats the essential linguistic principles which impact on foreign language learning: phonological, morphological, and syntactic interference; sound/spelling correspondences and language learning, error analysis, and remediation. Language-specific drills and exercises included. Identical with ALS 320. Offered in alternate years.
Prerequisite: GRM 215.

GRM 351 German Civilization (4)

An overview of contemporary life, education, and socio-economic conditions in Germany and other German-speaking countries. Conducted in English. Offered in alternate years.
Prerequisite: GRM 215.

GRM 355 Translating German (4)

Translation from German to English of a wide variety of materials, ranging from commercial and technical to literary. Study of both languages will facilitate the conversion of German into accurate, idiomatic English. Offered winter semester.
Prerequisite: GRM 314.

GRM 369 Field Experience in Teaching German in the Lower Grades (2 or 4)

Provides supervised experiences in teaching German in the elementary school. Graded S/N. May be repeated for credit once. Does not carry credit toward departmental major.
Prerequisite: GRM 215.

GRM 370 Introduction to German Literature (4)

A sampling of critical approaches to the study of some masterpieces of German literature. Conducted in German. Offered fall semester.
Prerequisite: GRM 215.

GRM 380 Survey of German Literature (4)

A survey of the highlights of German literature. Intended to supplement the work of GRM 370. Conducted in German. Offered winter semester.
Prerequisite: GRM 370.

GRM 408 Advanced Oral Practice in German (2)

Practice in speaking at an advanced level, which may include style and delivery appropriate to formal and informal speaking situations. Course

work may include oral presentations, self-recording, and critique.

Prerequisite: GRM 316.

GRM 413 From the Middle Ages through the 17th Century (4)

A study of works in all genres by leading German authors of the period. Conducted in German.

Prerequisite: GRM 370 and 380.

GRM 415 The 18th Century (4)

A study of works in all genres by leading German authors of the period. Conducted in German.

Prerequisite: GRM 370 and 380.

GRM 417 The 19th Century (4)

A study of works in all genres by leading German authors of the period. Conducted in German.

Prerequisite: GRM 370 and 380.

GRM 418 The 20th Century (4)

A study of works in all genres by leading German authors of the period. Conducted in German.

Prerequisite: GRM 370 and 380.

GRM 455 Translation into German (4)

Translation from English into German of a wide variety of materials ranging from commercial and technical to literary. Individual students may choose to emphasize areas of interest. Offered fall semester.

Prerequisite: GRM 314, 318, and 355.

GRM 480 Seminar in German Literature (4)

Study of individual authors, selected themes, or critical problems.

Prerequisite: Permission of department.

GRM 490 Independent Reading and Research (2, 4, or 8)

Directed individual research and reading designed for advanced German majors. May be taken for one or more semesters.

Prerequisite: Permission of department.

GRM 491 Independent Translation Project (4 or 8)

Directed annotated translation from German into English of a major work in the student's field.

Prerequisite: GRM 355 and 455 and permission of department.

Hindi-Urdu Language

HIUR 114-115 Introduction to Hindi and Urdu (4 each)

A two-semester sequence of the fundamentals of both Hindi and Urdu. HIUR 114 must be taken first.

HIN 214-215 Second Year Hindi (4 each)

A two-semester sequence continuing the work of HIUR 114-115, with the addition of cultural and literary readings in Hindi. HIN 214 must be taken first.

Prerequisite: HIUR 114-115.

URD 214-215 Second Year Urdu (4 each)

A two-semester sequence continuing the work of HIUR 114-115, with the addition of cultural and literary readings in Urdu. URD 214 must be taken first.

Prerequisite: HIUR 114-115.

HIUR 390 Directed Readings in Hindi-Urdu (2 or 4)

Directed readings for individual Hindi-Urdu students. May be repeated for credit once.

Prerequisite: Permission of department.

HIUR 490 Independent Reading and Research (2, 4, or 8)

Directed individual research and reading designed for advanced Hindi-Urdu students. May be taken for one or more semesters.

Prerequisite: Permission of department.

Italian Language and Literature**IT 114-115 Introduction to Italian (4 each)**

A two-semester sequence of the fundamentals of Italian. A beginning course for students who have had no more than one year of secondary-school level preparation. IT 114 must be taken first.

IT 214-215 Second Year Italian (4 each)

A two-semester sequence continuing the work of IT 114-115 with the addition of cultural and literary readings. IT 214 must be taken first.

Prerequisite: IT 114-115.

IT 390 Directed Readings in Italian (2 or 4)

Directed individual readings in Italian. May be repeated for credit once.

Prerequisite: Permission of instructor.

Japanese Language**JPN 114-115 Introduction to Japanese (4 each)**

A two-semester sequence in the fundamentals of Japanese. A beginning course, intended for students who have had no more than one year of secondary-school preparation. JPN 114 must be taken first.

JPN 214-215 Second Year Japanese (4 each)

A two-semester sequence continuing the work of JPN 114-115, with the addition of cultural and literary readings. JPN 214 must be taken first.

Prerequisite: JPN 114-115.

Russian Language and Literature**RUS 111-112 Introduction to Oral Russian (1 each)**

A two-semester sequence of practice in listening to and speaking Russian, including supervised laboratory work and drill sessions. To be taken only in conjunction with RUS 114-115. Required of majors. RUS 111 must be taken first.

RUS 114-115 Introduction to Russian (4 each)

A two-semester sequence in the fundamentals of Russian. A beginning course for students who have had no more than one year of secondary-school preparation. RUS 114 must be taken first.

RUS 211-212 Second Year Oral Russian (1 each)

A two-semester sequence continuing the work of RUS 111-112. To be taken only in conjunction with RUS 214-215. Required of majors. RUS 211 must be taken first.

Prerequisite: RUS 111-112.

RUS 214-215 Second Year Russian (4 each)

A two-semester sequence continuing the work of RUS 114-115, with the addition of cultural and literary readings. RUS 214 must be taken first. Prerequisite: RUS 114-115.

RUS 216 Basic Russian Conversation (2)

The course is designed to develop the student's ability to organize and express ideas in Russian with a minimum of inhibition. Prerequisite: RUS 115.

RUS 290 Directed Readings in Russian (2 or 4)

A reading course for nonmajors interested in research in a particular area. Approximately 50 hours of reading per credit; one conference weekly with the instructor. May be repeated for credit once. Prerequisite: RUS 215.

RUS 314 Russian Grammar Review (2)

Review of Russian grammar. Offered fall semester. Prerequisite: RUS 215.

RUS 316 Intermediate Russian Conversation (2)

Provides a transition between the carefully structured drills of other intermediate courses and free manipulation of the spoken language. Offered winter semester. Prerequisite: RUS 215.

RUS 318 Russian Composition (2)

Practice in written composition. Techniques of textual analysis and exposition are introduced. Offered winter semester. Prerequisite: RUS 314.

RUS 320 Applied Linguistics of Russian (4)

Treats the essential linguistic principles which impact on foreign language learning: phonological, morphological, and syntactic interference; sound/spelling correspondences; and language learning, error analysis, and remediation. Language-specific drills and exercises included. Identical with ALS 320. Offered in alternate years. Prerequisite: RUS 215.

RUS 355 Translating Russian (4)

Translation from Russian to English of a wide variety of materials, ranging from commercial and technical to literary. Individual students may choose the areas they wish to emphasize. Study of both languages will facilitate the conversion of Russian into accurate, idiomatic English. Offered winter semester. Prerequisite: RUS 314.

RUS 370 Introduction to Russian Literature (4)

A sampling of critical approaches to the study of some masterpieces of Russian literature. Conducted in Russian. Offered fall semester. Prerequisite: RUS 215.

RUS 380 Survey of Russian Literature (4)

A survey of the highlights of Russian literature. Intended to supplement the work of RUS 370. Conducted in Russian. Offered winter semester. Prerequisite: RUS 370.

RUS 400 Special Topics in Language (4)

Special problems or topics selected by the instructor. May be repeated for credit. Prerequisite: RUS 318, or 370 and 380.

RUS 408 Advanced Oral Practice in Russian (2)

Practice in speaking at an advanced level, which may include style and delivery appropriate to formal and informal speaking situations. Course work may include oral presentations, self-recording, and critique.
Prerequisite: RUS 316.

RUS 416 The 19th Century: First Half (4)

A study of works in all genres by leading Russian authors of the period. Conducted in Russian.
Prerequisite: RUS 370 and 380.

RUS 417 The 19th Century: Second Half (4)

A study of works in all genres by leading Russian authors of the period. Conducted in Russian.
Prerequisite: RUS 370 and 380.

RUS 418 The 20th Century (4)

A study of works in all genres by leading Russian authors of the period. Conducted in Russian.
Prerequisite: RUS 370 and 380.

RUS 455 Translation into Russian (4)

Translation from English into Russian of a wide variety of materials ranging from commercial and technical to literary. Individual students may choose to emphasize area of interest. Offered fall semester.
Prerequisite: RUS 314, 318, and 355.

RUS 480 Seminar in Russian Literature (4)

Study of individual authors, selected themes, or critical problems.
Prerequisite: Permission of department.

RUS 490 Independent Reading and Research (2, 4, or 8)

Directed individual research and reading designed for advanced Russian majors. May be taken for one or more semesters.
Prerequisite: Permission of department.

RUS 491 Independent Translation Project (4 or 8)

Directed annotated translation from Russian into English of a major work in the student's field.
Prerequisite: RUS 355 and 455 and permission of department.

Spanish Language and Literature**SPN 105-106 Spanish for Doctors and Nurses (2 each)**

A two-semester sequence designed to prepare students in the medical field to communicate more effectively with Spanish-speaking patients. Basic rules of the language, practical phrases, and technical vocabulary are taught. SPN 105 must be taken first.

SPN 111-112 Introduction to Oral Spanish (1 each)

A two-semester sequence of practice in listening to and speaking Spanish, including supervised laboratory work and drill sessions. To be taken only in conjunction with SPN 114-115. Required of majors. SPN 111 must be taken first.

SPN 114-115 Introduction to Spanish (4 each)

A two-semester sequence in the fundamentals of Spanish. A beginning course for students who have had no more than one year of secondary-school preparation. SPN 114 must be taken first.

SPN 211-212 Second Year Oral Spanish (1 each)

A two-semester sequence continuing the work in SPN 111-112. To be

taken only in conjunction with SPN 214-215. Required of majors. SPN 211 must be taken first.

Prerequisite: SPN 111-112.

SPN 214-215 Second Year Spanish (4 each)

A two-semester sequence continuing the work of SPN 114-115, with the addition of cultural and literary readings. SPN 214 must be taken first.

Prerequisite: SPN 114-115.

SPN 216 Basic Spanish Conversation (2)

The course is designed to develop the student's ability to organize and express ideas in Spanish with a minimum of inhibition.

Prerequisite: SPN 115.

SPN 290 Directed Readings in Spanish (2 or 4)

A reading course for nonmajors interested in research in a particular area. Approximately 50 hours of reading per credit; one conference weekly with the instructor. May be repeated for credit once.

Prerequisite: SPN 215.

SPN 300 Composition and Conversation (4)

Part of overseas study program only. Third- or fourth-year level, depending on student preparation.

Prerequisite: SPN 215.

SPN 313 Spanish Phonetics (2)

Group and individualized practice in the sound system of Spanish, with specific reference to interference from English. Both written and laboratory work required.

Prerequisite: SPN 215.

SPN 314 Spanish Grammar Review (2)

Review of Spanish grammar. Offered fall semester.

Prerequisite: SPN 215.

SPN 316 Intermediate Spanish Conversation (2)

Provides a transition between the carefully structured drills of other intermediate courses and free manipulation of the spoken language. Offered winter semester.

Prerequisite: SPN 215.

SPN 318 Spanish Composition (2)

Practice in written composition. Techniques of textual analysis and exposition are introduced. Offered winter semester.

Prerequisite: SPN 314.

SPN 320 Applied Linguistics of Spanish (4)

Treats the essential linguistic principles which impact on foreign language learning: phonological, morphological, and syntactic interference; sound/spelling correspondences; and language learning, error analysis, and remediation. Language-specific drills and exercises included. Identical with ALS 320. Offered in alternate years.

Prerequisite: SPN 215.

SPN 350 Spanish Theatre (2 or 4)

The study and presentation of Spanish plays with intensive drill in pronunciation and intonation.

Prerequisite: Permission of instructor.

SPN 351 Spanish Civilization (4)

Historical approach to Spanish culture and civilization, with particular

emphasis given to geography, social structure, philosophical thought, music, art, and architecture. Part of overseas study program only.
Prerequisite: Sophomore standing.

SPN 355 Translating Spanish (4)

Translation from Spanish into English of a wide variety of materials, ranging from commercial and technical to literary. Individual students may choose the areas they wish to emphasize. Study of both languages will facilitate the conversion of Spanish into accurate, idiomatic English. Offered winter semester.
Prerequisite: SPN 314.

SPN 370 Introduction to Spanish Literature (4)

A sampling of critical approaches to the study of some masterpieces of Spanish literature. Conducted in Spanish. Offered fall semester.
Prerequisite: SPN 215.

SPN 380 Survey of Spanish Literature (4)

A survey of the highlights of Spanish literature. Intended to supplement the work of SPN 370. Conducted in Spanish. Offered winter semester.
Prerequisite: SPN 370.

SPN 408 Advanced Oral Practice in Spanish (2)

Practice in speaking at an advanced level, which may include style and delivery appropriate to formal and informal speaking situations. Course work may include oral presentations, self-recording, and critique.
Prerequisite: SPN 316.

SPN 411 The Golden Age (4)

Masterpieces of Spanish literature of the period.
Prerequisite: SPN 370 and 380.

SPN 412 The Quixote (4)

Detailed study of Cervantes' masterpiece.
Prerequisite: SPN 370 and 380.

SPN 417 The 19th Century (4)

A study of works in all genres by leading Spanish authors of the period. Conducted in Spanish.
Prerequisite: SPN 370 and 380.

SPN 418 The 20th Century (4)

A study of works in all genres by leading Spanish authors of the period. Conducted in Spanish.
Prerequisite: SPN 370 and 380.

SPN 421 Spanish American Literature (4)

Masterworks of 20th-century Spanish-American literature.
Prerequisite: SPN 370 and 380.

SPN 455 Translation into Spanish (4)

Translation from English into Spanish of a wide variety of materials ranging from commercial and technical to literary. Individual students may choose to emphasize areas of interest. Offered fall semester.
Prerequisite: SPN 314, 318, and 355.

SPN 480 Seminar in Spanish Literature (4)

Study of individual authors, selected themes, or critical problems.
Prerequisite: Permission of department.

SPN 490 Independent Reading and Research (2, 4, or 8)

Directed individual research and reading designed for advanced Spanish majors. May be taken for one or more semesters.

Prerequisite: Permission of department.

SPN 491 Independent Translation Project (4 or 8)

Directed annotated translation from Spanish into English of a major work in the student's field.

Prerequisite: SPN 355 and 455 and permission of department.

Modern Literatures in Translation**LIT 170 Introduction to Comparative Literature (4)**

Introduction to the purposes and methods of comparative literature. Systematic study of literary masterpieces according to form, content, and historical period.

LIT 251 Topics in Continental European Film (4)

A study of film as a mirror of European culture and civilization. Topics to be selected by the instructor.

LIT 281 Continental European Literature in Translation I (4)

A study of the main literary currents as reflected in European masterpieces up to 1850. All works read in English translations.

LIT 282 Continental European Literature in Translation II (4)

A study of the main literary currents as reflected in European masterpieces from 1850 to the present. All works read in English translations.

LIT 319 "Third World" Literature of European Expression (4)

A survey of literature in a European language (in translation) of a non-European area from colonial to modern times. Areas treated, e.g. Francophone Africa, French Canada, Brazil, Hispanic America, Anglophone India, will vary on a regular basis. May be repeated once for credit with permission of the department. See also FRH 419 and SPN 421.

LIT 341 Topics in World Drama (4)

Studies in world drama in English translation. Topics to be selected by the instructor. May be repeated for credit with permission of the department. Identical with THA 341.

LIT 342 Continental European Drama I (4)

A study of dramatic literature from the Middle Ages through the 18th century. Topics covered include morality play, Renaissance drama of Italy, Spanish baroque theatre, French classical drama, the theatre of the Enlightenment, and Romantic drama. Identical with THA 342.

LIT 343 Continental European Drama II (4)

A study of dramatic literature in the 19th and 20th centuries. Topics covered include drama in the periods of Realism, Naturalism, Symbolism, and Expressionism, as well as recent trends in dramatic literature from Existentialism and the Theatre of the Absurd to the present. Identical with THA 343.

LIT 346 Non-Western Theatre and Dramatic Literature (4)

A study of classical and modern theatre and dramatic literature from one or more areas: China, India, Japan. Identical with THA 346.

LIT 385 Topics in World Literature (4)

A theme of humanistic interest as it has been treated in different literary forms throughout the world and throughout the ages.

LIT 480 Seminar in Comparative Literature (4)

Analysis of theories of comparative literature; application of theory to specific literary problems.

Prerequisite: Permission of instructor.

Modern Language**ML 191-192 Tutorial in Foreign Language (4 each)**

Instruction in the elements of a spoken or written foreign language such as Arabic, Bengali, Czech, Sanskrit, Catalan, etc. for which no regular course sequence exists here. May be repeated for credit in a different language each time.

Prerequisite: Permission of instructor.

ML 211 Diction for Singers, First Semester (4)

A basic course to instruct voice students in the techniques of pronouncing foreign languages. Extensive work with the International Phonetic Alphabet, tapes, and native speakers. Italian and Latin will be stressed.

ML 212 Diction for Singers, Second Semester (4)

A continuation of ML 211 with special emphasis on German and French. Extensive work with transcription techniques, tapes, and native speakers.

Prerequisite: ML 211.

ML 290 Topics Related to Foreign Language Study (2 or 4)

Topics will be explored in areas not normally a part of regular offerings in language or literature.

Prerequisite: Permission of instructor.

ML 291-292 Intermediate Tutorial in Foreign Language (4 each)

Intermediate work in a language and literature not normally taught at Oakland University. May be repeated for credit.

Prerequisite: Permission of instructor.

ML 391-392 Advanced Tutorial in Foreign Language (4 each)

Advanced work in a language and literature not normally taught at Oakland University. May be repeated for credit.

ML 497 Apprentice College Teaching (2 or 4)

Supervised participation in the teaching of an undergraduate course in language or literature, together with discussion of teaching objectives and methods. Does not carry credit toward departmental major.

Prerequisite: Permission of department.

DEPARTMENT OF MUSIC

CHAIRPERSON: Raynold Allvin

ASSOCIATE PROFESSORS: Raynold Allvin, David Daniels, David DiChiera, Robert Facko, Lyle Nordstrom

ASSISTANT PROFESSORS: James Dawson, Robert K. Gray, Stanley Hollingsworth, Flavio Varani

SPECIAL INSTRUCTORS: John Douras, Alice Engram, Marvin Holladay

LECTURERS: Joyce Adelson, Janice Albright, Joan Berndt, Ronald English, Norman Fickett, Richard Jaissle, Arlene Koenig, Beverly Labuta, Nancy LaValley, Harold McKinney, Samuel Sanders, Peter Wenger, Herbert Williams

APPLIED MUSIC INSTRUCTORS: Joyce Adelson (piano), Janice Albright (voice), James Allen (jazz drums), Donald Baker (oboe), Mary Bartlett (harp), Joan Berndt (woodwinds), Steven Carryer (jazz guitar), Douglas Cornelsen (clarinet), Penny Crawford (harpsichord), James Dawson (saxophone), Ronald English (jazz guitar), Roy Ferguson (harpsichord), Norman Fickett (percussion), Derek Francis (violin-violin), Robert Gladstone (string bass), Constance Grubaugh (voice), Richard Jaissle (classical guitar), Lyell Lindsey (bassoon), Kent McDonald (piano-organ), Harold McKinney (jazz piano), Ervin Monroe (flute), Phillip Mooney (voice), Lyle Nordstrom (recorder), Edward Pickens (jazz string bass), Richard Piippo (cello), Samuel Sanders (jazz saxophone), Joseph Skrzynski (trombone-tuba), Enid Sutherland (viola da gamba), James Underwood (trumpet), Eugene Wade (French horn), Barbara Williams (voice), Herbert Williams (jazz trumpet)

The Department of Music offers major programs leading to a Bachelor of Arts or Bachelor of Science, a Bachelor of Science with a major in music education, and a Master of Music.

The music curriculum is undergoing revision, and significant changes will be in effect by fall, 1977. Therefore, it is necessary to read the *Music Handbook* (available from the music office), and to consult with a departmental adviser before beginning a music degree program. In addition, new students are expected to audition during the first week of classes in order to qualify for their chosen performing medium.

The Certificate System

The Department of Music uses a certificate system which enables majors to devise their own means of study and, to considerable

extent, their own course of study. Under this system, levels of achievement are required but, with a few exceptions, courses and course sequences in the department are not. Students may work toward the levels of achievement by taking the courses offered, by independent study, or by combining the two.

To help students plan their course of study and determine their means of study, the Music Department publishes samples of the certificate examinations. Passing these certificate examinations, rather than following a particular sequence of departmental courses, is the requirement for completing a music major. The examinations are also diagnostic; if students do not achieve the required level of proficiency, the results identify areas they need to study before trying again.

Requirements for the Bachelor of Arts with a Major in Music

1. 48 credits in music distributed as follows:
 - a. 16 credits in music theory, plus theory certificate examination
 - b. MUT 411, MUS 321, and MUS 322
 - c. 16 credits in applied music (4 credits may be in MUS 395 and 4 credits may be in MUA 171, 271, 371, or 471)
 - d. Four semesters in a music ensemble
2. 24 credits, distributed between:
 - a. 12 or 16 credits in foreign language (see page 139 for specific requirements)
 - b. 8 or 12 credits in art history, theatre, or dance courses

Requirements for the Bachelor of Science with a Major in Music

A more intensive preprofessional training, including 72 credits of music and successful completion of eight certificates: Theory, Ear Training, Music History and Literature, Performance Major, Performance Minor, Keyboard Proficiency, and two elective certificates. Certificates currently available are: Advanced Theory-Composition, Advanced Music History, Instrumental Studies, Choral Studies, Church Music, Pedagogy, Jazz, Early Music, and Performance Honors. With departmental approval, students may design individualized certificates.

Requirements for the Bachelor of Science with a Major in Music Education

This is a program of study for prospective public school teachers leading to elementary and secondary teaching certification by

the state of Michigan. Sixty credits of music (plus intern teaching, education courses, and teaching minor) and successful completion of eight certificates: Theory, Ear Training, Music History and Literature, Performance Major, Performance Minor, Keyboard Proficiency, Music Education, and either Instrumental Studies or Choral Studies.

Intern teaching in music is normally offered only in the winter semester. Students should plan carefully with their department adviser in order to complete all of the certificates by the end of the fall semester in the year in which practice teaching is to be undertaken.

Requirements for the Secondary Teaching Minor in Music

The student must complete 28 credits in the Department of Music distributed as follows: 8 credits in music theory (MUT); 8 credits in applied music (MUA); four semesters (at least 4 credits) in music ensembles (MUE); a planned program of 8 credits (to be approved by a music adviser) selected from the following: MUS 149, 250, 295, 322, 350, 395, 401, 402, 441, 494, 495, 496. At least 14 of the 28 credits must be in courses numbered 300 or above.

Foreign Language Requirement

Music majors must complete a fourth semester foreign language course, or demonstrate equivalent proficiency. German is particularly recommended for those interested in music theory or music history. Italian is recommended for voice students. There are four exceptions to this requirement:

1. Students interested in a field where computer programming may be useful (such as theory/composition) may satisfy this requirement with two semesters of computer programming and two semesters of foreign language.
2. Students in music education may satisfy the requirement with one of the following:
 - a. Two semesters of a foreign language. For voice majors in music education, two semesters of singer's language diction (ML 211 and 212).
 - b. 8 credits in computer programming.
 - c. An 8-credit combination of courses in linguistics or symbolic logic.
3. For voice majors not in music education, two semesters of a foreign language (or equivalent proficiency), and two semesters of singer's foreign language diction.
4. Candidates for the B.A. with a major in music may satisfy the requirement with three semesters of foreign language if 12 credits are taken in art history, theatre, or dance. For voice majors, 8 credits should be in ML 211-212.

Major Standing

Application for major standing must be made after completing 32 college credits of music, taken at Oakland University or elsewhere. Approval for graduation and/or permission for intern teaching will be given only after a student has received major standing in the Department of Music.

COURSE OFFERINGS

ENSEMBLES

Ensembles are open to all students by audition. May be repeated for credit.

MUE 301 University Chorus (1 or 2)

Performance of the large choral masterpieces from all music periods.

MUE 302 University Community Chorus (1 or 2)

A festival-type mixed chorus for citizens of the surrounding communities who possess prior vocal experience. Performances of varied choral literature. Meets in the evening.

MUE 303 "Treble" Chorus (1 or 2)

A choral ensemble of "treble" voices performing literature of all periods including contemporary.

Prerequisite: Permission of instructor.

MUE 304 Oakland University Singers (2)

Performance of a wide range of choral chamber repertoire from Renaissance to the present.

Prerequisite: Permission of instructor.

MUE 305 Opera Chorus (1 or 2)

An ensemble which performs in conjunction with the Michigan Opera Theatre.

Prerequisite: Permission of instructor.

MUE 309 Meadow Brook Festival Chorus (1)

Performance of major choral masterpieces from all music periods under world-famous conductors at the Meadow Brook Music Festival. May be repeated for a total of 8 credits.

Prerequisite: Permission of instructor.

MUE 320 University Orchestra (1 or 2)

Orchestral performance of repertoire from the 18th, 19th, and 20th centuries. Several concerts per year, on and off campus. Accompaniments for solo concertos and university choral groups. Membership by audition.

MUE 330 Wind Ensemble (1 or 2)

An exploration of the literature written for wind ensembles of various instrumentation. Membership by audition.

MUE 340 Afram Lab Band (1 or 2)

A study of traditional and contemporary literature for large jazz ensembles within the Afro-American cultural context. Both conceptualization of the material and improvisational techniques will be explored and defined.

MUE 341 Jazz Improvisation Workshop (2)

A laboratory in performance practice designed to increase improvisational skills indigenous to jazz performance and to identify systematically and use stylistic characteristics of various subcategories of jazz.

MUE 350 Opera Workshop (1, 2, or 3)

Study and experience in various forms of musical theatre.

Prerequisite: Permission of instructor.

MUE 360 Collegium Musicum (1 or 2)

Performance of Medieval, Renaissance, and Baroque music. Present groups include the Renaissance Band, the Collegium Singers, the Renaissance Ensemble, and the Baroque Ensemble.

Prerequisite: Permission of instructor.

MUE 370 Guitar Ensemble (1 or 2)

A study of performance practice and techniques of classical guitar literature involving two or more players.

MUE 380 Chamber Music (2)

Performing ensemble of various instrumentations. A wide spectrum of appropriate music literature, Medieval through contemporary.

MUE 390 Accompaniment Practicum (1 or 2)

Practical experience in piano accompaniment of solo and/or ensembles, vocal and instrumental. May be repeated once for credit.

Prerequisite: MUA 370.

APPLIED MUSIC

The following courses each have four course number designations. Music majors are to enroll using the number which corresponds to the year in school — freshmen, 100 level; sophomores, 200 level; juniors, 300 level; seniors, 400 level.

The faculty of the Department of Music may make adjustments of course numbers at the time of the entering audition, or after the first lesson.

Beginners must use the 100-level designation regardless of year in school. Students who have previously studied, either privately or in a college or university, should consult the *Music Handbook* to determine the appropriate course number. May be repeated for credit except where indicated.

The following courses are individual lessons and involve an applied music fee (see page 17).

MUA 100, 200, 300, 400	Voice (2)
MUA 101, 201, 301, 401	Piano (2)
MUA 102, 202, 302, 402	Organ (2)
MUA 103, 203, 303, 403	Harpsichord (2)
MUA 104, 204, 304, 404	Violin (2)
MUA 105, 205, 305, 405	Viola (2)

MUA 106, 206, 306, 406	Violoncello (2)
MUA 107, 207, 307, 407	String Bass (2)
MUA 108, 208, 308, 408	Flute (2)
MUA 109, 209, 309, 409	Oboe (2)
MUA 110, 210, 310, 410	Clarinet (2)
MUA 111, 211, 311, 411	Bassoon (2)
MUA 112, 212, 312, 412	French Horn (2)
MUA 113, 213, 313, 413	Trumpet (2)
MUA 114, 214, 314, 414	Trombone (2)
MUA 115, 215, 315, 415	Tuba (2)
MUA 116, 216, 316, 416	Timpani (2)
MUA 117, 217, 317, 417	Percussion (2)
MUA 118, 218, 318, 418	Harp (2)
MUA 119, 219, 319, 419	Guitar (classical) (2)
MUA 120, 220, 320, 420	Renaissance Winds (2)
MUA 121, 221, 321, 421	Viola da Gamba (2)
MUA 122, 222, 322, 422	Lute (2)
MUA 123, 223, 323, 423	Recorder (2)
MUA 124, 224, 324, 424	Saxophone (2)
MUA 130, 230, 330, 430	Piano (jazz) (2)
MUA 131, 231, 331, 431	Guitar (jazz) (2)
MUA 132, 232, 332, 432	Trumpet (jazz) (2)
MUA 133, 233, 333, 433	Saxophone (jazz) (2)
MUA 134, 234, 334, 434	Percussion (jazz) (2)
MUA 135, 235, 335, 435	Double Bass (jazz) (2)

MUA 149, 249, 349, 449 Applied Music (2)

This course may be used to increase the number of private lessons in the student's major or minor performing medium. Must be taken in conjunction with one of the applied music courses.

MUA 150, 250, 350, 450 Performance Honors (2 or 4)

A program of intensive study on the student's major instrument. May only be taken concurrently with one of the individually-taught applied music courses.

Prerequisite: Permission of department.

The following music courses are group lessons and involve an applied music fee (see page 17).

MUA 171, 271, 371, 471 Keyboard Technique (2 each)

Designed to develop the basic keyboard facility essential to the equipment of any musician and to acquaint him/her with keyboard

literature. Music majors planning to register for this course should indicate such intention to the Department of Music at the time of their first registration in the university. May not be repeated for credit.

Prerequisite: Permission of instructor.

MUA 260 Class Voice (2)

Elementary aspects of singing, including diction, breath control, projection, and repertoire.

MUA 265 Class Recorder (2)

MUA 266 Class Viola da Gamba (2)

MUA 267 Class Lute (2)

MUA 268 Class Renaissance Winds (2)

MUA 361-362 Vocal Literature I and II (2 each)

A survey of literature for the voice with emphasis on historical style. MUA 361 covers from the Middle Ages through the 19th century, with emphasis on German song. MUA 362 continues through the 19th and 20th centuries, emphasizing French, British, and American.

Prerequisite: ML 212 (may be taken concurrently) and permission of instructor.

MUA 363 American Musical Theatre (2)

A practical approach to the problems and performance practices of American musical theatre beginning with a historical survey and culminating in public performances of selections from musical comedy.

Prerequisite: Permission of instructor.

MUA 370 Accompanying (1 or 2)

Designed to help the pianist acquire a knowledge of the basic skills required in the ensemble situation. Representative vocal and instrumental compositions are studied; emphasis is placed on rehearsal techniques and performance. May apply toward Performance Certificate.

MUA 375 Keyboard Ensemble Technique (2)

Class instruction in performance and repertory of multiple keyboard literature. May apply toward Performance Certificate.

Prerequisite: Permission of instructor.

MUA 376, 377, 476, 477 Jazz Keyboard Practices (2)

Development of basic jazz keyboard techniques and skill including jazz chord and rhythm reading, melodic development, and voice leading. May not be repeated for credit.

Prerequisite: Keyboard proficiency demonstrated by audition.

MUA 390 Beginning String Class (2)

Class instruction at the beginning level for all string instruments.

MUA 391 Beginning Woodwinds Class (2)

Class instruction at the beginning level for all woodwind instruments.

MUA 392 Beginning Brass Instrument Class (2)

Class instruction at the beginning level for all brass and percussion instruments.

MUA 395 Chamber Music Techniques (2)

Group instruction and coaching of performance of chamber music. May apply toward Performance Certificate.

Prerequisite: Permission of instructor.

THEORY AND COMPOSITION

MUT 111 Beginning Musicianship (4)

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.

MUT 205 Ear Training Certificate Preparation (1)

A required course for all full-time music majors who have not satisfied the Ear Training Certificate. Course includes a series of ear training tests. See *Music Handbook*. May be repeated for a maximum of 4 credits. Prerequisite: MUT 210.

MUT 210 Introduction to the Materials of Music (5)

The development of perceptive listening techniques and an awareness of musical styles. Solution of musical problems in written work and laboratory sessions. Beginning ear training and the rudiments of tonal harmony.

MUT 211 Harmony (4)

The harmonic practice of the 18th and early 19th centuries. Composition and analysis in this style. Prerequisite: MUT 210.

MUT 310 Advanced Harmony (4)

Harmonic practice of the late 19th and early 20th centuries; composition and analysis in this style. Prerequisite: MUT 211.

MUT 311 Techniques of Musical Analysis (4)

Techniques of analyzing works of various styles and periods, with emphasis on tonal music. Prerequisite: MUT 211.

MUT 312 Tonal Counterpoint (4)

The contrapuntal style of the 18th century; composition and analysis. Prerequisite: MUT 211.

MUT 314 Jazz Theory (4)

Techniques of reading and writing music notation-pitch and rhythmic organization in the jazz idiom. Basic compositional and arranging procedures are studied. Prerequisite: MUT 211.

MUT 315 Composition (4)

Private lessons in composition and composition laboratory. Studies, exercises, and projects concerning creativity and craft in the composing of music. For freshmen and sophomores. May be repeated for credit. Prerequisite: Permission of instructor.

MUT 410 20th Century Techniques (4)

Compositional practices in the 20th century; composition and analysis. Prerequisite: MUT 211.

MUT 411 Orchestration (4)

A study of the orchestral instruments and their use in various combinations, including full orchestra and band. MUS 380, 381, 382, 404, and MUT 410 are related courses. Prerequisite: MUT 211.

MUT 412 Modal Counterpoint (4)

The contrapuntal style of the 16th century. Analysis and composition in

this style. Offered in alternate years.

Prerequisite: MUT 211.

MUT 414 Jazz Composition and Arranging (4)

Composition and arranging technique for jazz ensembles. Includes study of jazz notational systems, idiomatic jazz practice, standard jazz forms, and orchestration for instruments and voice as used in jazz ensembles.

Prerequisite: MUT 314.

MUT 415 Advanced Theory/Composition (4)

Private lessons in composition and composition laboratory; studies, exercises, and projects concerning creativity and craft in composing music. For juniors and seniors. May be repeated for credit.

Prerequisite: Permission of instructor.

MUSIC HISTORY, LITERATURE, AND APPRECIATION

MUS 100 Introduction to Music (4)

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. An elective course for nonmusic majors.

MUS 250 World Music Survey (4)

An introduction to selected music cultures aimed at acquainting the student with a variety of musical functions and styles at various places and times. Emphasis will be on demonstrations by means of live performances by visiting lecturers and guest artists. May be taken twice for a total of 8 credits.

MUS 251 African through Afro-Caribbean Music (4)

A study of African music and its transmutation into Afro-Caribbean music. The concentration in African traditions will be predominantly those of the West African cultures directly related to the transplantation into the Western Hemisphere through slavery.

MUS 252 Afro-American Music (4)

A study of the evolution and development of the music culture of Afro-American people in the United States. An investigation into the origins and cultural roots of music of Afro-Americans and other American music.

MUS 300 Advanced Music Appreciation (4)

Further development of the techniques of listening skills to great music; methods of criticism in areas of performance and of music literature.

Prerequisite: MUS 100 or a music theory course.

MUS 321 Music History and Literature to 1750 (4)

History and literature of music through the Baroque period. Designed primarily for music majors. Offered fall semester.

Prerequisite: MUT 210.

MUS 322 Music History and Literature since 1750 (4)

History and literature of music from 1750 to the present. Offered winter semester. Designed primarily for music majors.

Prerequisite: MUT 210.

MUS 331 Opera and Music Drama (4)

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

Prerequisite: MUT 210.

MUS 340 Piano Master Class (2)

Class study of piano literature for stylistic characteristics and technical considerations for proper performance.
Prerequisite: Permission of instructor.

MUS 345 20th Century Music (4)

A study of significant styles and composers from Debussy to the present. Suggested as an elective for nonmusic majors.
Prerequisite: MUT 210.

MUS 346 The Music of Black Americans (4)

Contributions of the black race to the development of music in the United States. Investigation of the elements of African musical style in Afro-American music. What is black musical idiom? Folksong — secular and sacred. Formal composition. Popular forms of music. Recommended as an elective for nonmusic majors as well as music majors.

MUS 347 History of Jazz (4)

A survey and historical study of the development of jazz, including significant periods and trends, stylistic analysis, and aesthetic foundations.

MUS 350 World Music Survey II (4)

A continuation of MUS 250. A study of selected cultures designed to find relationships between musical styles and functions in the society. Emphasis will be on demonstrations by means of live performances of visiting lecturers and guest artists.

MUS 421 Advanced Studies in Music History and Literature to 1750 (4)

Advanced study of history and literature through the Baroque period of music. The aesthetic values of music of each period will be studied to determine interrelated social and technical concepts.
Prerequisite: MUT 210.

MUS 423 Performance Practices of Music before 1600 (4)

An investigation of source materials and basic performance practice problems of music from the Middle Ages and the Renaissance. The course will deal with cantus firmus and related compositional techniques, improvisation, ornamentation, dances and dance forms, musica ficta, musical symbolism, and editorial problems. A different stylistic period will be covered each semester. The course may be repeated a total of three times for credit with permission of instructor.
Prerequisite: Permission of instructor.

MUS 490 Introduction to Music Bibliography (4)

A course designed primarily for the music history and literature major. A rigorous and systematic introduction to basic research materials and methodology in musicology.
Prerequisite: MUS 321, 322, and a 400-level theory course.

MUS 491 Directed Research in Music History (4)

A program of directed individual reading and research designed for advanced music history majors.
Prerequisite: MUS 321, 322, and a 400-level theory course.

MUSIC EDUCATION**MUS 149 Music as an Art and as an Elementary School Subject (5)**

An introduction to the techniques of listening to music and of teaching

music in the elementary school. Begins at a level for the student lacking previous musical experience.

MUS 230 Studies in Choral Music (2 or 3)

Seminar, independent study, and performance of choral music including vocal production techniques, performance practices, and historical foundations. Offered summer session.

MUS 231 Studies in Orchestral Music (2 or 3)

Seminars, independent study, and performance of orchestral music, including study of performance practices, theory, history, and chamber music of various periods. Offered summer session.

MUS 232 Studies in Piano Performance and Literature (2 or 3)

Master class in performance of selected piano works including historical performance practices, and technical considerations. Offered summer session.

MUS 233 Studies in Musical Expression through Movement (2 or 3)

Seminars in music theory and composition and in various forms of movement which express sound. Eurythmics and chironomy are studied as well as standard dance forms. Offered summer session.

MUS 245 Field Studies in Music Teaching and Learning (4)

The pedagogical foundations of teaching and learning music via lectures, discussions, simulations, games, and observations. Application of pedagogical theory to develop learning/teaching strategies appropriate to group and individual music instruction.

MUS 380 Instrumental Methods (Strings) (2)

Designed to provide the teacher with basic facilities and pedagogical techniques for the string family.

MUS 381 Instrumental Methods (Woodwinds) (2)

Designed to provide the teacher with basic facilities and pedagogical techniques for the woodwind family.

MUS 382 Instrumental Methods (Brass and Percussion) (2)

Designed to provide the teacher with basic facilities and pedagogical techniques for the brasses and percussion.

MUS 395 Conducting (4)

The basic techniques of conducting, including both instrumental and choral. Participants will elect to emphasize either instrumental or choral technique and will be assigned at least one hour per week as assistants in university performing groups or public school ensembles.

Prerequisite: MUT 210 and a 300-level theory course.

MUS 401 Teaching Music in Elementary Schools (4)

The organization and content of the general vocal music class in the kindergarten and the first six grades of elementary school. The development of musicality in the child through singing, playing instruments, listening to music, and participating in rhythmic activities. Special emphasis on teaching music reading and ear training to young children.

Prerequisite: MUT 210 and a 300-level theory course.

MUS 402 Teaching Music in Secondary Schools (2)

The content and organization of the complete secondary school curriculum and the role music assumes in it, including place and function of

performing groups, general music, music appreciation, music theory, and musical production. Coordination of the music program with other subject areas such as English, social studies, and drama. Selection of appropriate repertoire and development of the school music library.
Prerequisite: MUT 210 and a 300-level theory course.

MUS 403 Conducting Choral Music in Secondary Schools (4)

The organization and conducting of choral music in junior and senior high schools. The development of the adolescent and young adult voice. Problems of selection of repertoire. The selected choir, mixed chorus, glee club, madrigal group, and other small vocal ensembles. Historical style in choral singing, choral festivals, and contests.
Prerequisite: MUT 210 and a 300-level theory course.

MUS 404 Conducting Instrumental Music in Secondary Schools (2)

The organization and conducting of instrumental music in junior and senior high schools. Repertoire, materials, and techniques of secondary school orchestras, bands, stage bands, and ensembles. Pedagogical principles appropriate to individual or group instruction.
Prerequisite: MUT 210 and a 300-level theory course.

MUS 441-442 Music Pedagogy (4 each)

Principles of music instruction for the studio teacher. The first semester will be devoted to a survey of the field and to observation. The second semester will be devoted to supervised teaching.

MUS 445 Music Criticism (4)

A study of the techniques of evaluating musical performances and making appropriate verbal and written comments. Includes techniques of writing program notes.

MUS 480 Advanced Studies in Choral Conducting and Literature (1, 2, or 3)

A program of independent and seminar work in advanced choral conducting. Emphasis is placed on interpretation of choral literature through research. Opportunities are provided for conducting experience in choral lab groups. Offered summer session.
Prerequisite: Choral conducting experience and one class in music history.

MUS 481 Advanced Studies in Orchestral Conducting and Literature (1, 2, or 3)

A program of independent and seminar work in advanced orchestral conducting. Emphasis is placed on interpretation of orchestral literature through research. Opportunities are provided for conducting experience in a laboratory orchestra. Offered summer session.
Prerequisite: Conducting experience, music history.

MUS 494 Directed Research in Music Education (2 or 4)

A program of directed individual reading and research in technology of, innovation in, and psychology of music instruction.
Prerequisite: Two courses from the series MUS 401, 402, 403, and 404.

MUS 496 Innovations in Music Instruction (2, 3, or 4)

Innovative patterns of music instruction. Materials, methods, and curricula appropriate to changing demands made on the public school music teachers. Offered summer session.
Prerequisite: Permission of instructor.

MUS 499 Special Topics in Music (1, 2, 3, or 4)

Current topics and issues in music performance and literature.

Prerequisite: Permission of instructor.

INDEPENDENT STUDY**MUS 295 Independent Study (2, 4, 6, 8, 10, or 12)**

Normally for freshmen and sophomores.

Prerequisite: Permission of department.

MUS 296 Problems in Applied Music (2)

Independent study in technique and literature of the student's major performing area.

Prerequisite: Permission of department chairperson.

MUS 495 Independent Study (2, 4, 6, 8, 10, or 12)

Normally for juniors and seniors.

Prerequisite: Permission of department.

MUS 497 Apprentice College Teaching (2)

Supervises participation in the teaching of an undergraduate course in music, together with discussion of teaching methods and objectives.

Prerequisite: Permission of department.

**DEPARTMENT OF
PHILOSOPHY**

CHAIRPERSON: Richard J. Burke**PROFESSOR:** Richard J. Burke**ASSOCIATE PROFESSOR:** Richard W. Brooks**ASSISTANT PROFESSORS:** Jack Cumbee, Robert J. Wargo**INSTRUCTORS:** J. Clark Heston, Christopher R. Holliday**ADJUNCT PROFESSOR AND LECTURER:** Charles E. Morton

Philosophy is one of the oldest, often one of the least understood of the liberal arts. The philosopher is interested in all aspects of human life, searching for the greatest possible clarity concerning the most fundamental questions. There is no one kind of philosophy; there are many kinds, each with its own value. Philosophy has always served two functions: the first is speculative, the attempt to formulate illuminating generalizations about science, art, religion, nature, society, and any other important topic; the second is critical, the unsparing examination of its own generalizations and those of others to uncover unfounded assumptions, faulty thinking, hidden implications, and inconsistencies. The study of philosophy is designed to encourage a spirit of curiosity, a sensitivity toward the uses of words, a sense of objective assessment toward oneself as well as others. Competence in philosophy is solid training for advanced study in such fields as law, government, and public administration, as well as the ministry and teaching.

The Department of Philosophy offers programs of study leading to the degree of Bachelor of Arts with a major in philosophy, modified major, major in philosophy with concentration in area studies, major in philosophy with concentration in linguistics, and major in philosophy with concentration in religious studies.

**Requirements for a Liberal Arts
Degree with a Major in Philosophy**

The regular major in philosophy must complete 40 credits in philosophy, including the following:

1. One semester of logic (PHL 102, 170, or 370).
2. One semester of ethics (PHL 103, 317, or 318).
3. Two semesters in history of Western philosophy (PHL 204-6; PHL 307-8; PHL 204 and 206 are recommended).

4. One semester of Eastern philosophy (PHL 250, 351, 352, or 353).
5. At least 20 credits in courses numbered 300 or above.

A student may substitute other courses for any of the above with the permission of the department chairperson. Students planning to apply for graduate work in philosophy should discuss with the faculty which courses they should take in addition to the above.

Modified Majors

1. Requirements for the major in philosophy with a concentration in East Asian studies or South Asian studies: 24 credits in philosophy, including PHL 351 or PHL 353 (for East Asian studies) or PHL 352 (for South Asian studies). For requirements in area studies, see page 188 and 189.
2. Requirements for the major in philosophy with a concentration in linguistics: 24 credits in philosophy, including PHL 370 and PHL 475. For requirements in linguistics, see page 109.
3. Requirements for the major in philosophy with a concentration in religious studies: 24 credits in philosophy, including PHL 225. For requirements in religious studies, see page 204.

Departmental Honors

Students who think they might qualify for departmental honors should submit an example of their philosophical writing to the chairperson early in the semester before they expect to graduate. This should normally be a substantial paper written in PHL 395, but two or three papers written in other courses will be acceptable. If this work is judged to be of sufficiently high quality, it will be read by the rest of the department, and a conference to discuss it with the student will be arranged. Departmental honors are thus based upon written and oral achievement in philosophy, as well as general performance in courses.

Departmental Course Prerequisites

In general, 100-level courses presuppose no prior college experience, 200-level courses presuppose some, 300-level courses require some prior philosophy courses or related courses in other fields, and 400-level courses are designed primarily for philosophy majors. However, strict prerequisites have been kept to a minimum to encourage nonmajors to take philosophy courses as electives.

COURSE OFFERINGS

PHL 100 Topics in Philosophy (4)

A study of one philosophic topic or problem, to be announced in the schedule of classes for each semester.

PHL 101 Introduction to Philosophical Thinking (4)

Fundamental skills and questions in philosophy, including: how to read and write philosophy; what an argument is, and how to assess one; practice in clarifying concepts, such as absolute and relative, subjective and objective; similarities or differences between philosophy and other activities, such as science, religion, psychology, debating, and bull sessions. Offered every semester.

PHL 102 Introduction to Logic (4)

Study of the relationship between conclusions and statements given in support of them; emphasizes inductive logic. Topics may include analysis of ordinary arguments (such as might occur in a newspaper), hypothesis formulation and testing, elementary probability and statistical concepts, argument by analogy, and informal fallacies. Offered every year.

PHL 103 Introduction to Ethics (4)

Systematic reading and discussion of major ethical analyses of the distinction between right and wrong, good and evil. Appeals to custom, theology, happiness, reason, and human nature will be examined as offering viable criteria for judgments on contemporary issues of moral concern. Offered every year.

PHL 170 Introduction to Formal Logic (4)

Formal or symbolic logic is a study of what makes deductive arguments valid, employing symbols to represent sentences, words, phrases, etc. in order to reveal the formal structure of the arguments. Offered every year.

PHL 204, 205, 206 History of Western Philosophy (4 each)

The development of systematic philosophical thought in the Western world from its beginnings in the Mediterranean region to 1800 A.D., with extensive readings in the works of major philosophers. The three courses are: PHL 204, Classical Greek Philosophy (beginnings to Aristotle), PHL 205, Hellenistic and Medieval Philosophy (Stoics to the Renaissance); and PHL 206, Early Modern Philosophy (Galileo to Kant). Each course may be taken separately, although together they present a continuous development. Offered in sequence, so that each course is offered every other year.

PHL 211 Nonviolence (4)

Study of nonviolence as a value fundamental to a way of life. Implications for life style, interpersonal relations, social practices, and institutions, including politics and economics.

Prerequisite: Permission of instructor.

PHL 221 Theories of Justice, Power, and Freedom (4)

The meanings of 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. Offered every other year.

PHL 225 Philosophy of Religion (4)

Examination of arguments for and against the existence of God, the nature of religious language, and the relations between religion and philosophy. Offered every other year. Identical with REL 225.

PHL 250 Philosophies and Religions of Asia (4)

A study of the major religions of India, China, and Japan with emphasis on their philosophical significance. The course will cover Hinduism, Jainism, Confucianism, Taoism, and Buddhism (with special reference to

Ch'an or Zen), and will deal with both the ancient traditions and some modern developments. Offered every year. Identical with REL 250.

PHL 260 American Philosophy (4)

An historical survey of American philosophy, from its beginnings in New England puritanism to the present day. Emphasis on Peirce, James, and Dewey. Offered every other year.

PHL 307 European Philosophy since Kant (4)

Among the major philosophers included are Hegel, Marx, Kierkegaard, Nietzsche, and Sartre. Several types of Marxism and existentialism will be distinguished, and their influence in this country will be discussed. Offered every two years.

Prerequisite: One philosophy course.

PHL 308 Analytic Philosophy since Kant (4)

A study of 19th- and 20th-century philosophy in the U.S. and Britain. The course will trace the history that has led Americans and Britons to look at philosophy in a new scientific way and it will present some unsolved contemporary problems.

Prerequisite: One philosophy course. PHL 206 recommended.

PHL 310 Philosophy of Rhetoric (4)

The problem of "objectivity," philosophical justifications for distinction between persuasion and proof, between propaganda and information, etc., and the consequences of denying such a distinction. Readings will include Plato's *Gorgias*, Aristotle's *Rhetoric*, and recent documents on reasoning and communication. Offered every other year. Identical with SCN 310.

Prerequisite: One philosophy course, or SCN 201 or 301.

PHL 312 Aesthetics (4)

Systematic examination of the nature of aesthetic experience and aesthetic judgment in the appreciation of nature and art. Critical analysis of major theories, of the creation and structure of works of art, the psychology of aesthetic perception, and the logic and semantics of aesthetic judgment. Offered every other year.

Prerequisite: One philosophy course, or a course in art, music, or literature.

PHL 317 Recent Theories of Ethics (4)

Theories of ethics and meta-ethics of the 20th century, with emphasis on the analysis of ethical statements. Typical problems considered include the possibility of supporting ethical claims; the place of reason, emotion, and persuasion in ethics; and ethical relativism. Offered every other year. PHL 103 is strongly recommended as preparation.

PHL 318 Ethics and the Health Sciences (4)

Examination of central ethical issues in modern health care and research. Included are the distribution and allocation of health resources, the right to life and death, human experimentation, "informed consent," eugenics, and the ethics of behavioral control. Offered every year.

Recommended: PHL 103.

PHL 319 Philosophy of Law (4)

A study of the nature of law and legal obligation, with emphasis upon the relation of law, coercion, and morality. Attention will also be given to such issues as the nature of legal reasoning, the legal enforcement of morality, the justifiability of civil disobedience and conscientious refusal, and the

justification of punishment. Offered every year. PHL 103 or PS 241 recommended as preparation.

PHL 329 Philosophy of Science (4)

A study of the philosophical problems arising from critical reflection on the sciences. Typical topics: the structure of scientific explanation, the nature of scientific laws and theories, causality, and confirmation. Offered every other year.

Prerequisite: At least one course in philosophy and one in physical science, either in high school or college. PHL 170 is strongly recommended.

PHL 333 Theories of Knowledge (4)

Critical examination of knowledge claims and of the types of justification given in their support. Typical topics are: skepticism; empiricism; rationalism; the relations between sensations, images, and concepts; meaning and truth; believing and knowing; intuition; and limits of knowledge. Offered every other year.

Prerequisite: One philosophy course. PHL 206 or 308 recommended.

PHL 340 Metaphysics (4)

A study of selected influential attempts to characterize the basic features of the world. Emphasis on reformulations of metaphysical problems, such as the relation between nature and mind, in the light of modern advances in scientific knowledge and sophistication. Offered every other year.

Prerequisite: One philosophy course.

PHL 351 Chinese Philosophy (4)

Systematic study of the rise and development of Chinese philosophy with emphasis on the classical (Chou) period, especially Confucianism and Taoism. The impact of Buddhism on Chinese philosophical thinking will be examined. Reference to modern developments as time permits.

Prerequisite: PHL 250 or AS 210.

PHL 352 Indian Philosophy (4)

An examination of the presuppositions and doctrines of India's major philosophic systems. Both Indian logic and metaphysical speculation will be covered. Realistic, idealistic, pluralistic, dualistic, and monistic systems will be considered, with some reference to contemporary developments. Offered every other year.

Prerequisite: PHL 250 or AS 240.

PHL 353 Japanese Philosophy (4)

An examination of Japan's major philosophical and religious systems including Shinto, Pure Land and Zen Buddhism, and Confucianism in the premodern era. The latter half of the course will be the study of the impact of European philosophical thought on the tradition and the emergence of a creative synthesis in the philosophy of Nishida Kitaro.

Prerequisite: PHL 250 or AS 220.

PHL 370 Symbolic Logic (4)

A study of standard first-order symbolic logic, emphasizing quantification theory and including identity theory and logical semantics, and possibly including an introduction to set theory and formal metatheory. The logical system is approached both as a formal system and as a theoretical analysis of human reasoning. Offered every year.

Prerequisite: PHL 170, CIS 180, or MTH 103 or equivalent.

PHL 395 Independent Study in Philosophy (2 or 4)

A tutorial on a topic not included in regular courses, primarily (but not exclusively) for majors. Students should consult with the department

chairperson before approaching a faculty member with a topic. Two credits graded S/N; 4 credits graded numerically. For 4 credits, in addition to reading and consultation, the student will write a substantial term paper. Prerequisite: One philosophy course at Oakland and permission of instructor.

PHL 401 Study of a Major Philosopher (4)

A study of the works of one major philosopher. The specific philosopher to be considered will vary each time, but courses on Plato, Aristotle, Kant, and Wittgenstein will be offered every few years. May be repeated for credit.

Prerequisite: One philosophy course. PHL 204, 205, 206, 307, or 308 recommended, whichever is relevant.

PHL 437 Philosophy of Mind (4)

An examination of selected topics or works in the philosophical literature about mind. Some of these topics are: the nature of psychological explanation, the relation of mind and body, thinking, emotions, concepts, consciousness, and remembering. Offered every other year.

Prerequisite: PSY 100 and one philosophy course. PHL 308 is recommended.

PHL 440 Contemporary Issues in Metaphysics (4)

A study of one or more current issues in metaphysics. The analytic tools of contemporary thinkers will be used in trying to resolve these perennial issues. Offered every other year.

Prerequisite: PHL 170. PHL 340 recommended. Additional prerequisites or recommendations may be announced in the schedule of classes.

PHL 470 Philosophical Logic (4)

Study of logic as a tool of philosophical clarification, the role of logic in analyzing concepts such as knowledge, belief, obligation, causal necessity, time, or the subjunctive conditional; related issues in metaphysics, epistemology, and language theory.

Prerequisite: PHL 370.

PHL 475 Philosophy of Language (4)

An inquiry into problems concerning the philosophical theories of the structure of natural language. Emphasis will be given to views about what meaning is and how we are to explain our ability to communicate with one another. Offered every two years.

Prerequisite: PHL 102 or 170, or LIN 207. PHL 308 is recommended.

PHL 497 Apprentice College Teaching (4)

A course open to any well-qualified philosophy student who obtains consent of a faculty member to assist in a regular college course. The apprentice should be capable of assuming limited teaching duties.

Prerequisite: Permission of instructor.

DEPARTMENT OF PHYSICS

CHAIRPERSON: Abraham R. Liboff

PROFESSORS: Abraham R. Liboff, John M. McKinley, Ralph C. Mobley, Robert M. Williamson

ASSOCIATE PROFESSORS: Norman Tepley, Paul A. Tipler, W. D. Wallace

ASSISTANT PROFESSOR: Paul M. Doherty

ADJUNCT PROFESSOR: Gifford G. Scott

ADJUNCT ASSOCIATE PROFESSOR: Norman H. Horwitz (William Beaumont Hospital)

VISITING INSTRUCTOR: Thomas D. Poppendieck

The courses of study offered by the Department of Physics are grouped into two categories — preprofessional career programs and individual courses for students with broad interests in contemporary human culture. The latter are strongly recommended as experiences in science for students planning to go into a wide range of careers, including law, business, criminology, art history, music, government, library science, and journalism.

Programs of study lead to the degrees of Bachelor of Science, Bachelor of Arts, and Master of Science.

The Bachelor of Science degree major in physics is intended primarily for students who plan to become professional scientists. It qualifies them for graduate studies in the physical sciences or research positions in government and industry.

Students, if they wish, may opt for concentrations in four areas: applied physics and electronics, astronomy, geophysics, and medical physics.

Students who complete the medical physics major or concentration are enabled to seek a career in medical physics or in medicine.

The Bachelor of Arts degree with a major in physics is intended primarily for students with broader interests who desire a less specialized background in physics, as for example, students who plan to take graduate work in a nonscience field or teach in secondary schools. The Bachelor of Arts degree program does not necessarily preclude a professional career in science if the student elects to supplement the program requirements with

additional courses.

Students interested in a career in physics and public policy are urged, early in their undergraduate work, to seek guidance in either the Department of Physics or the Department of Political Science. Specially selected students, with a double major in physics and political science, may qualify for a senior year internship in Washington or Lansing.

Requirements for the Bachelor of Science Degree with a Major in Physics

1. 30 credits in physics courses at or above the 200 level, including either PHY 371 or 472.
2. PHY 158 or 159.
3. 16 credits of mathematics at a level not below MTH 154.
4. 8 credits of chemistry at a level not below CHM 114.
5. 2 credits of computer programming or equivalent experience.
6. 4 credits of a modern language.

Requirements for the Bachelor of Arts Degree with a Major in Physics

1. 32 credits in physics, of which at least 22 credits must be in courses with numbers above 200.
2. 20 additional credits in chemistry, mathematics, and physics.
3. 4 credits of a modern language.

Requirements for the Secondary Teaching Major in Physics

ED 344, 345, 428, and 455, in addition to the requirements for the Bachelor of Arts degree with a major in physics, are required.

Requirements for the Secondary Teaching Minor in Physics

Twenty credits in physics are required.

Programs in Medical Physics

Students interested in medical physics may earn either the B.S. in medical physics or the B.S. major in physics with a concentration in medical physics. The requirements are the same for both, and are described on page 303.

COURSE OFFERINGS

PHY 101-102 General Physics (4 each)

An introduction to classical and modern physics. Particle mechanics, wave motion, electricity and magnetism, properties of atoms, and atomic

systems are considered. Calculus is not required. Premedical students fulfill their physics requirements by taking PHY 101-102 and PHY 158, rather than PHY 151-152.

Prerequisite for 101: High school algebra and trigonometry or equivalent.

Each of the following courses is designed for nonscience majors.

PHY 104 Classical Astronomy (4)

Early theories. The universe of Ptolemy and Copernicus, concepts of Brahe, Kepler, and Newton. Light, optical instruments. The earth in the universe. Time and seasons. The moon, its composition, motion, eclipses. Exploration of the solar system.

Prerequisite: High school algebra, some trigonometry desirable.

PHY 105 Modern Astronomy (4)

Stellar astronomy, energy production in the sun and stars. Properties of starlight; classification of stars; radio astronomy; stellar evolution; gravitational collapse; new astronomical objects (quasars, pulsars, radio galaxies); the primeval fireball; and cosmology: origin, history, and future of the universe.

Prerequisite: High school algebra with some trigonometry desirable.

PHY 106 Earth Sciences I (4)

The earth as a planet. Topics include: origin, history, orbit, gravity, rocks and minerals, earthquakes, the interior, and the theory of continental drift.

PHY 107 Earth Sciences II (4)

The surface of the earth, including the atmosphere and oceans. Topics include: climate, meteorology, continental evolution, weathering, glaciers, wind, and the energy resources of the earth.

PHY 115 Energy (4)

Basic physical principles of energy, sources, transmission, and distribution. Political, economic, and ecological considerations.

PHY 121 Introduction to the Physics of Sensory Systems (4)

The senses as systems which allow us to respond to external stimuli. The senses as detectors or transducers. Special emphasis on visual and auditory systems. Speech production and its acoustic characteristic and recognition.

PHY 125 The Physics of Music (4)

Lectures and demonstrations on the nature of vibrations, waves, and sound as applied to musical instruments and scales, voice, hearing, room acoustics, and electronic music.

PHY 127 Human Aspects of Physical Science (4)

Designed primarily for the student wishing to explore the interaction between the physical and social sciences. Format will vary to reflect the impact of physics on contemporary life, particularly on politics, economics, and behavior, as well as environment and well-being.

PHY 141 The Physics of Health Care (4)

An introduction to the physical principles underlying the delivery of health care. Scientific systems and method. Data-collecting measurements, problem-solving, applications, physical hazards, radiation dosimetry, and electrical safety.

PHY 169 Physics in Science Fiction (4)

A study of physical principles as revealed by the extent to which science

fiction authors observe or violate them. Selected readings, discussions, and written papers. No mathematics required beyond algebra. Graded S/N.

Prerequisite: High school algebra.

The following courses are designed primarily for the physics major and for majors in the other sciences and engineering.

PHY 150 Perspective and Method in Contemporary Physics (4)

A survey of current work in physics: pulsars, neutron stars, black holes, quarks, gravitational radiation, membrane potentials, symmetries in nature, methods in physics, techniques of problem solving, and evolving relation of the physicist to societal problems.

PHY 151-152 Introductory Physics (4 each)

Mechanics, electricity and magnetism, and wave motion. Optics for science, mathematics, and engineering students.

Prerequisite for PHY 151: MTH 154 or PHY 150 with corequisite MTH 154.

Corequisite for PHY 152: MTH 155.

PHY 158 General Physics Laboratory (2)

Elementary experiments in mechanics, heat, sound, electricity, and optics designed for students with little previous high school physics laboratory experience.

Prerequisite: PHY 101 or 151. Corequisite: PHY 102 or 152.

PHY 159 Introductory Physics Laboratory (2)

Extended experiments and projects related to introductory physics. Students with high school physics laboratory (or PHY 158) are encouraged to do open-ended experiments chosen jointly by instructor and student.

Prerequisite: PHY 101 or 151 and one year high school physics laboratory.

Corequisite: PHY 102 or 152.

PHY 247 Introduction to Scientific Instrumentation (4)

Lecture and laboratory course in the use of various devices and techniques used in scientific research. Oscilloscopes, integrated circuits, operational amplifiers, recorders, scintillation detectors, counters, and scalars. Laboratory experiments are related to health sciences. EKG, EEG, nerve transmission, blood pressure, and radioisotope labeling.

Prerequisite: PHY 101-102 or 151-152 and one laboratory course in any science.

PHY 271 Introduction to Atomic and Nuclear Physics (4)

Basic survey of atomic and nuclear physics: elementary quantum effects, X-rays, the nuclear atom, neutrons, radioactivity, nuclear geophysics, charged particle, absorption, range and energy, nuclear reactions, radiation dosimetry, scintillation detectors, and photomultipliers.

Prerequisite: PHY 101-102 or 151-152.

PHY 290 Introduction to Research (2 or 4)

Independent study and/or research in physics for students with no previous experience in research.

Prerequisite: Permission of instructor.

PHY 304 Astrophysics I (4)

Distribution and dynamics of stars and galaxies. Thermal, nuclear, electromagnetic, and quantum processes in astrophysics; relativity. Offered every other year; not offered in 1977-78.

Prerequisite: PHY 371 and APM 255.

PHY 305 Astrophysics II (4)

Stellar interiors and stellar evolution, stellar atmospheres, interstellar medium, and structure of the universe. Offered every other year; not offered 1977-78.

Prerequisite: PHY 304.

PHY 306 Observational Astronomy (2)

A lecture/laboratory course utilizing the Oakland Observatory and providing the student with basic training in astronomical techniques.

Prerequisite: PHY 158 or 159.

PHY 307 Geophysics (4)

The application of concepts in physics to the study of the earth, gravity and its anomalies, geomagnetism, earth-sun energy, geochronology, and seismic wave propagation. Offered every other year.

Prerequisite: PHY 151-152.

PHY 308 Physical Oceanography (4)

Physical oceanography and meteorology; composition and structure of the atmosphere and oceans. Interactions of sea water with the atmosphere, the continents, and man. Offered every other year.

Prerequisite: PHY 151-152.

PHY 317-318 Intermediate Laboratory (2 each)

Optics, atomic and nuclear physics experiments, shop techniques, vacuum systems, and error analysis.

Prerequisite: PHY 158 or 159.

PHY 325 Biophysical Science I (4)

A lecture course, emphasizing the physics of living systems: thermodynamics in biology, information theory, theories of aging, biomolecular structure, nerve conduction, radiation biology.

Prerequisite: PHY 102 or 152, and MTH 155.

PHY 326 Biophysical Science II (4)

A lecture course presenting the application of the physical laws to the operation of modern biophysical instruments; the electron microprobe, ultracentrifuge, spectrometer, laser light scattering, optical and X-ray diffraction, and acoustic probe.

Prerequisite: PHY 102 or 152, and MTH 155.

PHY 331 Optics (4)

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

Prerequisite: PHY 152 and MTH 155.

PHY 341 Electronics (4)

Circuit theory, vacuum tubes, transistors, power supplies, linear amplifiers, feedback, oscillators.

Prerequisite: PHY 152, PHY 158 or 159, and MTH 155.

PHY 347-348 Electronics Laboratory (2 each)

A.C. circuits and electronics experiments.

Corequisite for PHY 347: PHY 341.

PHY 351 Intermediate Theoretical Physics (4)

Topics and techniques common to intermediate level physics courses.

Prerequisite: PHY 152 and MTH 254.

PHY 361 Mechanics I (4)

Applications of Newton's laws to particles, systems of particles, harmonic

oscillators, central forces, accelerated reference frames, and rigid bodies.
Prerequisite: PHY 152. Corequisite: MTH 254.

PHY 371 Modern Physics (4)

Relativity, atomic physics, the experimental bases of quantum mechanics and properties of nuclei.

Prerequisite: PHY 152 and MTH 155.

PHY 381 Electricity and Magnetism I (4)

Maxwell's equations and the experimental laws of electricity and magnetism. Vector calculus, potential theory, boundary conditions on the electromagnetic field vectors, field energy dielectrics, conductors, and magnetic materials.

Prerequisite: PHY 152 and MTH 254. APM 255 desirable.

PHY 400 Undergraduate Seminar (1)

PHY 405 Special Topics (2, 4, or 6)

Prerequisite: Permission of department.

PHY 417 Advanced Laboratory (2)

Methods of experimental physics. Experiments and projects in all areas of classical and modern physics, with emphasis on research techniques and detailed analysis of experimental data.

Prerequisite: PHY 317-318, 341, and 347-348. Also, PHY 331, 361, and 371 which may be taken concurrently.

PHY 418 Modern Optics Laboratory (2)

Laboratory studies employing modern, sophisticated laser, spectrometer, and photon counting techniques and equipment including LIDAR, atomic absorption spectroscopy, intensity fluctuation spectroscopy, Raman Effect, atomic and molecular fluorescence, and Brillouin scattering.

Prerequisite: PHY 371.

PHY 421 Thermodynamics (4)

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

Prerequisite: PHY 361 and APM 255.

PHY 441 Physics of Radiology I (2)

Physical principles underlying the practice of radiology. Offered fall semester.

Prerequisite: Departmental approval and PHY 371, 381, and either PHY 247 or 347.

PHY 442 Physics of Radiology II (2)

A continuation of PHY 441. Offered winter semester.

Prerequisite: PHY 441.

PHY 443 Physics of Nuclear Medicine I (2)

Physical principles underlying diagnostic and therapeutic applications of radio-nuclides. Offered fall semester.

Prerequisite: Approval of department, PHY 371, 381, and either PHY 247 or 347.

PHY 444 Physics of Nuclear Medicine II (2)

A continuation of PHY 443. Offered winter semester.

Prerequisite: PHY 443.

PHY 445 Medical Instrumentation (2)

A detailed examination of the scientific instrumentation used in modern medical diagnostic and therapeutic practice. Offered fall semester.
Prerequisite: Approval of department, PHY 371, 381, and either PHY 247 or 347.

PHY 470 Relativity (4)

Special relativity in mechanics and electromagnetism. Introduction to general relativity and gravitation.
Prerequisite: PHY 361, 371, or 381.

PHY 472 Quantum Mechanics I (4)

Principles of nonrelativistic quantum mechanics, Schrodinger wave equation, expectation values of energy, position, momentum and angular-momentum operators, spin, perturbation theory, identical particles. With applications to atomic systems.
Prerequisite: PHY 361 and APM 255.

PHY 482 Electricity and Magnetism II (4)

Multipole fields, solutions and Laplace and Poisson equations, electromagnetic waves in insulators and conductors, and the derivation of the laws of optics from Maxwell's equations.
Prerequisite: PHY 381 and APM 255.

PHY 490 Independent Study and Research (2, 4, or 6)

Prerequisite: Permission of department.

DEPARTMENT OF POLITICAL SCIENCE

CHAIRPERSON: Edward J. Heubel

PROFESSORS: Sheldon Appleton, Thomas W. Casstevens, Edward J. Heubel, Roger H. Marz, Carl R. Yann (Political Science and Behavioral Sciences)

ASSOCIATE PROFESSOR: James R. Ozinga

ASSISTANT PROFESSORS: Thomas W. Church, Jr., Brian Coyer, L. Thomas Farley, Robert J. Goldstein, Vincent Khapoya, Neuman Pollack

INSTRUCTOR: Claude Rowland

Political science offers a concentrated and systematic study of politics at all levels of government and in many different cultural and national settings. Policy-making, law, political behavior, administration, international politics, foreign governments, and theories and philosophies of government are among the many topics explicated by these courses. The general educational aim is to increase the student's awareness and understanding of the broad realm of politics and government. Many students electing this major wish to prepare for careers in public service, law, practical politics, or the teaching of government and social studies.

The Bachelor of Arts degree with a major in political science is the department's broadest degree program and is appropriate for the student with an interest in public affairs or with an intention to enter law school or graduate school. The department also offers a major in public administration leading to the Bachelor of Science degree. The program provides the appropriate analytical skills for professionals and attempts to prepare students either for direct entry into public service or for specialized graduate programs in public administration and public policy.

Requirements for the Bachelor of Arts Degree with a Major in Political Science

The major requires 40 credits in political science including PS 100, 131, and 222. No more than 4 credits of PS 110 and no more than 12 credits of independent study (PS 390 and 490) may be offered toward the satisfaction of the major requirements.

Requirements for the Bachelor of Science Degree with a Major in Public Administration and Public Policy

In addition to the general requirements for a Bachelor of Science degree, described on page 47, students are expected to maintain a 2.50 average in required major and cognate courses.

The following major courses are required: PS 100, 131, 222, 350, 353, 453, and 457. Students are advised to enroll in PS 458, Public Affairs Internship (8 credits), in the spring session of their senior year. For students who complete the internship, 4 credits must be chosen from the following list to complete the major: PS 205, 307, 450, 451, 452, 455, 456. For students who do not take the internship, an additional 12 credits from the preceding are required.

The following corequisite courses are required:

1. MTH 121 and 122 (or 8 credits of mathematics at a higher level)
2. ECN 200 and 201 (8 credits)
3. MGT 200 (5 credits)
4. Either MGT 203 or CIS 120 (2 credits)

Political science majors may be advised by anyone in the department. For entry into the public administration program, consult any of the following: Edward J. Heubel, chairperson; Brian W. Coyer; Roger H. Marz; Neuman F. Pollack.

Concentration in Public Management

The Department of Political Science, in cooperation with the School of Economics and Management, offers a concentration in public management. Students majoring in political science may satisfy the requirements for both the major and the concentration by completing:

1. PS 100, 131, 205, 222, 350, 353, 453, and two other PS courses.
2. ECN 200, 201, and 301.
3. MGT 200 and MGT 436/PS 456.
4. MTH 121 and 122.

Other Concentrations and Options

Students in political science may pursue a regular major in political science with a number of interdepartmental concentrations described on page 197-210.

For students who wish to emphasize political science and pursue a secondary education career in social studies, see program information on page 207.

Department Honors and Independent Research

Departmental honors are conferred upon graduates who successfully complete a PS 490 project and paper at the honors level during their senior year. The student seeking honors should obtain permission of the department prior to registering for a 490 project. There are opportunities for advanced students to undertake independent readings and research under the PS 390 and PS 490 numbers; these also require pre-enrollment in the department office.

COURSE OFFERINGS

PS 100 Introduction to American Politics (4)

A study of the process of decision-making in the American national government and of the ways in which parties, groups, and individuals work to produce public policy in Congress, the Presidency, and the courts.

PS 103 Black Politics (4)

Analysis of Afro-Americans and their relationship to the American political system. Emphasis is given to black political ideologies and thought, political organizations and strategies, and forms of political participation, both electoral and nonelectoral.

PS 110 Contemporary Political Issues (4)

Selected topics dealing with current political issues or public policy problems. The particular topic will be announced at the time of offering. The course is designed for the general student. This may be repeated for credit with different topics.

PS 115 U. S. Foreign Policy (4)

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

PS 131 Foreign Political Systems (4)

Analysis of the politics and governmental systems of selected countries in the contemporary world; types chosen range from established constitutional democracies and totalitarian systems to movements and regimes of new developing nations. Offered fall and winter semesters.

PS 205 Politics of the Local Community (4)

Study of local governments, political forces, trends in metropolitan and suburban politics, and problems of planning in an age of urbanization. Offered fall semester.

Prerequisite: PS 100.

PS 213 International Politics (4)

Interdisciplinary study of concepts and hypotheses basic to understanding and analysis of relations among nations. The class may engage in a simulation exercise in international conflict and in the analysis of a number of actual cases to gain experience in the application of the hypotheses studied. Offered fall or winter semester.

PS 222 Measurement and Methodology (4)

A study of the design of research, the measurement of political variables, and the analysis of data.

Prerequisite: One course in political science.

PS 241 Law and Politics (4)

A broad survey of the function of law and legal systems in the political order. The student will be exposed to the classic jurisprudential, historical, anthropological, and comparative treatments of the subject. Offered fall and winter semesters.

PS 272, 273 Western Political Thought (4 each)

A two-semester survey of Western political philosophy. Each major philosopher, from Plato to Marx, is placed in his/her political setting so as to show the interrelationships between a philosopher's environment and his/her ideas. Offered fall and winter semesters.

PS 301 American Presidency and the Executive Process (4)

A study of presidential politics, decision-making, and leadership in the American political system. Offered winter semester.
Prerequisite: PS 100.

PS 302 Legislative Process and Public Policy (4)

A study of legislative behavior and decision-making, emphasizing the problems of public policy development in the American political system. Offered fall semester.
Prerequisite: PS 100.

PS 307 State Politics (4)

Comparative analysis of the variations and similarities of the political systems of the 50 states; the policy-making structures; political participation; and contemporary public policy issues. Offered winter semester.
Prerequisite: PS 100.

PS 313 International Law (4)

An examination of the principles and organization of modern international law. Attention is given to the growing field of ocean resource, outer space, environmental protection, and information law.
Prerequisite: PS 213.

PS 317 Sino-Soviet Relations (4)

The relations between the People's Republic of China and U.S.S.R., emphasizing the reaction to the Russian experience by the leaders of China and the split between the U.S.S.R. and the People's Republic. Offered winter semester.
Prerequisite: PS 131.

PS 320 Laboratory in Empirical Methods (4)

An examination of and training in empirical methodology. Topics include social science data management, two or three batch and conversational statistical packages, some computer programming, some statistics not covered in PS 222, and different modes of empirical political science research.
Prerequisite: PS 222.

PS 321 Systematic Political Analysis (4)

A study of formal models in political science. Offered once a year.

PS 323 The American People and Their Presidents (4)

Study of the relationships among public attitudes toward the Presidency and the political system, voting behavior in Presidential elections, and Presidential policies and leadership.
Prerequisite: PS 100.

PS 324 Electoral Processes (4)

The study of electoral systems, political parties, and the voting behavior

of individuals and groups, with special attention to U.S. political experience.

Prerequisite: PS 100.

PS 329 European Political Systems (4)

An analysis of politics within and between nations in Europe. Selected institutions and processes are examined in detail. A comparative point of view is emphasized.

Prerequisite: PS 131.

PS 330 Comparative Political Theory (4)

An examination of the various approaches and theories that are used in comparative political research, including theories of development and modernization.

Prerequisite: PS 131 and 222.

PS 331 The Political Systems of Britain and Canada (4)

An analysis and comparison of British and Canadian politics, parties, parliament, politicking, and public policy.

Prerequisite: PS 131.

PS 332 Politics of the Middle East and North Africa (4)

Examination of the politics of the Middle East and North Africa. The cultural and historical factors that influence the contemporary politics of the area will be emphasized. Topics include religion, social structures, economic problems, the impact of the West, and the Arab-Israeli conflict.

Prerequisite: PS 131.

PS 333 African Politics (4)

Examination of politics of selected African states. The primary focus is on political development. Attention is given to traditional and colonial politics as well as to individuals, groups, and institutions that make up the present political process. Offered winter semester.

Prerequisite: PS 131.

PS 334 Political Systems of Southern Asia (4)

Examination of the elements of political life in India, Bangladesh, and Pakistan. The cultural, historical, social, and economic factors that influence contemporary political institutions; and the issues and the processes by which political conflicts are resolved will be studied. Politics in Ceylon, Nepal, and Himalayan border kingdoms also may be considered.

Prerequisite: PS 131.

PS 335 Politics of Latin America (4)

Analysis of the political systems of Latin America and the historical, social, and economic factors underlying them. The major countries are studied intensively, and a comparative approach is used to examine the variations from democracy to dictatorship and the political instability that characterizes the area. Offered fall semester.

Prerequisite: PS 131.

PS 337 The Soviet Political System (4)

A descriptive analysis of the Soviet society as a political system: its origins, institutions, and political behavior. Trends and developments in the system will be assessed, and comparisons with other political systems will be undertaken. Offered winter semester.

Prerequisite: PS 131.

PS 338 Modern Chinese Politics (4)

An analysis of the rise of social movements in China after the breakdown

of the traditional order; the emergence of the Nationalist and Communist regimes and the triumph of the Communists; and the political processes of the People's Republic of China, emphasizing the role of elites in policy formation, ideology, mass support, and the exercise of central power. Offered fall semester.

Prerequisite: PS 131.

PS 342 American Legal System I: Principles and Processes (4)

A study of the various institutions of the American legal system with emphasis on the specific policy-making tools of the judicial process.

Prerequisite: PS 100.

PS 343 American Legal System II: Constitutional Law and Civil Liberties (4)

A broad survey of American constitutional law. Special emphasis will be placed on civil rights and liberties in America as defined and protected by the judiciary. Primary emphasis on United States Supreme Court decisions dealing with freedoms of speech, religion, and privacy; rights of the accused; racial, ethnic, and sexual discrimination. Offered winter semester.

Prerequisite: PS 241 or 342.

PS 350 Public Administration (4)

Study of government in action, with special attention to policy formulation, organization, personnel administration, supervision, coordination, administrative control, and accountability. Offered winter semester.

Prerequisite: PS 100.

PS 353 Public Policy Analysis (4)

Examines the political, economic, and social factors in the development, implementation, and impact of public policies; the roles of interest groups, political parties, bureaucratic institutions, and legislative bodies in the policy process at federal, state, and local governmental levels; and policy issues such as health, transportation, land-use, education, and welfare.

Prerequisite: PS 100.

PS 371 American Political Thought (4)

The writings of prominent American thinkers and statesmen whose ideas have influenced the development of the American polity will be considered. Selected texts by European thinkers may also be examined with a view to their influence on America.

Prerequisite: PS 100.

PS 377 Communism (4)

The development of revolutionary socialism from early Marxism to the present. The course analyzes the relevance of Marxism to a variety of contemporary revolutionary situations. Offered fall semester.

PS 390* Independent Study (2 or 4)

Readings not normally covered in existing course offerings. Directed on an individual basis.

Prerequisite: Permission of department and instructor.

PS 452 Comparative Public Administration (4)

Study of the role of public administrative systems in the context of diverse national environments, various levels of political development, and different stages of modernization.

Prerequisite: PS 131 and 350.

PS 453 Public Budgeting (4)

A study of the budgeting process in complex institutions, with special reference to various modern budgetary systems. Stresses the use of control over flow of funds as an instrument in control of policy.

Prerequisite: PS 350.

PS 455 Public Policy Evaluation (4)

Analysis of public policy-making, evaluation techniques, uses of relevant information, and the ethical implications of such studies. Offered fall semester 1978.

Prerequisite: PS 222 or a statistics course and PS 353.

PS 456 Public Administration Strategies and Policies (4)

The application of the management tools of economics, political science, statistics, accounting, and organizational behavior to the systematic analysis of case studies drawn from experience in the governmental sector or other not-for-profit enterprises.

Prerequisite: Senior standing and permission of department.

PS 457 Public Administration Career Orientation (2)

Prospects, problems, and ethics of public administration as a profession. Examples and practical problems from agency work, jointly presented by professional administrators and departmental faculty.

Prerequisite: PS 350 and permission of department.

PS 458 Public Affairs Internship (4 or 8)

Supervised student internships with governmental, political, and other public agencies; reports and analyses relating to agency required. Applicants must seek departmental approval at the beginning of the semester prior to that of the internship.

Prerequisite: Permission of department.

From time to time, the department offers advanced seminar courses in which a topic or problem is studied in depth, and in which significant individual student research is presented for analysis and criticism. The seminar titles refer to the broad fields of political science within which the problem falls; the precise problems to be studied will be announced by the department at the time the seminars are offered. All seminar courses require permission of the department before registration. Offered every semester.

PS 402, 403 Seminar in American Politics (4 each)

PS 410, 411 Seminar in International Relations (4 each)

PS 420, 421 Seminar in Political Behavior (4 each)

PS 430, 431 Seminar in the Comparative Study of Political Systems (4 each)

PS 440, 441 Seminar in Public Law (4 each)

PS 450, 451 Seminar in Public Policy (4 each)

PS 480, 481 Seminar in Political Theory (4 each)

PS 490* Special Topics or Directed Research (2, 4, or 8)

*Students are limited to 8 credits of independent study (PS 390 or 490) in any one semester, and may offer no more than 12 credits toward fulfillment of major requirements.

DEPARTMENT OF PSYCHOLOGY

ACTING CHAIRPERSON: Jean S. Braun

PROFESSORS: Edward A. Bantel, David C. Beardslee, Jean S. Braun, Harvey Burdick, Donald C. Hildum, Boaz Kahana, Donald D. O'Dowd

ASSOCIATE PROFESSORS: Daniel N. Braunstein, Max Brill, Kenneth H. Coffman, David G. Lowy, Virginia E. O'Leary, Ralph Schillace, David W. Shantz, Irving Torgoff

ASSISTANT PROFESSORS: Robert S. Fink, Ronald D. Hansen, Algea O. Harrison, Lawrence G. Lilliston, Dean G. Purcell, Amos Spector, David M. Stonner, Harold Zepelin

INSTRUCTOR: Keith E. Stanovich

ADJUNCT ASSOCIATE PROFESSOR: F. Edward Rice

VISITING ASSISTANT PROFESSOR: Maria S. Brané

The Department of Psychology offers undergraduate programs leading to the Bachelor of Arts degree. The Department of Psychology curriculum is structured to meet the needs of four types of students interested in majoring in psychology: the student who plans to find employment after obtaining his/her bachelor's degree, rather than continuing with formal education; the student who plans to go to graduate school in psychology; the student who plans to enter a field other than psychology that requires further formal training; and the student who has a general interest in psychology. A pamphlet, *Majoring in Psychology at Oakland University*, is available through the department office. The student majoring in psychology or contemplating doing so should obtain a copy of this pamphlet, which offers suggested programs of study.

Requirements for the Liberal Arts Major in Psychology

Effective for students entering fall semester 1975 and after, the requirement is 36 credits in psychology, including PSY 100, 250, and three courses at the 300 and/or 400 level. Students who plan on attending graduate school should take statistics (PSY 252) and one of the experimental courses (PSY 321, 330, or 356).

The department currently offers courses involving practicum experiences in applied settings in such areas of specialization as gerontology and community psychology.

Modified Majors and Other Options

A modified major in psychology with a concentration in linguistics is available. The linguistics concentration requires 24 credits in psychology, including PSY 100, 250, and at least two 300-level courses.

The department also offers a Master of Arts degree in clinical psychology and in developmental psychology. For details, see the *Oakland University Graduate Study Catalog*.

Honors Program in Psychology

The Department of Psychology is revising the requirements for departmental honors. Students who wish to qualify for honors should consult with the department chairperson, preferably at the beginning of their junior year.

COURSE OFFERINGS

Courses at the 500 level are generally available to upper level undergraduates. Consult the *Graduate Study Catalog* for further information.

PSY 100 Foundations of Contemporary Psychology (4)

The basic processes studied by psychologists. Topics include the central psychological processes of learning, perceiving, remembering, thinking, emotion, motivation, etc. Also looks at the comparative and physiological approaches to these topics. (Formerly PSY 146.)

PSY 130 Psychology and Society (4)

Examination of relationships among people and the effects of these relationships upon them. Analysis of social functions and roles; the development and change of attitudes, beliefs, and values; and the development of personality in relation to the social milieu. (Formerly titled Introduction to Social Psychology.)

PSY 200 through 209 Topics in Psychology (4 each)

Offered occasionally on special topics of current interest that are not listed among regular offerings.

PSY 215 Psychological and Field Studies in Education (4)

Identical with ED 345.

PSY 220 Abnormal Psychology (4)

The psychodynamics of abnormal behavior, clinical types, methods of investigation, and principles of psychotherapy.
Prerequisite: PSY 100.

PSY 221 Coping Strategies in the Normal Personality (4)

Characteristics of healthy personality in the following dimensions: need gratification, reality contact, interpersonal relationships, and growth. Coping strategies in a crisis situation.
Prerequisite: PSY 100.

PSY 222 Tests and Measurement (4)

Theories of measurement and evaluation. Examination of construction and interpretation of tests of ability, achievement, interests, and special

attitudes. Objective tests of personality.

Prerequisite: PSY 100.

PSY 223 Psychopathology of Childhood (4)

The psychopathology of children and adolescents, emphasizing dynamic and cognitive-perceptual-motor variables.

Prerequisite: PSY 100.

PSY 231 The Psychology of Social Issues (4)

Psychology's contribution to the understanding of selected issues of current social concern such as urban areas, jury selection, the effects of television on violence, etc.

Prerequisite: PSY 100.

PSY 232 Psychology of Women (4)

Psychological variables that repeatedly differentiate women from men will be examined in light of existing psychological theory and research. Topics will include sex differences in personality and learning ability, dependence, passivity, identification, role conflict, and achievement motivation.

Prerequisite: PSY 100.

PSY 233 Dehumanization (4)

Survey of the research and literature concerned with the effects of removing an individual's responsibility for the outcome of personal behavior. Topics include bystander apathy, over-obedience, conformity, etc.

Prerequisite: PSY 100.

PSY 235 Social Psychology (4)

An overview of traditional and current trends in social psychology. Specific treatment will be given to developing theoretical approaches to attitudes, interpersonal processes, and social perception.

Prerequisite: PSY 100.

PSY 241 Individual Differences (4)

Intellectual, motivational, and personality differences associated with age, social roles, sex, ethnic and racial groups, and social class.

Prerequisite: PSY 100.

PSY 246 Applied Psychology (4)

The areas in which psychology has been put to work, such as child-rearing, teaching and training methods, personality and aptitude testing, sensitivity training, human engineering, environmental design, and animal behavior.

Prerequisite: PSY 100.

PSY 250 Introduction to Research Design (4)

General introduction to the design, function, and interpretation of research in the social sciences. Aimed at providing students with preparation necessary to evaluate the empirically based content of psychology.

Prerequisite: PSY 100.

PSY 252 Statistics and Research Design (4)

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. Two years of high school mathematics are recommended.

Prerequisite: PSY 100 and 250.

PSY 271 Child Development (4)

Theory and principles of the development of the child from birth to pub-

erty. Selected topics include: maturational processes, learning and motivation, intelligence, self concept, and child-rearing practices.

Prerequisite: PSY 100.

PSY 273 Psychology of Adolescence and Youth (4)

The adolescent experience and the transition to adulthood, as influenced by physiological change, intellectual growth, and social attitudes, form the subject matter of this course. Among the topics considered are the quest for identity, juvenile delinquency, drug use, the youth culture, relationships between generations, and vocational choice.

Prerequisite: PSY 100.

PSY 274 Psychology of Adulthood and Aging (4)

Psychological change, from young adulthood to death, is the subject matter of this course. Potentials for psychological growth and sources of crisis are considered along with such topics as changes in intellectual processes, attitudes toward aging, retirement, and the needs of the aged.

Prerequisite: PSY 100.

PSY 300 through 309 Topics in Psychology (2 or 4 each)

These courses will be offered occasionally by faculty members wishing to explore special topics of current interest which are not listed among regular offerings, either on their own initiative or at the request of a group of students.

Prerequisite: Permission of instructor.

PSY 320 Theories of Personality (4)

Major theories of human personality development and principals of personality theory building.

Prerequisite: PSY 100 and two other psychology courses.

PSY 321 Experimental Psychopathology (4)

Basic philosophy of science; issues in design and methodology of psychological research with application to abnormal behavior. Experience in data collection.

Prerequisite: PSY 220 and 252.

PSY 322 The Psychology of Crime and Delinquency (4)

The nature of criminal behavior. Various psychological theories regarding the origins of delinquency and alternative approaches to dealing constructively with criminal behavior.

Prerequisite: PSY 100 and 220.

PSY 323 Community Psychology (4)

Historical antecedents, contemporary roots, and basic concepts of the community psychology movement will be described. The community approach to problems of emotional disorder, suicide, poverty, community organization, and community education will be examined.

Prerequisite: PSY 220.

PSY 330 Experimental Social Psychology (4)

Theory and techniques of survey research, field experiments, laboratory experiments, and field studies. Experience in data collection; independent project required.

Prerequisite: PSY 235 and 252.

PSY 332 Attitudes and Opinions (4)

Nature and function of attitudes, relations between attitudes and personality, and attitudes and behavior. Attitude measurement, formation, and change processes.

Prerequisite: PSY 252.

PSY 333 Organizational Behavior I (4)

Identical with MGT 330.

PSY 334 Organizational Behavior II (4)

Identical with MGT 331.

PSY 335 Psycholinguistics (4)

Identical with ALS 335.

PSY 337 Group Behavior (4)

Group structure, function, and process. Focus on how individuals affect the behavior of people in groups; how the group, in turn, affects the behavior of the individual. Topics include leadership, cohesion, group therapy, crowds, and mobs.

Prerequisite: PSY 235.

PSY 340 History and Systems of Psychology (4)

How psychology came to be as it is. From the beginning to the great experiments and the schools of psychology. From the schools to World War II. From World War II to the present. Men, experiments, theories.

Prerequisite: PSY 100 and two psychology courses other than PSY 252.

PSY 350 Motivation (4)

The nature of physiological and behavioral mechanisms that control an organism's reaction to the demands of its environment.

Prerequisite: PSY 100.

PSY 351 Learning, Memory, and Thinking (4)

Approaches to learning, memory, and thinking processes. Includes such topics as conditioning, problem solving, verbal behavior, storage systems, and organization.

Prerequisite: PSY 100.

PSY 352 Sensation and Perception (4)

Approaches to the basic sensory systems and perceptual processes.

Prerequisite: PSY 100.

PSY 353 Cognitive Psychology (4)

Information processing, selective attention, short and long term memory models, theories of forgetting, verbal learning, and psycholinguistics.

Prerequisite: PSY 100.

PSY 354 Animal Behavior (4)

Methods of observing, measuring, and recording the behavior of animals, including man. Theories of the ethologist are contrasted with the views and techniques of contemporary comparative psychologists. Focuses on animal aggression, territoriality, communication, and social behavior, primarily from an evolutionary viewpoint.

Prerequisite: PSY 100.

PSY 355 Physiological Psychology (4)

Anatomy of the human nervous system and techniques employed to discover relationships between brain and behavior. The physiological bases of emotion, motivation, sleep, learning, and sensory processes are discussed as well as pathology of the human central nervous system and the effects of human psychosurgery.

Prerequisite: PSY 100.

PSY 356 Experiments in the Basic Processes (4)

Issues in learning, perception, thinking, physiological psychology, and

animal behavior with independent research project.
Prerequisite: PSY 252 and 351, or PSY 352 or 353.

PSY 371 Work with the Elderly I (2 or 4)

Introduction to work with the elderly in the community and institutions. Placement in field settings is combined with readings and lectures on psychosocial services for the elderly.
Prerequisite: PSY 274, which may be taken concurrently with instructor's consent.

PSY 372 Work with the Elderly II (2 or 4)

Field work is combined with independent readings in gerontology to develop in-depth knowledge of particular area of specialization.
Prerequisite: PSY 371 and 250 or its equivalent, and instructor's consent.

PSY 376 Socialization in the Family (4)

Some of the areas of research and theory on socialization processes. Areas of focus: attachment and separation, conscience development, sex-role identity, ego-identity, etc. Role of principal agents, e.g. family, peers, school.
Prerequisite: PSY 271, 273, or 274.

PSY 390 Honors Proseminar (4)

In-depth review of selected theoretical and empirical topics in major areas of specialization in psychology (clinical, developmental, experimental, and social).
Prerequisite: Admission to Department of Psychology Honors Program.

PSY 430 Advanced Social Psychology (4)

Critical study of selected areas in social psychology such as attribution theory.
Prerequisite: Permission of instructor.

PSY 441 Advanced General Psychology (4)

A survey of the current frontiers of knowledge and new methodology in the whole range of psychology. For senior majors who plan to attend graduate school. (Formerly PSY 541.)
Prerequisite: Permission of instructor.

**PSY 480 through 485 Readings and Research Projects
(2 or 4 each)**

Individual readings or laboratory research on a topic mutually agreed upon by a student and a member of the psychology faculty. (The course numbers will be rotated from one semester to another.)
Prerequisite: Permission of instructor.

PSY 490 Honors Seminar—General Experimental (4)

Intensive examination of theoretical and empirical issues in general experimental psychology. Emphasis on theory construction, criticism, and research methodology.
Prerequisite: PSY 390.

PSY 491 Honors Seminar—Developmental (4)

Intensive examination of theoretical and empirical issues in developmental psychology. Emphasis on theory construction, criticism, and research methodology.
Prerequisite: PSY 390.

PSY 492 Honors Seminar—Clinical (4)

Intensive examination of theoretical and empirical issues in clinical psychology. Emphasis on theory construction, criticism, and research

methodology.

Prerequisite: PSY 390.

PSY 493 Honors Seminar—Social (4)

Intensive examination of theoretical and empirical issues in social psychology. Emphasis on theory construction, criticism, and research methodology.

Prerequisite: PSY 390.

PSY 494, 495 Honors Independent Studies (4 each)

Independent honors research projects in the area of clinical, developmental, experimental, and social psychology, respectively.

Prerequisite: PSY 390 and one of the 490-493 Honors Seminar Series.



DEPARTMENT OF SOCIOLOGY AND ANTHROPOLOGY

CHAIRPERSON: Donald I. Warren

PROFESSORS: Nahum Z. Medalia, Jesse R. Pitts, Philip Singer

ASSOCIATE PROFESSORS: Peter J. Bertocci, Judith K. Brown, Harry Gold, Donald I. Warren

ASSISTANT PROFESSORS: William Bezdek, James Dow, Jacqueline R. Scherer, Richard B. Stamps

ASSOCIATED FACULTY: Gayle H. Partmann Assistant Professor (Linguistics)

VISITING ASSISTANT PROFESSOR: A. Gary Shepherd

The Department of Sociology and Anthropology participates in several degree programs, each of which is designed to provide the maximum degree of flexibility to serve the student's interest while, at the same time, providing the substantive background required to prepare the student for a career in his/her chosen field. These programs lead to the Bachelor of Arts degree.

Requirements for Majors in Sociology and Anthropology

1. **Major in Sociology:** SOC 100 and 36 other credits in sociology. Of these, 8 may be taken in anthropology.
2. **Major in Anthropology:** AN 101, 102, and 32 other credits in anthropology. Of these 8 may be taken in sociology. LIN 301 may be substituted for one departmental course.
3. **Major in Sociology and Anthropology:** SOC 100, AN 101, AN 102, 16 additional credits in sociology, and 12 additional credits in anthropology.

Note: No more than 8 credits may be taken in SOC or AN 190, 480, or 490.

Requirements for Modified Majors

1. **Modified Major in Anthropology with Concentration in Area Studies:** 24 credits in anthropology, including AN 101 and 102, and 20 credits in an area studies concentration.
2. **Modified Major in Anthropology with Concentration in Linguistics:** AN 101 and 102, 12 additional credits in anthropology, and 20 credits in linguistics. For linguistics requirements, see page 109.
3. **Modified Major in Sociology with Concentration in Linguistics:**

24 credits in sociology, including SOC 100 and 412, and 20 credits in linguistics. AN 204 may be substituted for one course in sociology. For linguistics requirements, see page 109.

COURSE OFFERINGS IN ANTHROPOLOGY

AN 101 Evolution of Man and Culture (4)

Introduction to physical anthropology and archaeology as applied to the evolution of man and culture. Stress placed upon man's development in adaptation to the environment.

AN 102 Man in Culture and Society (4)

Introduction to cultural and social anthropology with emphasis on the continuing adaptation of man to the environment and especially the interactions among culture, society, and natural environment.

AN 190 Current Issues in Anthropology (4)

Designed for the general student, this course will examine issues of current interest in anthropology. The particular topic will be announced at the time of offering.

AN 200 Social Anthropology (4)

Examines social structure and social organization in anthropological perspective. Entails the study of economic, political, religious, and kinship systems in the social life of man.

Prerequisite: AN 102.

AN 204 Communication, Ethology, and Man (4)

The course will cover such topics as verbal and nonverbal communication, culture or tradition, spatial relationships, sexuality, ritual, group structure, and the definition of social situations.

AN 221 Subsistence and Technology in Nonindustrial Society (4)

The technologies of different cultures and their implications for the individual, society, and general cultural survival; the ecology of tribal, peasant, and industrial cultures with emphasis on the subsistence technology of non-Western cultures or on a comparative study of cultural adaptation. Identical with ENV 221.

Prerequisite: AN 102.

AN 251 Peasant Society and Culture (4)

The peasant as a social type; the peasant's role in the making of great civilizations; and forces for change in peasant societies, especially in the non-Western world.

Prerequisite: AN 102.

AN 271 Magic, Witchcraft, and Religion (4)

Anthropological theories of magic, witchcraft, and religion: human interaction with beings, creatures, and forces that manifest extraordinary powers; folk beliefs of nonliterate people; and the transformation of social systems by religious movements. Identical with REL 271.

Prerequisite: AN 102 or sophomore standing.

AN 276 Language in Culture (4)

Identical with ALS 276.

AN 281 Primate Behavior (4)

Various bio-social factors which aid the nonhuman primates in their adaptation to the environment, implications for human behavior, classroom discussions, and field studies.

Prerequisite: AN 101.

AN 282 The Prehistoric Origins of Civilization (4)

The development and spread of culture in the period before written history, using archaeological evidence from Neolithic Old World and New World sites. Cultural evolution from early farming and settlement to the rise of complex civilization.

Prerequisite: AN 101.

AN 305 Child Rearing in Cross-Cultural Perspective (4)

Child rearing practices and their educational role, the rearing of nonhuman primate young, and the socialization practices of certain Western subcultures and non-Western societies.

Prerequisite: AN 102.

AN 310 Culture and Personality (4)

Theories of psychological anthropology on culture and personality and psychological phenomena viewed in relationship to culture and from a cross-cultural perspective.

Prerequisite: AN 102.

AN 336 Sex Roles (4)

Comparative analysis of sex roles and status in tribal and class societies. Modern anthropological and sociological theories on sex role and status differences.

Prerequisite: SOC 100 or AN 102.

AN 340 Culture and Personality in Indian Society (4)

Personality in Indian culture; the persistence of basic Hindu personality and cultural communities.

Prerequisite: AN 310.

AN 341 Peoples and Cultures of the Mediterranean (4)

A comparative study of several rural communities around the Mediterranean basin in terms of certain key concepts such as "honor and shame," "cult of saints," "evil eye," and the "folk-urban dichotomy." These themes will be discussed within their national and modern contexts.

Prerequisite: AN 102.

AN 352 Survey of African Peoples and Cultures (4)

A general survey of the geography, history, economy, society, religions, and political systems of selected indigenous peoples of Africa. Part of the course will cover the events of the period of European contact.

Prerequisite: AN 102.

AN 353 Anthropology of North Africa and the Middle East (4)

The Arab peoples and their neighbors, emphasizing socio-cultural systems, group relations, social change, and the role of Islam as a cultural unifier.

Prerequisite: AN 102.

AN 361 Peoples and Cultures of India (4)

A survey of contemporary society and culture on the Indian subcontinent, with special focus on India, Pakistan, and Bangladesh; emphasis on social structure, folk religion, and the problems of socio-cultural change.

Prerequisite: AN 102 or AS 240.

AN 362 Peoples and Cultures of China (4)

An anthropological study of China, stressing the variety of cultural and ecological adaptations characteristic of that complex society.
Prerequisite: AS 210.

AN 370 Archaeology of Mesoamerica (4)

The pre-Hispanic culture of Mexico and Guatemala, the Aztecs and Mayas, and their neighboring and derivative cultures. Detailed discussion of the major archaeological sites.
Prerequisite: AN 101 and 102.

AN 371 Cultures of Mesoamerica (4)

Anthropological studies of Indian and Mestizo societies in Mexico and Guatemala, including their separate socio-economic patterns and their integration into a dualistic social system.
Prerequisite: AN 102.

AN 372 Indians of South America (4)

A survey of the native South Americans. Includes warriors of the jungles, peasants and herders of the mountains, nomads of the plains and forests, and subsistence fishermen of the southern coasts.
Prerequisite: AN 102.

AN 380 Archaeology of North America (4)

A survey of the evolution of native North American cultures (including Mesoamerica) from 50,000 B.C. to 1500 A.D., with emphasis on the ecological factors in the development of culture areas.
Prerequisite: AN 101.

AN 381 Indigenous Peoples of North America (4)

The culture of certain North American Indian societies and Eskimo societies and their adaptation to Western contact.
Prerequisite: AN 102.

AN 382 Advanced Physical Anthropology (4)

The emergence and diversification of the human species in relation to the morphology and ecology of both modern and fossil man, including such topics as physical and physiological variation (sex, race, and age), climatic adaption, and population genetics.
Prerequisite: AN 101.

AN 383 Methods in Anthropological Archaeology (4)

Instruction and field research, including site location, excavation and artifact analysis, and conservation. May be repeated once for credit.
Prerequisite: AN 101.

AN 400 History of Anthropological Theory (4)

Traces the historical development of theory in anthropology; emphasis on recurring problems of theoretical and empirical import to the growth of the discipline as a whole.
Prerequisite: AN 200.

AN 415 Cognitive Anthropology (4)

Study of culture as it is perceived by the people who live it, rather than by an outside observer. Includes ethno-science, ethnographic semantics, and systematic ethnography. Involves work with symbolic systems.
Prerequisite: AN 102.

AN 420 Ethnopsychiatry (4)

The socio-cultural context of mental illness and the forms of its institutional and medical care; relation between family relationships, child-

rearing practices, and mental illness; and the physician-patient and indigenous healer-patient relationship.

Prerequisite: Three sociology or anthropology courses.

AN 430 Systems of Wealth and Power in Anthropological Perspective (4)

The concepts and methods of political and economic anthropology, emphasizing the interrelated state of political and economic phenomena, with particular reference to preindustrial, non-Western societies.

Prerequisite: AN 102.

AN 460 Problems of Social and Economic Change in Developing Societies (4)

The role of anthropology in programs of socio-economic development in non-Western areas. Review of the activities of the United Nations and of national governments.

Prerequisite: AN 102.

AN 480 Independent Study and Research (2 or 4)

A tutorial in which the student will pursue a course of reading and research with the instructor. May be repeated only once for credit.

Prerequisite: Permission of instructor.

AN 490 Current Problems in Anthropology (2 or 4)

An advanced seminar in which a topic or problem is studied in depth. Each seminar requires students to do independent readings and writing.

Prerequisite: Permission of instructor.

AN 497 Apprentice College Teaching (2 or 4)

Supervised participation in teaching an undergraduate course in anthropology, combined with readings and discussion of teaching objectives and methods appropriate for anthropological presentation. May be taken only once for credit toward a major.

Prerequisite: Senior anthropology major and permission of instructor.

COURSE OFFERINGS IN SOCIOLOGY

SOC 100 Introduction to Sociology (4)

An introduction to the basic principles, concepts, and theories of sociology relating to the study of man as a participant in group life. Particular attention is given to social structure, cultural processes and patterns, socialization and personality development, and social stratification.

SOC 190 Current Issues in Sociology (4)

Designed for the general student, this course will examine issues of current interest in sociology. The particular topic will be announced at the time of the offering.

SOC 200 Introduction to Sociology of Education (4)

The public school system in contemporary life, emphasizing unionization, bureaucratic structure and informal organizations within the school, and the special problems of minority groups. Primarily for secondary teaching majors.

SOC 202 Introduction to Methods of Social Research (4)

The collection, organization, analysis, and interpretation of social data; elementary techniques of understanding and using quantitative evidence in sociological research.

Prerequisite: SOC 100.

SOC 203 Social Statistics (4)

The interpretation of social data by quantification and statistical reasoning. Considers basic descriptive techniques such as percentages, correlations, and measures of dispersion; basic ideas of statistical inference; basic properties of the binomial and normal distributions; and the more common nonparametric statistics used in analyzing survey data.

Prerequisite: Two years high school mathematics.

SOC 205 Sociology of Social Problems (4)

An introductory survey of social problems in areas such as race relations, poverty, delinquency, and crime. Comparison of sociological with journalistic, theological, and political-legal approaches to social problems.

Prerequisite: SOC 100.

SOC 210 The Social Context of Social Work (4)

An introduction to the profession of social work and the social context of welfare policies; the relationships between social structure and the development of social work practice, and public and private welfare organizations.

SOC 260 Urban Sociology (4)

The social structure, culture, and ecology of early and contemporary urban communities; institutional responses to the problems of modern urban life.

Prerequisite: SOC 100.

SOC 300 Social Stratification in Cross-Cultural Perspective (4)

The concepts of class, caste, and race in relation to social conflict and social integration. Students will study these problems in a cross-cultural perspective, placing emphasis upon comparative materials.

Prerequisite: SOC 100.

SOC 305 Sociology of Religion (4)

An analysis of changing relationship between social structure and religion in preindustrial societies, Europe during the Protestant Reformation, and the contemporary United States. Identical with REL 305.

Prerequisite: SOC 100.

SOC 306 Sociology of Science (4)

A sociological view of the natural and life sciences. Topics include: the training and socializing of young scientists; organizations in scientific fields, such as industrial laboratories, university departments, and "invisible colleges"; and inequalities in science.

Prerequisite: SOC 100 or major standing in a physical or life science.

SOC 307 Advanced Methods of Social Research (4)

Problems and techniques of measurement in contemporary sociological research; the diversity of research methods; and the relationship between social research and social theory.

Prerequisite: SOC 100 and 202.

SOC 308 Population Theory and Problems (4)

Provides a historical analysis of world population growth, focusing upon the relationships among population size, population policy, and social and economic development.

Prerequisite: SOC 100.

SOC 311 Classical Sociological Theories (4)

A study of classical sociological theory stressing the works of Comte,

Marx, Durkheim, Pareto, Weber, Simmel, and Freud.

Prerequisite: SOC 100 or a 300- or 400-level course in any social science.

SOC 320 Sociology of Crime and Punishment (4)

A study of the various forms of criminal deviance, the sociological theories developed to explain the phenomenon of crime, and modes of control from hospitals to penitentiaries.

Prerequisite: SOC 100.

SOC 323 Juvenile Delinquency and Its Social Control (4)

Nature and types of juvenile delinquency; the relation of juvenile delinquency to the stress of adolescence and the specific social situation; methods of preventing delinquency or its recurrence.

Prerequisite: SOC 320.

SOC 327 Police and Society (4)

A study of police techniques and problems, of deviant citizen-police relations, and of social control in a field where power is high and visibility is relatively low. Topics include the defenses against corruption and the containment concept of police.

Prerequisite: SOC 320.

SOC 331 Racial and Cultural Relations (4)

A study of racial, national, and religious groups, particularly those of the United States, emphasizing their historical development, special problems of adjustment and assimilation, and contemporary problems and trends.

Prerequisite: SOC 100.

SOC 335 The Family (4)

A comparative and historical study of the family.

Prerequisite: SOC 100.

SOC 336 Sex Roles in Modern Society (4)

The impact of ideological and technological change on the statuses, occupations, and relationships of males and females.

Prerequisite: SOC 100.

SOC 337 Character and Social Structure (4)

A study of the impact of society upon the individual.

Prerequisite: SOC 100.

SOC 355 Sociology of Occupations and Professions (4)

The structure of major occupations and professions in terms of their publics, their mandates, their clients, and the career lines they offer, with comparisons between "incomplete professions," such as nursing and undertaking, and full-fledged professions.

Prerequisite: SOC 100.

SOC 357 Industrial Sociology (4)

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, informal work groups, and the character of occupational life in America.

Prerequisite: SOC 100.

SOC 360 Political Sociology (4)

The sociological factors which influence the distribution of power within a society: political communication, the maintenance of consensus, the process of revolution, the structure of political parties, and the

emergence of new states.

Prerequisite: SOC 100.

SOC 368 Sociology of Medical Practice (4)

The structure of the medical profession from "black-bag" practice to group and hospital-centered practice; medical training, induction into practice and collegueship; related professionals such as chiropractors, optometrists, nurses, and paramedics.

Prerequisite: SOC 100.

SOC 370 Communities (4)

Community is examined in both empirical and theoretical contexts, with an emphasis upon contemporary experiments, recent political and social interpretations of community development, and changing patterns of communal interaction.

Prerequisite: SOC 100.

SOC 371 Forms and Effects of Mass Communication (4)

Analysis of the objectives and techniques of disseminating ideas and information through the mass media; the evaluation of the influence of the media on the values and policy preferences of individuals, social groups, and institutions; the design and application of research methods and models for the study of mass communication. Identical with SCN 371.

Prerequisite: SOC 100 or sophomore standing.

SOC 376 Sociolinguistics (4)

Identical with ALS 376.

SOC 381 Sociology of Modern Organizations (4)

A study of organizations, especially nonindustrial organizations such as labor unions, ethnic associations, religious congregations, and social service agencies. Topics include: analysis of bureaucracies, features of organizations such as goal-setting and communication and effects of organizations on American culture.

Prerequisite: SOC 100.

SOC 400 Higher Education as a Socializing Institution (4)

Discussion of concepts and research methods developed in the study of socializing institutions with particular reference to higher education.

Prerequisite: SOC 100 and 200.

SOC 402 Small Groups (4)

The study of small group relations and the informal understandings, codes, and conventions which they generate. Considers the dynamics of individuality, leadership, conformity, and esprit de corps in a group setting. Identical with SCN 402.

Prerequisite: SOC 100.

SOC 404 Sociology of Poverty and Social Welfare (4)

Survey of the development of social welfare programs in the United States. Procedures developed to deal with problems of poverty, such as case work, community organization, and agency programming; analysis and evaluation of current policy debates on welfare programs.

Prerequisite: SOC 100 or 210.

SOC 412 Contemporary Sociological Theory (4)

Contemporary sociological theory from Veblen, Mead, and Thomas to the present, including Merton, Parsons, Lipset, Goode, and Eisenstadt.

Prerequisite: SOC 311.

SOC 425 Corrective and Rehabilitative Institutions (4)

Correctional institutions according to levels of security, and levels and types of resocialization pressures; problems of interaction within the institution are analyzed, e.g. between inmate, guard, supervisor, and rehabilitation specialist; development of inmate subcultures; dynamics of crisis (e.g. riots); and equilibrium.
Prerequisite: SOC 320.

SOC 430 Internship in Social Justice and Corrections (4 or 8)

Field placement and supervision of students in police, prison, and parole organizations and agencies.
Prerequisite: Enrollment in social justice and corrections concentration and written permission of instructor.

SOC 437 Sociology of the Courts (4)

The roles of judges, court officers, jury, and attorneys are described and analyzed in the context of their professional matrix.
Prerequisite: SOC 100 and 320.

SOC 440 The Sociology of Youth (4)

A cross-cultural analysis of the emerging youth culture in industrial societies: the economic, social, and political consequences.
Prerequisite: SOC 100 and junior standing or above.

SOC 441 Social Change (4)

The prediction and explanation of social change; change mechanisms such as crowds, publics, mass or social movements, and revolutions; and implications for social action.
Prerequisite: SOC 100 and junior standing or above.

SOC 470 Field Studies in Sociology: Urban Workshop (4)

Emphasis on sociological analysis and interpretation as participant-observers in Detroit metropolitan social service organizations. Four to eight hours per week of field activity and written reports of the field study are required. Field placements and class meetings to be arranged by instructor.
Prerequisite: SOC 100 or 210.

SOC 473 Social Control of Mass Media (4)

The major sociological factors which control the informational content of the mass media; differences between the structures and processes or control in the print and electronic sectors of the media. Identical with SCN 373.
Prerequisite: SOC 371.

SOC 480 Independent Study and Research (2 or 4)

Directed individual reading and research.
Prerequisite: Permission of instructor.

SOC 490 Special Topics in Sociology (2 or 4)

Seminar on a special topic or problem requiring independent reading and writing.
Prerequisite: Permission of instructor.

SOC 497 Apprentice College Teaching (2 or 4)

Supervised participation in the teaching of an undergraduate course in sociology, combined with readings and discussion of teaching objectives and methods appropriate for sociological presentation. May be taken only once for credit toward a major.
Prerequisite: Senior sociology major and permission of instructor.

AREA STUDIES PROGRAMS

CHAIRPERSON: Carlo Coppola (*Modern Languages — South Asia*)

AREA STUDIES COMMITTEE: Carlo Coppola (*Modern Languages — Graduate Coordinator*), De Witt S. Dykes (*History — Afro-American Studies*), Lawrence T. Farley (*Political Science — Africa*), Kathryn M. McArdle (*Modern Languages — Latin America*), Lawrence D. Orton (*History — Russia*), Amitendranath Tagore (*Modern Languages*), Richard Tucker (*History — South Asia*), Robert J. Wargo (*Philosophy — China*)

Drawing upon faculty from its various disciplines, the College of Arts and Sciences sponsors a distinctive offering of area studies programs. The programs are dedicated to the understanding of living civilizations whose various aspects — art, government, history, language, literature, music, and social organization — are studied in the traditional departments of the university. A concentration in one of the areas offered might be considered by a student who, from intellectual curiosity, seeks an integrated view of a civilization as well as by a student who looks forward to a career in government service, journalism, teaching, residence or work abroad, or to graduate study with an area emphasis.

Oakland offers area programs in African studies, Afro-American studies, East Asian studies (China and Japan), Latin American studies, Slavic studies (Russia and Eastern Europe), and South Asian studies (India, Pakistan, and Bangladesh). Courses labeled "AS" are described at the end of this section. All other courses applicable to area studies programs are offered by the departments of the college and descriptions of those courses are found in the respective departmental listings.

African Studies Program

COORDINATOR: Lawrence T. Farley (*Political Science*)

FACULTY: Cordell W. Block (*Learning Skills*), Richard M. Brace (*History*), William C. Forbes (*Biological Sciences*), James D. Graham (*History*), Karl D. Gregory (*Economics and Management*), Marvin D. Holladay (*Music*), James W. Hughes (*Education*), David Jaymes (*French*), Mary Karasch (*History*), Vincent B. Khapoya (*Political Science*), Gayle Partmann (*Linguistics*)

The concentration in African studies, which consists of 40 credits, is offered in conjunction with a full major in any department. Course requirements are AS 230, four semesters of Swahili or Arabic,* and AS 384.

*Until Oakland offers Swahili or Arabic on a regular basis, this

requirement may be met by completion of 20 hours of French or other courses approved by the African studies staff.

COURSE OFFERINGS

AN 352	Survey of African Peoples and Cultures
ECN 327	African Economic Development
HST 286, 287	Survey of African History
HST 365	Response to European Colonialism
HST 386	Contemporary African History
HST 387	Northwestern Africa (the Maghrib) since 1830
LIN 301	Linguistic Structures
ALS 428	The Teaching of English as a Second Language
MUS 251	African through Afro-Caribbean Music
PS 332	Politics of the Middle East and North Africa
PS 333	African Politics
AS 230	Introduction to Africa
AS 300	Special Topics in Area Studies
AS 384	Seminar in African Studies
AS 390	Directed Readings in Area Studies
AS 490	Directed Research in Area Studies

Afro-American Studies Program

COORDINATOR: De Witt S. Dykes (History)

FACULTY: Johnetta Brazzell (Urban Affairs), Robert L. Donald (English), James D. Graham (History), Karl D. Gregory (Economics and Management), Marvin D. Holladay (Music), Mary Karasch (History), Vincent B. Khapaya (Political Science), Nahum Medalia (Sociology and Anthropology), Gadis Nowell (Economics and Management), Carl Osthaus (History), Colin A. Palmer (History), John Tower (Economics and Management)

The concentration in Afro-American studies, which consists of 28 credits, is offered in conjunction with a full major in any department. Required courses are AS 230, HST 291, HST 292, AS 380, and one course from each of the following groups:

1. ENG 342, or MUS 346.
2. PS 103, ECN 221, or SOC 331.
3. AS 300, AS 390, HST 319, HST 323, or HST 366.

COURSE OFFERINGS

ECN 221	Economics of the Afro-American Experience
ENG 342	Black American Writers
HST 291, 292	History of the Afro-American People
HST 319	History of the American South
HST 323	Topics in Afro-American History
HST 366	Slavery and Race Relations in the New World
MUS 346	The Music of Black Americans

PS 103	Black Politics
SOC 331	Racial and Cultural Relations
AS 300	Special Topics in Area Studies (Field Studies in the Afro-American Experience)
AS 380	Seminar in Afro-American Studies
AS 390	Directed Readings in Area Studies
AS 490	Directed Research in Area Studies

East Asian Studies Program

COORDINATOR: Robert J. Wargo (Philosophy)

FACULTY: Sheldon L. Appleton (Political Science), Robert C. Howes (History), Janet Krompart (East Asian Librarian), John Marney (Chinese Language and Literature), Paul M. Michaud (History), I. Michael Solomon (History), Richard B. Stamps (Anthropology), Amitendranath Tagore (Chinese Language and Literature)

The concentration in East Asian studies is offered in combination with a modified departmental major in anthropology, art and art history, history, political science, philosophy, or sociology. Admission to the concentration requires successful completion of AS 210 or 220 and two semesters of Chinese. The requirements for the concentration are 24 credits in the major department, four semesters of Chinese language, and 20 additional credits from the following list including AS 490.

Students interested in East Asian studies may also major in Chinese language and civilization. The major, sponsored by the Department of Modern Languages, requires 16 credits in Chinese beyond CHE 216 and 20 credits from the following list, including AS 490.

COURSE OFFERINGS

AH 104	Introduction to Asian Art
AH 300	Chinese Art
AH 301	Japanese Art
HST 277, 278	Survey of Japanese History
HST 370	China: Beginnings through Han, to 220 A.D.
HST 371	China: From the Three Kingdoms through Ming, 220-1644
HST 373	China: The Final (Ch'ing) Imperial Phase, 1644-1912
HST 374	China: The Nationalist Republican Period, 1912-1949
HST 375	Topics in Chinese Intellectual History
HST 376	History of Chinese Communism, 1921-Present
PHL 250	Philosophies and Religions of Asia
PHL 351	Chinese Philosophy
PHL 353	Japanese Philosophy

PS 338	Modern Chinese Politics
PS 317	Sino-Soviet Relations
AS 210	Introduction to China
AS 220	Introduction to Japan
AS 300	Special Topics in Area Studies
AS 381	Seminar in East Asian Studies
AS 390	Directed Readings in Area Studies
AS 490	Directed Research in Area Studies

South Asian Studies Program

COORDINATOR: Richard P. Tucker (History)

FACULTY: Peter J. Bertocci (Sociology and Anthropology), Richard W. Brooks (Philosophy), Carlo Coppola (Modern Languages), Brian W. Coyer (Political Science), Bruce Harker (Education), Paul M. Michaud (History), Munibur Rahman (Modern Languages), Amitendranath Tagore (Modern Languages)

The concentration in South Asian studies is offered in combination with a modified departmental major in anthropology, art and art history, history, political science, philosophy, or sociology. The requirements are 24 credits in the major department, four semesters of an Indian language*, and 20 credits from the following list, including AS 490.

Formal admission to the concentration requires completion of AS 240 and two semesters of an Indian language. Interested students should consult with the coordinator of South Asian studies as early in their college careers as possible.

*In special cases, Sanskrit or Bengali may constitute an alternative to Hindi-Urdu. Consent of the coordinator is required.

COURSE OFFERINGS

AH 104	Introduction to Asian Art
AN 361	The Peoples and Cultures of India
ECN 223	The Indian Economy
HST 280	History of Southeast Asia
HST 282	Introduction to the History of India
HST 381	History of Early India
HST 383	British Imperialism and Hindu Nationalism in India, 1740-1947
PHL 250	Philosophies and Religions of Asia
PHL 352	Indian Philosophy
PS 334	Political Systems of Southern Asia
SOC 300	Social Stratification in Cross-Cultural Perspective

AS 240	Introduction to India
AS 300	Special Topics in Area Studies
AS 382	Seminar in South Asian Studies
AS 390	Directed Readings in Area Studies
AS 490	Directed Research in Area Studies

Slavic Studies Program

COORDINATOR: Lawrence D. Orton (History)

FACULTY: Alice Garlin (Economics), Robert C. Howes (History), Dmytro Ijewliw (Russian Language and Literature), Helen Kovach-Tarakanov (Russian Language and Literature), James R. Ozinga (Political Science)

The concentration in Slavic studies is offered in combination with a modified major in anthropology, history, political science, philosophy, or sociology. The requirements are 24 credits in the major department, four semesters of Russian language, and 20 credits from the list of Slavic studies courses, including HST 250, PS 337, and AS 490. Admission to the program requires completion of AS 260 and two semesters of Russian. Interested students should consult with the coordinator of the program as early in their college careers as possible.

Students interested in Slavic studies may also major in Russian language and civilization. The major, sponsored by the Department of Modern Languages, requires 16 credits in Russian beyond RUS 216 and 20 credits selected from the list of Slavic studies courses, including AS 490.

COURSE OFFERINGS

ECN 251	The Soviet Economy
HST 250	Introduction to Russian History
HST 254	Eastern European History
HST 352	Kiev and Muscovy
HST 353	Imperial Russia
HST 354	Soviet Russia
HST 359	Russian Intellectual History to Peter the Great
HST 360	Russian Intellectual History since Peter the Great
PS 317	Sino-Soviet Relations
PS 337	The Soviet Political System
PS 377	Communism
AS 260	Introduction to the Slavic World
AS 300	Special Topics in Area Studies
AS 382	Seminar in Slavic Studies
AS 386	Slavic Folk Studies
AS 390	Directed Readings in Area Studies
AS 490	Directed Research in Area Studies

Latin American Studies

COORDINATOR: Kathryn McArdle (Spanish)

FACULTY: William C. Bryant (Spanish), James W. Dow (Anthropology), Edward J. Heubel (Political Science), Mary C. Karasch (History), Richard Mazzara (French, Portuguese), Colin A. Palmer (History)

The concentration in Latin American studies is offered in combination with a modified major in anthropology, art and art history, history, political science, philosophy, or sociology. The requirements are 24 credits in the major department, four semesters of Spanish language, AS 250, and 20 credits from the following list, including AS 490. Admission to the program requires completion of AS 250, and two semesters of Spanish, Portuguese, or French. Interested students should consult with the coordinator of the program as early as possible in their college careers.

Students interested in Latin American studies may also major in Latin American languages and civilization. The major, sponsored by the Department of Modern Languages, requires 24 credits in Spanish beyond SPN 216 and 20 credits selected from the following list, including AS 490. For alternative language requirements, see the Modern Languages entry.

COURSE OFFERINGS

AN 370	Archaeology of Mesoamerica
AN 371	Cultures of Mesoamerica
AN 372	Indians of South America
HST 261, 262	Introduction to Latin American History
HST 363	History of Southern South America
HST 365	The Response to European Colonialism
HST 366	Slavery and Race Relations in the New World
HST 367	History of Mexico
PS 335	Politics of Latin America
AS 250	Introduction to Latin America
AS 300	Special Topics in Area Studies
AS 368	Summer Program in Mexican Studies
AS 385	Seminar in Latin American Studies
AS 390	Directed Readings in Area Studies
AS 490	Directed Research in Area Studies

AREA STUDIES COURSE OFFERINGS

AS 210 Introduction to China (4)

A study of the traditional civilization and modern development of China. Topics include history, philosophy and religion, literature and the arts, government, and social organization.

AS 220 Introduction to Japan (4)

A study of the traditional civilization and modern development of Japan. Topics include history, philosophy and religion, literature and the arts, government, and social organization.

AS 230 Introduction to Africa (4)

An introduction to the geography and ecology of Africa and the history and cultures of African peoples. Attention will be directed also to social organization; economic, political, and religious systems; and problems of social change.

AS 240 Introduction to India (4)

A study of the traditional civilization and modern development of the Indian subcontinent. Topics include philosophy and religion, literature and the arts, history, political structure, and social organization.

AS 250 Introduction to Latin America (4)

A study of the traditional and modern forces in Latin America; the cultures of Indian, European, and African peoples; and a survey of contemporary social and political problems of the area.

AS 260 Introduction to the Slavic World (4)

A study of the traditional civilization and modern development of the Slavic peoples with special emphasis on the Russians. Topics include ethnography, history, literature and the arts, political organization, and the role of the Soviet bloc in the modern world.

AS 300 Special Topics in Area Studies (4)

Interdisciplinary study of a foreign area, or a particular aspect of a foreign area, for which no regular course offerings exist. May be repeated once for a total of 8 credits.

AS 368 Summer Program in Mexican Studies (8)

Oakland faculty cooperate with Mexican faculty to present a set of summer courses focusing on Mexican culture; history, art, political and social problems, folk arts, archaeology, Chicano studies, intensive language, and Mexican literature. Approach emphasizes comparisons with U.S. culture and field work. Courses conducted in both Spanish and English. May be repeated once for additional credits with the consent of the coordinator of Latin American studies.

AS 380 Seminar in Afro-American Studies (4)

Offered to supplement departmental area courses. A study of selected topics dealing with the Afro-American experience. May be taken more than once.

Prerequisite: Permission of instructor.

AS 381 Seminar in East Asian Studies (4)

Offered to supplement departmental area courses. A study of selected topics dealing with East Asia. May be taken more than once.

Prerequisite: Permission of instructor.

AS 382 Seminar in South Asian Studies (4)

Offered to supplement departmental area courses. A study of selected topics dealing with South Asia. May be taken more than once.

Prerequisite: Permission of instructor.

AS 383 Seminar in Slavic Studies (4)

Offered to supplement departmental area courses. A study of selected topics dealing with the Slavic area. May be taken more than once.

Prerequisite: Permission of instructor.

AS 384 Seminar in African Studies (4)

Offered to supplement departmental area courses. A study of selected topics dealing with Africa. May be taken more than once.

Prerequisite: Permission of instructor.

AS 385 Seminar in Latin American Studies (4)

Offered to supplement departmental area courses. A study of selected topics dealing with Latin America. May be taken more than once.

Prerequisite: Permission of instructor.

AS 386 Slavic Folk Studies (2)

An intensive survey of the traditional music, songs, dances, and costumes of selected Slavic cultures. Includes participation in the Slavic Folk Ensemble. May be repeated once for a total of 4 credits.

AS 390 Directed Readings in Area Studies (2, 4, 6, or 8)

Readings from diverse disciplines with focus on a student's area of specialization. Conducted on a tutorial basis by an instructor chosen by the student.

Prerequisite: Permission of department and instructor.

AS 490 Directed Research in Area Studies (2, 4, 6, or 8)

Research relating to the student's area of specialization including completion of a senior essay or research paper. May be offered as a seminar or as a tutorial. Supervised by an instructor from the area studies staff.

Prerequisite: Senior standing, admission to an area concentration, and permission of department and instructor.

THE HONORS COLLEGE

DIRECTOR: Melvin Chernov (History)

COUNCIL: Sheldon Appleton (Political Science), Charles B. Lindemann (Biological Sciences), Lewis N. Pino (Chemistry), Norman Susskind (Modern Languages and Literatures)

The Honors College has been established by the Faculty of Arts and Sciences to meet the needs of highly-motivated students who wish an unusually challenging undergraduate education. It provides a specially-designed general education and additional requirements along with fulfillment of a departmental major in the College of Arts and Sciences or in one of the professional schools at Oakland University. Students currently admitted to or enrolled at Oakland may apply directly to the Honors College for admission; others must apply for admission to Oakland University as well. Application forms are available at the Honors College office. Courses that bear the HC prefix are open only to students who have been accepted into the Honors College.

REQUIREMENTS AND PROCEDURES

The Departmental Major

1. The student must pursue the course of requirements established for completion of a departmental major in the College of Arts and Sciences or of a prescribed course of study in the School of Economics and Management, School of Education, School of Engineering, or School of Nursing.
2. Honors college students will be expected to follow specially designated honors tracks of requirements in departments where they exist.
3. The Honors College Council will accept a student who is not pursuing a standard major (for example, a student with an independent major) if it deems that student's program to be of sufficient breadth, depth, and coherence.

The Honors College General Education Requirements

1. The student must successfully complete the four Honors College core courses (HC 201, 202, 203, 204).
2. The student must successfully complete at least one 300-level course in each of three broad areas aside from that of his/her

major. The four areas (that is, groupings of departments) are: I. Literature and the Arts (Art, Communication Arts, English, Linguistics, Modern Languages and Literatures, Music); II. History, Philosophy, and Area Studies; III. Social Sciences; IV. Natural Sciences and Mathematics. In area IV, the course may be any introductory course normally taken by departmental majors.

3. The student must successfully complete a senior colloquium (HC 401).
4. The student must attain second-year foreign language proficiency.

Advanced Standing

1. The student (normally at the end of the sophomore year) will apply for advanced standing in the Honors College and will either be admitted (after a thorough review of his/her progress and after approval of his/her independent project) or asked to transfer to the university at large.
2. No student with a grade point average below 3.30 will be considered for advanced standing.

The Independent Project

1. The student will complete a major creative or scholarly work, under the supervision of a faculty member in the College of Arts and Sciences (or one of the professional schools when appropriate), after approval of the project by the Honors College Council. The request for approval will normally take place at the end of the student's sophomore year.
2. The student may receive departmental or Honors College independent study credit for all or part of this work.
3. This is to be an independently designed and completed project. Approval of the final report is required for graduation.

The Oral Examination

Soon after beginning the senior year, the student will be examined orally, as arranged by the Honors College Council. The examination will cover the student's independent project, knowledge of his/her major field, and general knowledge. The student's project supervisor will be present, as well as other members of the department, instructors of Honors College core courses, and members of the Honors College Council, as appropriate.

Graduation Grade Point Average and Graduation Honors

1. A grade point average of at least 3.30 is required for graduation.
2. The Honors College student may receive departmental and university graduation honors.

HONORS COLLEGE COURSE OFFERINGS

HC 201, 202, 203, 204 Honors College Core Courses (4 each)

The aim of the core courses is to introduce the student to a range of ways of thinking characteristic of a modern university. Each course is offered annually. Instructors for HC 201 will be drawn from one of the following departments: Art, Communication Arts, English, Linguistics, Modern Languages and Literatures, Music. Instructors for HC 202 will be drawn from the History or Philosophy departments or from the Area Studies Program. Instructors for HC 203 will be drawn from the departments of Economics, Political Science, Psychology, or Sociology/Anthropology. Instructors for HC 204 will be drawn from the departments of Biological Sciences, Chemistry, Mathematical Sciences, or Physics.

HC 401 Honors College Senior Colloquium (4)

Discussion of a broad topic of traditional concern or of an issue of particular current significance. Offered annually.

HC 490 Independent Study (4)

Supervised progress toward the completion of the student's required Honors College independent project. May be repeated for credit. Offered each semester.

OTHER CONCENTRATIONS AND OPTIONS

In addition to the area studies programs and other concentrations already detailed in departmental listings (such as linguistics, theatre arts, and journalism), the College of Arts and Sciences sponsors a number of other interdepartmental offerings. In addition, the college and other academic units on campus sponsor some of these programs jointly.

CONCENTRATION IN AMERICAN STUDIES

COORDINATOR: Jane Eberwein (English)

COMMITTEE: Sheldon Appleton (Political Science), Richard Stamps (Sociology-Anthropology), Patrick Strauss (History), William White (Communication Arts/Journalism)

The American studies concentration is intended both to provide students with a broad understanding of the American experience and to introduce them to the practice of focused interdisciplinary study. The concentration is taken in addition to a departmental major. By electing departmental courses with an American focus in two or three areas outside the major and framing the concentration with two interdisciplinary American studies courses, the student may expect to gain a coherent sense of the national experience and to appreciate the various contributions made by different academic disciplines to understanding this complex topic. Although not a vocationally-directed program, the American studies concentration should be of particular interest to students preparing for careers in law, government, or journalism and to those planning graduate work in American studies or any of its contributing disciplines.

This concentration requires 24 credits in American studies, including AMS 100, AMS 400, and four departmental electives, chosen from the list below. All four electives must be taken outside the student's major department.

AMERICAN STUDIES COURSE OFFERINGS

AMS 100 Introduction to American Studies (4)

A multi-disciplinary examination of one important topic in the American experience. Students will enroll in one of several sections taught by instructors in several different departments. Sections will meet separately for about half the classes and together for the other half. Joint meetings will include guest lecturers, films, etc.

AMS 400 American Studies Colloquium (4)

Examination of one topic in American studies. Course will include

participation by faculty in several departments. Should be taken in junior or senior year.

Prerequisite: AMS 100.

Departmental Electives

Art and Art History: AH 350.

English: ENG 224, 225, 317, 320, 322, 324, 332, 341, 342.

History: HST 214, 215, 220, 291, 292, 302, 306, 307, 310, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323.

Linguistics: LIN 277.

Music: MUS 347.

Philosophy: PHL 260.

Political Science: PS 100, 103, 115, 205, 301, 342, 343, 371.

Sociology-Anthropology: SOC 205, 260, 300, 331, 355, 357, 404; AN 380 and 381.

CONCENTRATION IN ARCHAEOLOGY

COORDINATOR: Gottfried Brieger (Chemistry)

This concentration is designed to prepare students for graduate study in archaeology as well as for students interested in an interdisciplinary approach to human cultural development viewed from historical, aesthetic, and scientific perspectives.

There are 28 credits required for this program:

1. Core: AN 101, CLS 100, and AH 100.
2. 4 credits in old world archaeology: AH 312; CLS 130, 131, 150; or AH 314.
3. 4 credits in new world archaeology: AN 282, 370, 371, 380; HST 306 or 367.
4. 8 credits in methods and field term: AN 383, AH 216.

In addition to the required courses, a number of other courses are recommended for those interested in further expanding their background. These include AH 322 and 326; CLS 337, 339, and 340; and HST 261, 262, 325, 328, and 329; PHY 107.

CONCENTRATION IN COMPARATIVE LITERATURE

COORDINATOR: Richard Mazzara (Modern Languages and Literatures)

COMMITTEE: Helen Schwartz (English)

The concentration in comparative literature may be taken in conjunction with any major. Comparative literature is a

discipline concerned with the systematic principles and methods by which the masterworks of world literature may be analyzed in relation to each other, using such organizing concepts as theme, genre, historical period, or the relationship between Eastern and Western literature.

Students who wish to take the concentration must apply for admission and must develop a program in consultation with one of the members of the Concentration Committee.

The concentration requires 24 credits in literature courses and foreign language competence. Requirements are:

1. LIT 170 and LIT 480 (see Modern Languages and Literatures course offerings pages 135 and 136).
2. 16 credits in departmental courses, distributed among the fields of theme, genre, period, and East-West under the following conditions:
 - a. at least one period course,
 - b. two courses in one field,
 - c. and no more than two courses in one literature (English, French, etc.).
3. Foreign language competence through third-year level, including a foreign language course numbered 355 (Translation into English).

CONCENTRATION IN COMPUTER AND INFORMATION SCIENCE

COORDINATOR: Glenn A. Jackson (Engineering)

COMMITTEE: Benjamin Cheydleur (Engineering), Curtis Chipman (Mathematics), David E. Boddy (Engineering), John McKinley (Physics), Harvey Shapiro (Economics and Management), Robert Simmons (Arts and Sciences)

The concentration in computer science is offered by the School of Engineering and is available on a joint basis to students within a department of the College of Arts and Sciences or the School of Economics and Management as well as to students in the School of Engineering. Many combinations are feasible.

With a major in mathematics, physics, chemistry, biology, or economics, a student may wish to emphasize numerical and scientific computing aspects of computer science. With a major in English, modern languages, history, philosophy, psychology, sociology, or anthropology, a student may wish to take courses in the computer science concentration that emphasize nonnumerical and symbolic data processing, language translation, and list processing. With a major in economics and management, a student may wish to take courses oriented toward application of computers in management data processing.

Admission to the concentration in computer science requires completion of 32 credits, including at least one CIS course. The student must also obtain the approval of an authorized adviser for the concentration in computer and information science by completing the application forms available in Room 248 Dodge Hall. The student's program will then be developed by joint action of the student, the departmental adviser, and the committee.

The computer and information science committee has established the minimal requirement for the concentration of 16 credits in CIS designated courses. Exceptions to this minimal requirement as specified by participating schools and departments are listed in their separate sections of this catalog.

The course offerings in computer and information science are listed on page 277.

CONCENTRATION IN ENVIRONMENTAL STUDIES

COORDINATOR: Paul Tamboulian (Chemistry)

The environmental studies program is intended to introduce students to modes of thought and action relative to environmental issues. Students learn to identify and evaluate alternative solutions to environmental problems. Short- and long-range implication of human activities are analyzed, as they affect resources and public policy.

Four broad areas of inquiry are included in these studies: application of science and technology to environmental quality and resources, the impact of human settlements on ecosystems and human welfare, the implications of human life support activities, including food, transportation and planning, and the use, reuse, and depletion of physical and biological resources.

Through a multidisciplinary approach problem-solving methods, decision-making programs, and benefit-risk analyses can best be understood. Thus the program does not offer a major, but concentrations are available in conjunction with existing majors in cooperating departments. Minimum requirements for the concentration are 24 credits in ENV and related courses, to be developed in consultation with the program coordinator. Programs of individualized independent study and field work are a frequent feature of the concentration.

Courses of related interest in many departments are often suitable for inclusion in an environmental studies concentration. These include, but are not limited to: AN 102, AH 363, BIO 237, BIO 301, BIO 343, ECN 225, ECN 308, ECN 309, PSY 205, SOC 308, SOC 370, EGR 415, HST 316, 317, HST 350, 351, PHL 219, PHY 106

and 107.

COURSE OFFERINGS

ENV 151 Introduction to Environmental Studies (4)

A general introduction to selected social and political aspects of typical environmental issues. Topics chosen from current literature and taught predominantly by social science faculty.

ENV 181 Introduction to Environmental Studies (4)

A general introduction to selected scientific and technical aspects of typical environmental issues. Topics chosen from current literature and taught predominantly by science faculty. Especially designed for non-science majors. Science majors should take ENV 271.

Prerequisite: Sophomore standing.

ENV 182 Introductory Environmental Topics (4)

A course complementing ENV 181 emphasizing selected areas of resource use and management. Content varies according to semester.

Prerequisite: Sophomore standing.

ENV 212 Energy and the Environment (4)

Basic facts of energy: its sources, forms, the roles it plays, and its ultimate sinks. Emphasis is placed on learning the laws that limit energy utilization, the energy flow patterns that affect human welfare, the effects of energy use on the environment, and the facts and alternatives associated with current energy-related problems.

Prerequisite: ENV 181. Two years of high school mathematics desirable.

ENV 221 Subsistence and Technology in Nonindustrial Society (4)

Identical with AN 221.

ENV 233 Food and Nutrition (4)

An introduction to the science of nutrition, with applications to the human diet. Includes study of new and processed foods, additives, and the relationships of geography and lifestyles to nutrition.

Prerequisite: Sophomore standing; background in biology and chemistry desirable.

ENV 271 Environmental Science (4)

A technical introduction to the scientific issues and principles underlying contemporary environmental issues. Especially designed for students in science, mathematics, and engineering majors.

Prerequisite: Sophomore standing and one year of college-level science.

ENV 305 Selected Topics (1, 2, 4, 6, or 8)

Studies in special areas, often individually arranged. May be repeated for credit. Preparation of study plan and approval of the instructor listed is required prior to registration. Graded S/N.

ENV 313 Problems of Energy and Environment (5)

Methods of determination of environmental costs of current energy consumption in agriculture, electric power generation, nuclear waste disposal, transportation, and industry. Advantages and disadvantages of alternative energy sources, consumption patterns, and conservation efforts are examined.

Prerequisite: CHM 115 or PHY 152.

ENV 362 Impact of Urbanization (4)

A scientifically-based environmental impact analysis of urbanization. Includes a consideration of the climate, hydrology, soils, physiography,

and ecological relationships in suburban, urban, and metropolitan areas. Prerequisite: Junior standing. Prior experience in metropolitan studies desirable.

ENV 372 Air Chemistry (4)

A technical evaluation of the nature and composition of the earth's atmosphere, both in its natural state and as it has been affected by man. Some discussion of air pollution control will be included. Identical with CHM 372.

Prerequisite: CHM 203 and 305.

ENV 373 Water Resources (4)

Analysis of natural water systems, introductory hydrology, the chemistry of eutrophication, and wastewater systems. Emphasis is on applications, including water pollution abatement and management strategies. Identical with CHM 373.

Prerequisite: CHM 203 and junior standing.

ENV 421 Health Effects of Environmental Pollutants (4)

Technical analysis of the relationships between environmental pollutants and human health. Includes sources of pollutants and modes of action, occupational hazards, low level effects, and corrective procedures.

Prerequisite: Junior standing and permission of instructor.

CONCENTRATION IN FILM AESTHETICS AND HISTORY

COORDINATOR: Robert T. Eberwein (English)

The concentration in film aesthetics and history, sponsored by the departments of English, Modern Languages and Literatures, and Communication Arts, allows students to explore theoretical and critical issues generated by film as an art and as a form of communication; it also introduces students to the history of film, with emphasis on narrative and technical advances.

Twenty-four credits are required, distributed as follows:

1. Introduction: ENG 250 and LIT 251.
2. History: Any two of CIN 300, 301, 302.
3. Theory: SCN 303 and ENG 392.

COURSE OFFERINGS

CIN 300 History of Film: The Silent Era (4)

Survey of major directors and issues: Griffith, Eisenstein, Chaplin, and others such as Murnau, Pabst, Lang; montage, realism.

CIN 301 History of Film: The Sound Era to 1958 (4)

Examination of major genres such as westerns, gangster films, musicals; directors such as Welles, Wyler, Hitchcock, Renoir, DeSica; and movements such as Italian Neo-Realism.

CIN 302 History of Film: The New Wave and Beyond (4)

Study of film since 1959: New Wave directors such as Truffaut, Godard, Resnais; major artists such as Fellini, Bergman, Kubrick; experimental films and new developments.

CONCENTRATION IN PREPROFESSIONAL STUDIES IN MEDICINE, DENTISTRY, AND OPTOMETRY

COORDINATOR: Moon J. Pak (Health Sciences)

COMMITTEE: Gottfried Brieger (Chemistry), Egbert W. Henry (Biological Sciences), John R. Reddan (Biological Sciences), Robert L. Stern (Chemistry), Nalin J. Unakar (Biological Sciences), Barry S. Winkler (Biological Sciences)

Students intending to pursue careers in the medical, osteopathic, or dental professions are expected to complete a concentration consisting of the following:

1. Biology, 20 credits, including laboratories
2. Chemistry, 20 credits, including laboratories
3. Mathematics, 8 credits
4. Physics, 10 credits, including laboratories

In chemistry, mathematics, and physics courses, students should opt for the course sequences that are more rigorous in academic context.

These are the minimum requirements for admission to the various medical, osteopathic, and dental schools in Michigan and elsewhere. The committee strongly recommends following additional courses for better preparation for the Medical College Aptitude Test (MCAT) as well as the medical school curriculum:

1. Science: Genetics (BIO 341, 342), developmental biology (BIO 323, 324), biochemistry (BIO 407, 408, or CHM 351, 357-358)
2. Humanities: Vocabulary and Etymology (CLS 102), Latin (LTN 114-115)

Students intending to pursue a career in the optometric profession are recommended to take the following courses:

1. Biology, 20 credits, including laboratory
2. Chemistry, 20 credits, including laboratory
3. Mathematics, 12 credits, including calculus (MTH 154, 155)
4. Physics, 10 credits, including laboratory
5. Introductory psychology (4 credits), English (8 credits), social science (8 credits)

This concentration does not constitute a major. Students must elect a major from among those offered by the university. Interested students must consult the Advisory Committee to receive counseling and assistance in planning their academic programs (Health Science Advising Office, 169 Dodge Hall).

CONCENTRATION IN PUBLIC MANAGEMENT

COORDINATORS: Roger Marz (Political Science) and Karl Gregory (Economics and Management)

The Department of Political Science, in cooperation with the School of Economics and Management, offers a concentration in public management. By the meshing of appropriate courses in political science, economics, management, and mathematics, the student will acquire skills essential to administrative responsibilities in government and other public and community agencies. The required courses for the concentration are: PS 100, 205, 350, and 453; ECN 200, 201, and 301; MGT 200 and 436; and MTH 121 and 122.

CONCENTRATION IN RELIGIOUS STUDIES

COORDINATOR: Leonardas V. Gerulaitis (History)

The religious studies program offers a series of courses on religion, both Western and Eastern, traditional and contemporary. These courses do not seek to confirm or attack any particular religious point of view; they are taught in the same scholarly and objective spirit as the other courses in the university and aim at understanding a pervasive human phenomenon. They are grouped into two types: historical studies and systematic studies.

At present, the program offers a concentration in religious studies consisting of at least 20 credits in religion, which may be taken jointly with a modified major (24 credits) in philosophy, or with a full major in any other department of the College of Arts and Sciences.

Students wishing to make religion the focus of an independent major will receive the support of the Committee on Religious Studies. Interested students should see the concentration chairperson for further information.

In addition to the religion courses, several collateral courses are suggested. They are CLS/ENG 312, HST 325, and PHL 205.

Courses with REL 200 numbers only require sophomore standing; courses with REL 300 numbers require one previous course in religious studies at Oakland, unless identical with departmental courses having different prerequisites.

COURSE OFFERINGS

Historical Studies

REL 200 Topics in the Historical Study of Religion (4)

The topic varies. Sample topics include: the New Testament, medieval mysticism, early Buddhism, the Protestant Reformation, Christ and Caesar, 18th and 19th century attacks on religion. May be repeated for credit.

REL 202 The Jewish Tradition (4)

Selected ideas and institutions in the development of Judaism from its pre-exilic roots to the present.

REL 203 The Christian Tradition (4)

Study of the most important Christian ideas and institutions from Jesus to the present.

REL 211 The Bible as Literature (4)

Identical with CLS/ENG 211.

REL 250 Philosophies and Religions of Asia (4)

Identical with PHIL 250.

REL 295 Contemporary Religious Movements (4)

Begins with a review of institutional religion in America, then surveys underground church movements, Zen, Yoga, TM, and others. Field work possible.

REL 304 The Islamic Tradition (4)

Selected ideas and institutions in the history of Islam.

REL 307 American Religious History (4)

Identical with HST 307.

Systematic Studies**REL 220 Topics in the Systematic Study of Religion (4)**

The topic varies. Sample topics include: mythology, psychoanalysis and religion, religion and education, types of religious communities, shamanism, the hero. May be repeated for credit.

REL 225 Philosophy of Religion (4)

Identical with PHIL 225.

REL 227 Psychology of Religion (4)

Basic data of religious experience in relation to motivation, cognitive structure, and personality; problems of religious symbolism, verbal and nonverbal; dynamics of religious movements; growth, propagation, and preservation of orthodoxy; varieties of reform. Offered every two years.

REL 229 Religion and Literature (4)

Study of a few masterpieces of world religious literature, such as Greek tragedy, Hindu epic, Dante and Milton, with an attempt to generalize about the use of religious themes in literature and about literature as an expression of religious belief. Offered every two years.

REL 271 Magic, Witchcraft, and Religion (4)

Identical with AN 271.

REL 291 Religion and Contemporary Moral Problems (4)

Investigation of the theological and ethical reasons for the emergence of a new attitude toward moral questions. Protestant, Catholic, Jewish, and secular viewpoints on some of these: love, sex, civil disobedience, criminal punishment, violence, war, suicide, and death. Offered every two years.

REL 305 Sociology of Religion (4)

Identical with SOC 305.

REL 390 Directed Readings in the Study of Religion (4)

Individual study of a topic not covered by regular courses, with the guidance of a faculty tutor. May be repeated for credit.
Prerequisite: Permission of concentration chairperson.

CONCENTRATION IN SOCIAL JUSTICE AND CORRECTIONS

COORDINATOR: Jesse R. Pitts (Sociology and Anthropology)

This concentration requires a minimum of 20 credits and is intended to be taken in conjunction with a full major in any department of the college. It will provide career-oriented education for students interested in the social forces producing delinquency and crime, in the evaluation of social planning for crime prevention and control, and in the operation of police organizations and correctional institutions.

A student must be admitted formally to the program and meet the following requirements:

1. 12 credits chosen from SOC 320, 323, 327, 425, PS 241, and PS 343.
2. 4 or 8 credits of SOC 430.

With permission of the concentration chairperson, students may substitute the following courses for those above: PSY 220, PSY 273, PS 342, PHL 221, SOC 437, and SOC 440.

CONCENTRATION IN SOCIAL SERVICES

COORDINATOR: Jacqueline R. Scherer (Sociology and Anthropology)

This concentration requires a minimum of 20 credits and is available to students throughout the university regardless of major. It is designed primarily for students who intend to pursue graduate studies in social services or who are interested in such topics as analysis of social programs and social welfare policies, exploration of the social and psychological dimensions of service delivery particularly as these relate to professional development, and integration of theoretical and applied approaches to problem solving.

Twenty credits are required, distributed as follows:

1. Sociological Conceptual Orientation: SOC 210 and 404.
2. Psychological Foundations (two of the following): PSY 220, 222, 271, and 274.
3. Analytical Skills/Field Work: SOC 470.

Students are encouraged to elect additional courses in psychology, human resources development, sociology, and related areas.

SECONDARY TEACHING SOCIAL STUDIES PROGRAM

The secondary teaching social studies program offers either a baccalaureate program with a major in social studies or a separate social studies minor. Students seeking the Bachelor of Arts degree with a major in social studies will take a minor in sociology, psychology, history, or political science to achieve secondary teacher certification. The Michigan secondary provisional certificate is valid for teaching all subjects in grades 7 and 8, and in subject matter areas in grades 9 to 12 in which the student has completed a major or minor. (See page 243 for a listing of teacher certification requirements).

Bachelor of Arts with Teaching Major in Social Studies

To complete the degree program the student must fulfill all the requirements set by the College of Arts and Sciences for B.A. candidates (see page 47).

The social studies program requires a core of social science courses with concentrated study in three social science content areas. The student must:

1. Complete a total of 40 credits in social studies and the social sciences, including:
 - a. SS 100 and 200 (prerequisite for ED 455, Internship).
 - b. 16 credits in political science, evenly distributed between American politics and non-American/comparative politics.
 - c. 16 credits in history, evenly distributed between American history and world history.
2. Complete a minor of at least 20 credits in one of the following social sciences: sociology, psychology, history, or political science. If a student elects to minor in either political science or history, 16 credits in another social science or from an interdisciplinary social science group must be substituted in the major.
3. Complete a professional component of 36 credits:
 - a. ED 100 and 200 must be taken concurrently.
 - b. ED 100 and 200, ED 370, and ED 428 must be taken sequentially in three semesters and are each prerequisites to ED 454 and ED 455.
 - c. ED 454 must be taken concurrently with ED 455.
 - d. ED 344 and 345 may be taken at any time in the student's program prior to ED 455.

Secondary Teaching Minor in Social Studies

A teaching minor in social studies requires the completion of SS 100 and 20 additional credits in the social sciences. At least three courses must be taken at the 200 level or higher. Students should concentrate in two of the social sciences, earning a minimum of 8 credits in each. Students intending to minor in social studies are required to see their secondary social studies academic adviser upon entry into a teacher certification program to agree upon the social sciences concentration and distribution. This minor may not be taken by students majoring in secondary social studies; it is open to any other student with a secondary teaching major.

COURSE OFFERINGS

SS 100 Introduction to Social Studies (4)

This introductory course to an interdisciplinary program in social science provides an overview of the philosophical and historical development of individual social science disciplines (psychology, sociology, anthropology, political science, history, economics, and geography). Students may examine key concepts, methods, and scholarly literature in these fields and apply their work to selected current issues through interdisciplinary models. Required of all social studies majors and minors.

SS 200 Inquiry Skills for the Social Scientist (4)

This course continues the interdisciplinary focus begun in SS 100. Current issues form its content. Students are expected to apply interdisciplinary investigative models to these issues in an effort to effect problem solution. Required of all social studies majors prior to student teaching. Prerequisite: SS 100.

For social studies course offering in elementary education, see page 262.

TEACHING MINOR IN SCIENCE

The teaching minor in science requires a minimum of 24 credits, selected from courses offered by the departments of Biological Sciences, Chemistry, and Physics. Course selections must cover two of the three disciplines and must include 12 credits in each discipline applied to the minor. All courses must be at the levels of BIO 111, CHM 104, PHY 101, or above, and they may not include courses in the discipline of the student's major.

PRE-LAW STUDIES

ADVISER: Carl R. Vann (Political Science)

There is no formalized pre-law curriculum at Oakland because no set of specific courses is necessary for either admission to, or success in, American law schools. Students planning to attend law school after graduation should major in a field in which they have both interest and aptitude; the actual field is considerably less important for admission than the overall success of the

student in college training as measured by cumulative grade point average and scores on the Law School Aptitude Test.

Rather than mastery of any particular subject matter, law schools require of the incoming student certain basic skills, particularly the ability to think logically and to express oneself orally and in writing in a coherent and precise manner. No one academic discipline possesses a monopoly on development of these abilities. The best advice to students planning legal careers is to choose courses that emphasize analytical thinking and critical writing and to do well in them.

If there are any specific courses that might be recommended to pre-law students because of the subject matter, they would be courses which deal with the operation of American institutions: particularly the basic courses in American politics, history, and economics. For students interested in general questions about law or legal techniques — from the perspective of the liberal arts and not as a technical discipline as taught in law school — the following courses should be of some interest: PHL 319, PS 241, PS 272, PS 273, PS 342, PS 343, and SOC 320. It must be emphasized, however, that none of these courses is in any way required for, or restricted to, pre-law students.

Both the library and the Department of Political Science maintain a collection of law school catalogs; a member of the Department of Political Science serves as the pre-law adviser for students with specific questions or problems. Booklets containing application forms for the Law School Aptitude Test should be obtained early in the senior year from the Career Advising and Placement Office or the Political Science Department.

OFF-CAMPUS STUDIES PROGRAMS

The College of Arts and Sciences administers an off-campus independent study program which allows a student to propose his/her own course of study for the semester off-campus. The following standards and procedures apply:

1. Any undergraduate student in good standing will be eligible to participate in the program after the completion of two semesters in residence.
2. A written proposal describing a course of activity will be prepared by a student applicant prior to beginning the program.
3. This proposal and the off-campus work it describes must receive the support and involvement of at least three members of the faculty and the approval of the dean.
4. All arrangements for off-campus work must be completed and filed by the end of the advising period in the semester preceding the semester of off-campus study.

5. It is expected that part of the preparatory work will include the designation of course equivalents totaling at least 8 credits for the independent study to be accomplished. This is to be effected by negotiation with the supporting faculty members.
6. Whenever credit is sought toward the completion of a major, the department, through its chairperson, must agree to the value of the independent work.
7. The dean of the college will require a release from parents absolving the university of responsibility for the well-being of students under 18 years of age while they are participating in off-campus independent study.
8. The initial approval of a program for a student will be for one semester with the provision that the student may request an extension of the program for additional semesters.
9. The student must be registered at Oakland University and pay the required fees during the period of independent study.

Students interested in overseas study programs sponsored by other universities and organizations, both domestic and foreign, should contact the Overseas Study Information Center located in the Department of Modern Languages. Information on work-study opportunities sponsored by institutions other than Oakland University can be obtained from the Placement Office and from the Department of Modern Languages and Literatures.

SCHOOL OF ECONOMICS AND MANAGEMENT

OFFICE OF THE DEAN

Norton C. Seeber, Dean
Eleftherios N. Botsas, Chairperson, Department of Economics
John E. Tower, Assistant Dean
Harvey A. Shapiro, Assistant to the Dean

PROFESSORS: Eleftherios N. Botsas, Karl D. Gregory, Robbin R. Hough, Siddheshwar Mittra, Norton C. Seeber, Andrew C. Stedry

ASSOCIATE PROFESSORS: Daniel N. Braunstein, David P. Doane, John E. Tower, Alan G. Weinstein

ASSISTANT PROFESSORS: Nancy S. Barry, Alice C. Gorlin, Douglas D. Gregory, Yong-Ha Hyan, Kenneth B. Moberg, Gadis Nowell, Barnett R. Parker, Richard M. Reese, Socrates D. Tauntas

INSTRUCTOR: Diane B. Herker

ADJUNCT PROFESSOR: Theodore O. Yntema

VISITING INSTRUCTOR: Paul T. Witt

VISITING LECTURERS: Paul Banas, Marilyn R. Cooper, David Essig, Paul Lorenz, Carl P. Moore, Francis J. St. Onge, Robert H. Schappe, Charles T. Weber

The School of Economics and Management offers programs for persons interested in obtaining the skills and information necessary for the management of profit-making businesses, not-for-profit enterprises (e.g., health care institutions, educational institutions, cooperative societies), and governmental units. The programs include: a Bachelor of Arts with a major in economics, a Bachelor of Science in management, a Bachelor of Science with an independent major, and concentrations in management, economics, international management, and international economics for students earning degrees in other schools and colleges of the university.

The school also offers concentrations in a functional field for students in the program for the Bachelor of Science in management. These concentrations include accounting, computer and information science, economics, finance, human resources management, and public management. Students in

either economics or management may also earn concentrations offered by other units in the university, including concentrations in Afro-American studies, American studies, archaeology, computer and information science, environmental studies, journalism, social justice and corrections, and statistics.

The School of Economics and Management offers a Master of Science in Management degree. Consult the *Oakland University Graduate Study Catalog* for more information.

The curriculum described below is effective for students entering the university in 1977-78. Students enrolled prior to the fall 1977 semester may, at their option, satisfy either the present or the older requirements for graduation.

UNDERGRADUATE PROGRAM LEADING TO THE BACHELOR OF ARTS WITH A MAJOR IN ECONOMICS

If a student elects the liberal arts major in economics, he/she will have the opportunity to combine an emphasis on the concepts and tools of economic analysis, a broad general education, and the freedom to take several courses in other areas of interest. The student will begin to learn to apply economic analysis to major problems that face the nation and the world today.

An education in economics is an excellent background for professional education in law schools and in graduate schools of business administration, public administration, or management. For students who plan to enter the work force directly after graduation, the economics degree provides entrance to management training programs in larger companies, to civil service jobs in government, and to employment in other not-for-profit institutions. To be employed as a professional economist or to teach economics, a student normally will have to proceed to graduate school and obtain at least a master's degree in economics and preferably a doctorate.

Requirements for the Degree of Bachelor of Arts with a Major in Economics

A student with a major in economics must meet the following requirements in order to graduate:

1. Have completed at least 124 credits.
2. Have completed 32 credits, including 12 credits in ECN courses, at Oakland University.
3. Have completed at least 32 credits in courses at the 300 level or above.
4. Have completed, in residence at Oakland, the last 8 credits needed to complete the baccalaureate requirements.

5. Have a cumulative grade point average of at least 2.00 in courses taken at Oakland University and in courses in the major.
6. Have completed at least 8 credits in electives.
7. Have obtained a certification of English composition proficiency as described on page 40 of this catalog.
8. Have completed a general education program of 40 credits.
9. Have completed the requirements for a major in economics.
10. Be in substantial compliance with all legal curricular requirements.

General Education

Economics students satisfy the general education requirement by completing the general education program of the College of Arts and Sciences, as described on pages 48-52 of this catalog, by fulfilling the requirements of the Honors College, as described on page 194, or by fulfilling the requirements of the New Charter College program, as described on page 292.

Economics Major Requirements

1. To obtain a background in mathematics, computers, and another social science discipline the student is required to take the following cognate courses:

MTH 121-122 Introductory Mathematics for the Social Sciences (MTH 121 is linear or matrix algebra and MTH 122 is calculus)

or MTH 154-155 Calculus

CIS 120 Introduction to Computer Programming
or MGT 203 BASIC Programming or any other course in computer programming

Social Science Two courses in one of the social sciences other than economics

2. The required economics core program courses are:

ECN 200 Introduction to Macroeconomics

ECN 201 Introduction to Microeconomics

ECN 301 Intermediate Microeconomic Analysis

ECN 302 Intermediate Macroeconomic Analysis

ECN 304 Statistical Methods for the Social Sciences

ECN 418 Selected Topics in Economic Policy

or ECN 480 Seminar in Economics

3. The economics elective requirement is 16 additional credits in courses numbered ECN 300 or higher. Eight of these economics elective credits must be in courses numbered ECN 400 or higher. No more than 4 credits in ECN 392, 490, 494, or 497 may be used as a required economics elective.

Requirements for Major Standing

Admission to major standing in economics requires: certification of English proficiency; completion of ECN 200-201, ECN 301, ECN 302, ECN 304, MTH 121-122 (or equivalent); completion of 56 credits or more; and at least a 2.00 cumulative grade point average overall and in economics and required mathematics courses.

Standard Program for the B.A. with a Major in Economics

First Semester

Freshman Year:

LS 100

MTH 121

Social science course

Elective

Second Semester

LS 101

MTH 122

Arts course

Language/Thought course

Sophomore Year:

ECN 200

CIS 120

Social science course

Language/Thought course

Elective (2 credits)

ECN 201

ECN 304

Natural science course

History/Philosophy course

(Western group)

Junior Year:

ECN 301

ECN elective (300-level)

Area studies

(Non-Western group)

Elective

ECN 302

ECN elective (300- or 400-level)

Literature course

Elective

Senior Year:

ECN elective (400-level)

ECN elective (400-level)

Elective

Elective

ECN 418 or 480

Elective

Elective

UNDERGRADUATE PROGRAM LEADING TO THE BACHELOR OF SCIENCE IN MANAGEMENT

The management program provides an education for management (i.e., the effective use of resources for defined objectives), rather than an education which describes the practices and institutions of business. The program aims to develop the transferable skills which make adaptive and innovative learners, and it enables graduates to understand and manage changing situations, whether these be in profit-oriented enterprises or in not-

for-profit enterprises, public or private. In this program, a general education is combined with the development of analytical approaches which will enable the student to find new answers to the increasingly complex and changing problems faced by managers and technical personnel in both private business and public organizations. Because education for management is a continuing process throughout a management career, the program seeks to give students the kind of experience that will provide the foundation for adaptability within our rapidly changing modern environment.

The management major obtains the background necessary for entering many positions in business, government, and administration; industry training programs; or graduate schools of management. The program's emphasis on analysis and analytical tools, such as the computer, opens the way to positions in many areas of rapidly developing technology and expanding employment opportunities.

To aid in obtaining initial entry into various positions in business, government, and other institutions, the management program offers the student opportunity to concentrate elective work either in a functional area of management or in some area of academic interest outside of management.

Requirements for the Degree of Bachelor of Science in Management

A student with a major in management must meet the following requirements in order to graduate:

1. Have completed at least 124 credits.
2. Have completed 32 credits, including 12 credits in MGT courses, at Oakland University.
3. Have completed at least 32 credits in courses at the 300 level or above.
4. Have completed, in residence at Oakland, the last 8 credits needed to complete the baccalaureate requirements.
5. Have a cumulative grade point average of at least 2.00 in courses taken at Oakland University and in courses in the major, including the cognate courses.
6. Have completed at least 8 credits in electives.
7. Have obtained certification of English composition proficiency, as described on page 40.
8. Have completed a general education program of 28 credits.
9. Have completed the management major requirements.
10. Be in substantial compliance with all legal curricular requirements.

General Education

Students in management may satisfy the general education requirement by meeting the requirements described below, by fulfilling the requirements of the Honors College of Arts and Sciences as described on page 194, or by fulfilling the requirements of New Charter College as described on page 292. The School of Economics and Management requires that each student take at least 28 credits in general education (as described in the College of Arts and Sciences section on pages 48-52) distributed as follows:

1. One course from each of the following distribution fields: Arts, History/Philosophy (Western group), Area Studies (non-Western group), Literature, and Natural Sciences.
2. Two courses in one of the social sciences other than economics.

Management Major Requirements

1. To obtain a basic set of skills useful in management, the student is required to take the following economics, mathematics, and computer programming cognate courses:

MTH 121-122 Introductory Mathematics for the Social Sciences (MTH 121 is linear or matrix algebra and MTH 122 is calculus)

or MTH 154-155 Calculus

CIS 120 Introduction to Computer Programming
or MGT 203 BASIC Programming, or any course in computer programming

ECN 200 Introduction to Macroeconomics

ECN 201 Introduction to Microeconomics

ECN 301 Intermediate Microeconomic Analysis

2. Required management core courses:

MGT 200 Introductory Financial Accounting

MGT 304 Statistical Methods for Management

MGT 306 Management Systems Analysis

or ECN 302 Intermediate Macroeconomic Analysis

MGT 330 Organizational Behavior I

MGT 331 Organizational Behavior II

MGT 435 Management Strategies and Policies

or MGT 436 Public Management Strategies and Policies

Choice of a quantitative methods course:

MGT 305 Computer Systems for Problem Solving

MGT 340 Quantitative Methods of Management Science

MGT 443 Operations Management

MGT 444 Simulation in Management

ECN 405 Econometrics

MOR 322 Mathematical Models in the Social Sciences

MOR 342 Introduction to Operations Research

3. The student completes his/her work in management by elect-

ing 16 additional credits offered by the School of Economics and Management. These electives must be chosen from among the economics or management courses numbered 300 or higher. At least 8 credits must be at the 400 level. No more than 4 credits in MGT 390, 392, 490, or 494 may be used as a required elective. To guide the student in the selection of these electives and to allow him/her to indicate his/her area of interest, concentrations in accounting, computer and information science, economics, finance, human resources management, and public management have been developed.

Requirements for Major Standing

Admission to major standing requires: certification in English proficiency; the completion of ECN 200-201, ECN 301, MGT 200, MGT 304, and MTH 121-122 (or equivalent); the completion of 56 credits; and cumulative grade point average of at least 2.00 overall and in management, economics, and required mathematics courses.

Standard Program for the B.S. in Management

The following list should be viewed as an example only.

First Semester	Second Semester
Freshman Year:	
LS 100	LS 101
MTH 121	MTH 122
Social science course	Literature course
Elective	Natural science course
Sophomore Year:	
ECN 200	ECN 201
MGT 200	MGT 304
CIS 120	Social science course
Arts course	History/Philosophy course (Western group)
Junior Year:	
ECN 301	MGT 306 or ECN 302
MGT 330	MGT 331
MGT/ECN elective (300- or 400-level)	MGT/ECN elective (300- or 400-level)
Area studies course (non-Western group)	Elective
Senior Year:	
Quantitative methods course (ECN 405, MGT 305, 340, 443, 444, or MOR 322, 342)	MGT 435
MGT/ECN elective (400-level)	MGT/ECN elective (400-level)
Elective	Elective
Elective	

INTERNAL CONCENTRATIONS FOR MANAGEMENT MAJORS

For a student who desires to specialize in a functional area of management, the School of Economics and Management has developed the following concentrations. These concentrations consist of a suggested set of 16-38 credits in courses which will provide the student with more extensive training in a specific field of management.

Concentration in Accounting

COORDINATOR: Diane B. Herker

The concentration in accounting is designed to prepare the student for a career in accounting as an independent auditor or a career in a profit-making business, a not-for-profit enterprise, or the government.

To obtain the concentration in accounting, the student must complete the 38 credits specified below with an average grade of 2.00 or better:

CIS 120-121	Introduction to Computer Programming
or CIS 180	Introduction to Computer Science I
MGT 200	Introductory Financial Accounting
MGT 304	Statistical Methods for Management
MGT 310	Managerial Accounting
MGT 311	Intermediate Accounting
MGT 411	Auditing
MGT 415	Tax Accounting
MGT 424	Legal Environment of Enterprise
Choice of either:	
MGT 412	Behavioral Effects of Accounting Information
MGT 414	Accounting Theory
MGT 416	Contemporary Issues in Accounting

Concentration in Computer and Information Science

COORDINATOR: Harvey Shapiro

The concentration in computer and information science is offered to management majors as a joint program of the School of Economics and Management and the Computer and Information Science Concentration Committee. The concentration specifies a set of courses that will provide more facility with computer programming languages and applications of this knowledge to management problems.

To obtain the concentration in computer and information science, the student must complete the 16 credits specified below with an average grade of 2.00 or better:

CIS 120-121	Introduction to Computer Programming
or CIS 180	Introduction to Computer Science I
and CIS 181	Introduction to Computer Science II
or CIS 220	Computer-Based Information Systems
MGT 305	Computer Systems for Problem-Solving
MGT 306	Management Systems Analysis

Concentration in Finance

COORDINATOR: Kenneth Moberg

The concentration in finance develops the specific skills, modes of analysis, and institutional information useful in working in the accounting and finance areas of a profit-making business or not-for-profit enterprise. The concentration program includes advanced work in accounting and basic and advanced work in finance.

To obtain the concentration in finance, the student must complete the 25 credits specified below with an average grade of 2.00 or better:

MGT 200	Introductory Financial Accounting
MGT 321	Monetary and Fiscal Theory and Policy
MGT 322	Managerial Finance I
MGT 422	Managerial Finance II

A choice of either:

MGT 310	Managerial Accounting
MGT 311	Intermediate Accounting

One course from the following electives:

MGT 320	Personal Financial Management
ECN 323	International Economic Relations
MGT 415	Tax Accounting
MGT 421	Investment Analysis
MGT 423	The Multinational Firm

Concentration in Human Resources Management

COORDINATOR: Daniel N. Brounstein

The concentration in human resources management develops the requisite skills to administer the various personnel functions in organizations. It is primarily for students who intend to pursue careers where the management of people at work is a central concern (e.g., personnel management, labor relations, and first-line supervision). Emphasis is placed on acquiring an in-depth understanding of the tools and techniques used in the acquisition, development, and utilization of an organization's

human resources. As such, the program will include broad coverage of such topics as personnel psychology, personnel administration, and labor-management relations, in addition to a basic knowledge of organizational behavior.

To obtain the concentration in human resources management, the student must complete the 24 credits specified below with an average grade of 2.50 or better and with not less than a 2.0 in any course:

MGT 330-331	Organizational Behavior I-II
MGT 433	Labor-Management Relations
MGT 434	Management of Human Resources

Two courses from among the following:

MGT 430	Assessment of Organizational Behavior
MGT 431	Leadership and Group Performance
MGT 432	Motivation and Work Behavior
MGT 437	Job Design
ECN 368	The Economics of Human Resources

Students wishing to pursue this concentration are advised to take MGT 330 and 331 in their second year.

Concentration in Public Management

COORDINATOR: Karl D. Gregory

The concentration in public management is offered jointly with the Department of Political Science. It is designed to provide the student with a more extensive understanding of the institutions and operations of the political system and of governmental agencies. The student obtains some of the particular skills and perspectives that relate to working for nonprofit enterprises and, in particular, governmental units.

To obtain the concentration in public management, the student must complete the 24 credits specified below with an average grade of 2.00 or better:

ECN 336	The Economics of the Public Sector
PS 100	Introduction to American Politics
PS 205	Politics of the Local Community
PS 350	Public Administration
PS 453	Public Budgeting
MGT 436	Public Management Strategies and Policies

Concentration in Economics (for Management Majors)

COORDINATOR: Sid Mitra

For management majors who would like to combine their management education with an emphasis on economics, the

Department of Economics offers a concentration in economics for management majors.

To obtain the concentration in economics, management majors must complete the 24 credits specified below with an average grade of 2.00 or better:

ECN 200	Introduction to Macroeconomics
ECN 201	Introduction to Microeconomics
ECN 301	Intermediate Microeconomic Analysis

Choice of either:

ECN 302	Intermediate Macroeconomic Analysis
ECN 303	Economic Growth, Fluctuations, and Forecasting

or ECN 321 Monetary and Fiscal Theory and Policy

Two courses from among the following:

ECN 309	Urban Economics
ECN 310	Economics of the Environment
ECN 323	International Economic Relations
ECN 325	Industrial Organization
ECN 326	Economic Development
ECN 327	African Economic Development
ECN 328	American Economic History
ECN 336	Economics of the Public Sector
ECN 350	Comparative Economic Systems
ECN 368	Economics of Human Resources
ECN 400	Advanced Systems Analysis
ECN 409	Regional Economics
ECN 417	Advanced Economic Theory
ECN 418	Selected Topics in Economic Policy
ECN 420	International Trade and Finance
ECN 423	The Multinational Firm
ECN 433	Labor-Management Relations
ECN 467	Economics of Health Care
ECN 480	Seminar in Economics

CONCENTRATIONS IN MANAGEMENT OR ECONOMICS FOR OTHER MAJORS

Concentration in Management

COORDINATOR: John Tower

For students in other majors who would like to combine their major with an introduction to the skills, analytical technique, and institutional material obtained in management courses, the School of Economics and Management offers a concentration in management.

To obtain the concentration in management, the student must

complete the 25 credits specified below with an average grade of 2.00 or better:

ECN 200	Introduction to Macroeconomics
ECN 201	Introduction to Microeconomics
MGT 200	Introductory Financial Accounting
MGT 330	Organizational Behavior I
2 MGT electives (300 or 400 level)	

Concentration in International Management

COORDINATOR: Eleftherios N. Botsas

For students in other majors, particularly modern languages and area studies, who would like to combine their major with an introduction to the skills, analytical technique, and institutional material related to international management and the multinational firm, the School of Economics and Management offers the concentration in international management.

To obtain the concentration in international management, the student must complete the 25 credits specified below with an average grade of 2.00 or better:

ECN 200	Introduction to Macroeconomics
ECN 201	Introduction to Microeconomics
ECN 323	International Economic Relations
MGT 200	Introductory Financial Accounting
MGT 330	Organizational Behavior I
MGT 423	The Multinational Firm

Concentration in Economics

COORDINATOR: David P. Doane

For students in other majors who would like to combine their major with an introduction to economic theory and its application to the problems of this world, the Department of Economics offers a concentration in economics.

To obtain the concentration in economics, the student must complete the 20 credits specified below with an average grade of 2.00 or better:

ECN 200	Introduction to Macroeconomics
ECN 201	Introduction to Microeconomics
Statistics	(ECN 304, PS 222, PSY 252, SOC 203, or STA 225-226)
Two ECN electives (300 or 400 level)	

Concentration in International Economics

COORDINATOR: Eleftherios N. Botsas

For students in other majors who would like to combine a

knowledge of international economics with their major, the Department of Economics offers a concentration in international economics.

To obtain the concentration in international economics, the student must complete the 20 credits specified below with an average grade of 2.00 or better:

ECN 200	Introduction to Macroeconomics
ECN 201	Introduction to Microeconomics
Statistics	(ECN 304, PS 222, PSY 252, SOC 203, or STA 225-226)
ECN 323	International Economic Relations
ECN 423	The Multinational Firm

COURSE OFFERINGS IN ECONOMICS

Basic Courses

The following courses are part of the basic program of the economics major and will be offered each year.

ECN 200 Introduction to Macroeconomics (4)

An introduction to the tools and analysis of economics. Analysis of the dynamics of a market system, the determination of national income, money and banking, the control of unemployment and inflation, short- and long-run economic growth, and international economics, i.e., macroeconomics. Offered fall, winter, and summer semesters.

Prerequisite: High school algebra.

ECN 201 Introduction to Microeconomics (4)

Analysis of consumer behavior, decision-making in the firm, market structure and performance, labor and other factor markets, government expenditures, and taxes, i.e., microeconomics. Application of microeconomic analysis to urban, environmental, energy, income maintenance, health, education, food, and fertility markets. Offered fall, winter, and spring semesters.

Prerequisite: ECN 200.

ECN 301 Intermediate Microeconomic Analysis (4)

Analysis of pricing, resource allocation, and income distribution at the level of the individual firm, industry, and household consuming unit. Offered fall, winter, and spring semesters.

Prerequisite: ECN 201 and MTH 122.

ECN 302 Intermediate Macroeconomic Analysis (4)

The construction, analysis, and interpretation of models of aggregate economic behavior, including the policy implications of alternative models. Offered fall, winter, and summer semesters.

Prerequisite: ECN 201 and MTH 121.

ECN 304 Statistical Methods for the Social Sciences (5)

Statistical techniques useful in management and economic analysis. Emphasis on statistical description and inference, including hypothesis testing, estimation, and regression techniques. Includes computer exercises. Offered fall, winter, and spring semesters. Identical with MGT 304.

Prerequisite: MTH 122 or 154.

Economics Electives

Following is a list of economics electives which have been offered by members of the faculty in the past three years. Any new course offering, change in the description of a course, or change in the prerequisite for a course will be announced in a supplementary bulletin published during the advising period for a given semester.

The following 100- and 200-level economics courses are designed for students not majoring in economics or management. They may be taken by economics or management majors but they cannot be used as one of the four required electives in the major.

ECN 100 Introduction to Political Economy (4)

An introduction to the traditional and radical economic analysis of the capitalist economy. Topics include: microeconomics — the development of the market system, monopoly, discrimination, pollution, and poverty; macroeconomics — economic activity, unemployment, inflation, defense spending, growth and underdevelopment, and imperialism; and alternative economic systems. Not open to majors in economics and management.

ECN 221 Economics of the Afro-American Experience (4)

Application of the tools of economic analysis to: the current economic status of Afro-Americans, the economic history of Afro-Americans, the market consequences of discrimination, the evaluation of alternative strategies for economic development, and the critical review of recent public economic policies.

ECN 222 The Economic Status of Women (4)

Application of economic analysis to the role and status of women in the modern industrial economy. Topics include the relationship between women and consumption, women in the labor market, and the relationship between the family structure and economic activity.

Prerequisite: ECN 100 or 201.

ECN 225 American Economic Growth and Development (4)

Study of the people, institutions, events, and overall trends in the American economy since colonial times. Emphasizes qualitative and quantitative patterns of change in resource organization for social and private goals.

Prerequisite: Sophomore standing.

ECN 251 The Soviet Economy (4)

The history of Soviet economic development; analysis of the principles of operation of the Soviet economy, with emphasis on planning techniques; the relationship between administrative structure and decision-making; and problems of resource allocation.

Prerequisite: ECN 100 or 201.

ECN 268 Manpower Economics (4)

An introduction to economic analysis emphasizing labor markets. Special attention will be paid to the problems of unemployment, poverty, and discrimination, and the importance of manpower programs in alleviating these problems.

The following 300-level economics electives are designed for majors in economics and management. Major standing is not required to take these courses, but some of them will have specific prerequisites or corequisites. Nonmajors may take these courses if they meet the prerequisites.

ECN 303 Economic Growth, Fluctuations, and Forecasting (4)

Analysis and modeling of the forces underlying economic growth in advanced nations. Study of business conditions and various factors affecting business fluctuations. Introduction to dynamic models and to economic forecasting techniques for the individual firm and for the national economy. Identical with MGT 303. Offered fall semester.

Prerequisite: ECN 201.

ECN 306 Systems Analysis (4)

Emphasizes the identification of goals and the use of resources for achieving goals through the application of analytical and quantitative tools developed in earlier courses to problems drawn from a variety of experiences, e.g., financial management, marketing, production, and capital budgeting. Identical with MGT 306. Offered fall, winter, and spring semesters.

Prerequisite: ECN 301.

ECN 309 Urban Economics (4)

A survey of selected contemporary urban economic problems; local public services and public finance in politically fragmented metropolitan areas; urban poverty and crime; urban housing, blight, and renewal; urban sprawl and traffic problems. Discussion of employment planning and area development within the context of national urban policy.

Prerequisite: ECN 201.

ECN 310 Economics of the Environment (4)

Application of the tools of economic analysis to the problems of energy, ecology, and the environment. Topics include: the economics of externalities and public goods; environmental improvement and optimum use of fixed national resources; the limits to economic growth and ecological aspects of principal pollution problems; current environmental policy.

Prerequisite: ECN 201.

ECN 321 Monetary and Fiscal Theory and Policy (4)

Analysis of modern monetary, banking, and fiscal theories and policies. The course investigates both domestic and international monetary analysis and policies, and the relationship between monetary and fiscal policies as they affect the economy. Offered fall semester.

Prerequisite: ECN 201.

ECN 322 Managerial Finance I (4)

The basic elements of managerial finance. Topics covered include: capital budgeting techniques, financial structure and analysis, the cost of capital, and working capital management. Offered fall, winter, and spring semesters. Identical with MGT 322.

Prerequisite: ECN 301 and MGT 200.

ECN 323 International Economic Relations (4)

An introduction to elementary international trade theory, the international monetary mechanism, exchange-rate regimes, the balance of payments, and economic interdependence.

Prerequisite: ECN 201.

ECN 324 Business in the American Economy (4)

Public attitudes toward the government regulation of business in our free enterprise society. Students are exposed to legal, social, and moral responsibilities of business to the individual, the community, the society, and the government. Identical with MGT 324.

Prerequisite: ECN 301.

ECN 325 Industrial Organization (4)

The structure of American industry and the factors affecting it, with emphasis on economies of scale; barriers to entry; structure-behavior relationships, including pricing, product differentiation, and technical change; evaluation of performance and implications for public policy. Identical with MGT 325. Offered fall semester.

Prerequisite: ECN 301.

ECN 326 Economic Development (4)

Application of the tools of economic analysis to the problems of economic development and growth.

Prerequisite: ECN 201.

ECN 327 African Economic Development (4)

The application of the tools of economic analysis to: the historical development of African economies, the evaluation of current strategies for their economic development, and the role of the developed countries.

Prerequisite: ECN 201.

ECN 328 American Economic History (4)

Models and case studies of selected events in the growth and development of the American economy from colonial times to the present. Emphasizes the evolution of historical thought under the impact of economic analysis.

Prerequisite: ECN 201 and 304.

ECN 336 Economics of the Public Sector (4)

A study of the role and impact of the public sector in a market economy. Includes expenditure determination, revenue source analysis, and discussion of current problems.

Prerequisite: ECN 301.

ECN 350 Comparative Economic Systems (4)

Comparative analysis of alternative forms of economic organization. The relationships between the economic system and resource allocation, pricing, income distribution, and growth. Capitalism, market socialism, and central planning are emphasized.

Prerequisite: ECN 301.

ECN 368 Economics of Human Resources (4)

Economic analysis of the functioning of labor markets, with emphasis on investment in human capital; the role of education; unemployment; labor market differentiation by race, sex, and age; the geographic and occupational mobility of labor; and the inflation-unemployment trade-off.

Prerequisite: ECN 301.

ECN 392 Directed Readings in Economics (2)

Independent but directed readings for junior and senior majors in fields of economics in which advanced courses are not available. Offered every semester.

Prerequisite: An approved contract.

The following 400-level economics electives are designed for eco-

nomics and management students who have achieved major standing.

ECN 400 Advanced Systems Analysis (4)

The course engages topics in the modeling, instrumentation, and control of complex systems. Particular emphasis is placed on the specification, testing, and implementation of policies in which direct controls must be foregone in favor of educational control policies. Identical with MGT 400. Prerequisite: Major standing and ECN 306.

ECN 405 Econometrics (4)

An introduction to the testing of economic models, expressed mathematically, by statistical methods and including real world problems. Prerequisite: Major standing and permission of instructor.

ECN 409 Regional Economics (4)

Emphasizes the determinants of spatial competition and the distribution of economic activity on space, the evolution of regional hierarchies, and linkages between regions. Techniques of regional analysis: base theory, local multipliers, input-output, gravity models, and econometric models. Prerequisite: ECN 301 or 302.

ECN 417 Advanced Economic Theory (4)

This course covers selected topics in the economic theory of resource allocation, economic growth, and stability. Topics change from time to time. Prerequisite: Major standing.

ECN 418 Selected Topics in Economic Policy (4)

Prerequisite: Major standing.

ECN 420 International Trade and Finance (4)

The theory of international specialization and exchange, commercial policy, national income and balance of payments, monetary relations, foreign investment, and current issues of international economic policy. Prerequisite: Major standing.

ECN 423 The Multinational Firm (4)

Analysis of the scope, structure, and environment (legal, social, political, and economic) with emphasis on management strategies of planning, marketing, location, and finance across cultural and national boundaries. Identical with MGT 423. Prerequisite: ECN 301 or 323.

ECN 433 Labor-Management Relations (4)

Analysis of management-employee relations in modern industry. Topics covered include: factors influencing the supply and demand for labor, evolution and government of trade unions, procedures and economic impact of collective bargaining, and public policy concerning labor and management relations. Identical with MGT 433. Prerequisite: Major standing.

ECN 442 Operations Research (4)

Application of network models, nonlinear and dynamic programming, and other analytical techniques to decision-making in economics and management. Identical with MGT 442. Prerequisite: Major standing and MGT 340.

ECN 444 Simulation in Economics (4)

An introduction to the use of simulation techniques in economic analysis. Identical with MGT 444.

Prerequisite: Major standing, computer programming, and ECN 304.

ECN 467 Economics of Health Care (4)

Application of the tools of economic analysis to the health care industry and government health care policy. Examines the impact of the special characteristics of health care and the medical services industry on the pattern of health care produced, its distribution, and the allocation of resources within the industry. Identical with MGT 467.

Prerequisite: Major standing.

ECN 480 Seminar in Economics (4)

Theses, individual topics, and readings. Offered winter semester.

Prerequisite: Major standing.

ECN 490 Independent Research (1, 2, 3, or 4)

Independent individual research on a topic chosen by the student and approved by the Committee on Instruction prior to the semester in which the student elects this course.

Prerequisite: Major standing and an approved contract.

ECN 494 Independent Group Study (4)

Students in this course determine which current economic issues are of interest to them and prepare a program for pursuing these issues in depth. The course consists primarily of student participation, but students may draw upon the faculty for consultation and direction.

Prerequisite: Major standing and an approved contract.

ECN 497 Apprentice College Teaching (2)

An elective course open to any well-qualified upperclassperson who wins consent of a faculty member in his/her major field to assist in presenting a regular college course to underclasspersons.

Prerequisite: Major standing and an approved contract.

COURSE OFFERINGS IN MANAGEMENT**MGT 100 Management: What Is It? (4)**

Overview of the economic, social, legal, and institutional settings within which management decisions are made. Includes discussion of the role of measurement in modeling policy decision making and the role of accounting, finance, human resource management, economics, and marketing.

Basic Courses

The following management courses are part of the core program for the management major and normally will be offered each fall and winter and in either the spring or summer.

MGT 200 Introductory Financial Accounting (5)

Introduction to accounting information as an aid to decision-making for external users of financial statements. Students learn how to measure and record accounting data, derive financial statements, and analyze data presented in published financial reports.

Prerequisite: Sophomore standing.

MGT 203 BASIC Programming (2)

This course is an introduction to computer programming using the

BASIC computer language and interacting through remote teletype terminals directly with Oakland's Burroughs computer.

MGT 205 Introduction to Computer Problem-Solving (4)

Introduction to the use of a computer as a tool in solving problems. Students learn the BASIC and FORTRAN languages in an interactive, time-sharing environment and are required to demonstrate proficiency through assigned problems. Offered fall semester.

Prerequisite: Knowledge of high school algebra.

MGT 304 Statistical Methods for Management (5)

Identical with ECN 304.

MGT 306 Management Systems Analysis (4)

Identical with ECN 306.

Management Electives

The following is a list and description of upper-level required and elective courses offered in the past three years in management. Any new course offering, change in the description of a course, or change in the prerequisite for a course will be announced in a supplementary bulletin published during the advising period for a given semester. The following 300-level management courses should be taken in the junior year (59-90 credits). The 300-level management electives are designed for management majors and students with concentrations in management. Major standing is not required for these courses but some of the courses have specific prerequisites or corequisites. Nonmajors may elect these courses if they meet the prerequisites.

MGT 303 Economic Growth, Fluctuations, and Forecasting (4)

Identical with ECN 303.

MGT 305 Computer Systems for Problem-Solving (4)

This is an advanced communications and problem-solving course in which students learn how to specify and design systems for computers. The course consists of field studies by groups of students which will lead to computerized prototype solutions of "real-world" problems. Offered winter semester.

Prerequisite: Programming experience in a higher level language (i.e., BASIC or FORTRAN).

MGT 310 Managerial Accounting (4)

An in-depth analysis of accounting as a system to provide information for optimal managerial decisions and their implementation. Topics will include an analysis of various accounting, planning, and control models with a view toward effective and efficient cost control. Offered fall, winter, and spring semesters.

Prerequisite: MGT 200.

MGT 311 Intermediate Accounting (4)

An in-depth study of selected problems in accounting. Emphasis will be placed on external reporting and the use of accounting as the language of the financial community. Offered fall, winter, and spring semesters.

Prerequisite: MGT 200.

MGT 320 Personal Financial Management (4)

The student is viewed as a business manager, responsible for all his/her financial affairs. Personal finance is viewed as an integrated entity. By adopting the "management by objectives" (MBO) approach, the student develops competence in personal financial management.

Prerequisite: ECN 301.

MGT 321 Monetary and Fiscal Theory and Policy (4)

Identical with ECN 321.

MGT 322 Managerial Finance I (4)

Identical with ECN 322.

MGT 324 Business in the American Economy (4)

Identical with ECN 324.

MGT 325 Industrial Organization (4)

Identical with ECN 325.

MGT 330 Organizational Behavior I (4)

Exploration of the theoretical and empirical issues surrounding organizational management as it relates to individual and organizational processes, e.g., perception, learning, motivation, communication, decision-making, leadership, power, and authority. The course covers individual processes in organizations, interpersonal, and group processes. Identical with PSY 333. Offered fall, winter, and spring semesters.

Prerequisite: MGT 304 recommended.

MGT 331 Organizational Behavior II (4)

Analysis of organizational management through the study of groups and organizations. Organizations will be viewed from a "macro" perspective; i.e., the study of groups and the structures and processes of organizations. Emphasis is on theory and research from, e.g., social psychology and the sociology of organizations. Identical with PSY 334. Offered fall, winter, and summer semesters.

Prerequisite: MGT 304 and 330.

MGT 334 Human Development in Organizations (4)

Surveys the developmental processes of employees in complex organizations both from a managerial and psychological standpoint. Topics to be covered include: personnel recruitment, selection, placement, training, and development; manpower planning; employee evaluation and reward systems; and job analysis and design. For nonmanagement majors only. Management majors should take MGT 434.

Prerequisite: Junior standing.

MGT 340 Quantitative Methods of Management Science (4)

Applications of statistics, linear programming, and other quantitative techniques to management problems.

Prerequisite: MTH 122 and MGT 304.

MGT 390 Apprentice College Teaching (2)

An elective course open to any well-qualified upperclassperson who has the consent of a faculty member in his/her major field to assist in presenting a regular college course to underclasspersons. Offered every semester.

Prerequisite: Major standing and an approved contract.

MGT 392 Directed Readings in Management (2)

Independent but directed readings for junior and senior majors in fields of management in which advanced courses are not available. Offered

every semester.

Prerequisite: Major standing and an approved contract.

The following 400-level management electives are designed for management students who have achieved major standing.

MGT 400 Advanced Systems Analysis (4)

Identical with ECN 400.

Prerequisite: Major standing and MGT 306.

MGT 402 Marketing and Consumer Behavior (4)

Analysis of consumer behavior and its significance for market analysis. The relationship between market structure and marketing behavior. Offered fall semester.

Prerequisite: Major standing.

MGT 403 Marketing Management (4)

An in-depth study of a selected topic relevant to the management of the marketing function. Topics that may be covered include: marketing and society, advertising and the mass media, institutional marketing, distribution channel management, and promotional policies. This course may be repeated when a different topic is covered.

Prerequisite: MGT 402 and major standing.

MGT 411 Auditing (4)

An introduction to the objectives, techniques, and standards of internal and external audits of the accounts of an enterprise. Generally accepted auditing standards will be critically examined.

Prerequisite: MGT 311 and major standing.

MGT 412 Behavioral Effects of Accounting Information (4)

An examination of the application of the results of behavioral science to accounting, budgeting, and other management information and control systems.

Prerequisite: MGT 310, 331, and major standing.

MGT 414 Accounting Theory (4)

Examination of selected topics of current interest in accounting theory. The opinions of the Accounting Principles Board (APB) and similar standard-setting committees of the accounting profession will be examined.

Prerequisite: MGT 311.

MGT 415 Tax Accounting (4)

An examination of the concepts of taxation. The essential logic underlying the federal tax laws will be developed. The class will take a problem-solving approach to changing individual and corporate income tax laws rather than training students to prepare current-year tax returns.

Prerequisite: MGT 311.

MGT 416 Contemporary Accounting Issues (4)

Topics vary and the course may be repeated for credit. An examination of the changes in accounting associated with the infusions of the theoretical results of other disciplines: behavioral science, organizational theory, economic theory, sociology, psychometrics, and anthropology. Also considered are changes in the role of the accountant.

Prerequisite: MGT 311.

MGT 421 Investment Analysis (4)

The course provides a comprehensive treatment of the important aspects

of security analysis and portfolio theory. Four areas are covered: investment management and the money and capital markets, the analytical procedures for appraising securities, portfolio analysis, and the assessment of capital market efficiency.

Prerequisite: MGT 322 and major standing.

MGT 422 Managerial Finance II (4)

The application of the tools of financial analysis to specific cases in the financial management of corporate businesses and not-for-profit enterprises.

Prerequisite: MGT 200, 322, and major standing.

MGT 423 The Multinational Firm (4)

Identical with ECN 423.

MGT 424 The Legal Environment of Enterprise (4)

The study of the legal framework in which business decisions are made and the types of economic conflict and political activity that have created this framework. Topics include: contracts, anti-trust legislation, conflict resolution, and regulatory agencies.

Prerequisite: Major standing.

MGT 430 Assessment of Organizational Behavior (4)

Use of findings and methods of various behavioral research strategies as input for managerial problem-solving. Comparison of case, experimental, survey, correlational, and other approaches. Review of various methods of individual and organizational measurement devices, including industrial tests, morale surveys, etc.

Prerequisite: MGT 331 and major standing.

MGT 431 Leadership and Group Performance (4)

A comprehensive examination of selected theories of leadership. Emphasis on relevant empirical evidence and application of the theories to case studies which involve leadership behavior and group functioning.

Prerequisite: MGT 331 and major standing.

MGT 432 Motivation and Work Behavior (4)

Analysis and discussion of individual and organizational factors affecting employee motivation, performance, and satisfaction in the work environment. Topics covered include: the role of leadership, job design, environmental variation, compensation policies, goal-setting techniques, and group influences as each affects employee attitudes and behavior.

Prerequisite: MGT 331 and major standing.

MGT 433 Labor-Management Relations (4)

Identical with ECN 433.

MGT 434 Management of Human Resources (4)

Exploration and analysis of the role of the personnel function in modern organizations. Topics covered include: job analysis and design; manpower planning; recruitment, selection, and placement; employee training and development; performance analysis and appraisal; compensation policies and practices; employee information systems; and personnel research techniques.

Prerequisite: MGT 331 and major standing.

MGT 435 Management Strategies and Policies (4)

The application of management tools of economics, statistics, organizational behavior, accounting, and quantitative methods to the systematic analysis of organizational case studies.

Prerequisite: Major standing and senior status.

MGT 436 Public Management Strategies and Policies (4)

The application of the management tools of economics, political science, statistics, accounting, and organizational behavior to the systematic analysis of case studies drawn from experience in the governmental sector or other not-for-profit enterprises.

Prerequisite: Major standing and senior status.

MGT 437 Job Design (4)

Alternative job design strategies will be evaluated from two perspectives — theory related to the structuring of organizational roles and findings of empirical research. Includes implications of alternative job design strategies for employee attitudes, motivation, and performance.

Prerequisite: MGT 304 and 331.

MGT 442 Operations Research (4)

Identical with ECN 442.

MGT 443 Operations Management (4)

Analysis of the economic problems encountered in the management of productive processes in general manufacturing and service industries. Mathematical programming, statistical, and Monte Carlo methods will be used to solve problems of inventory management, quality control, plant and equipment investment, facility location, operations scheduling, etc.

Prerequisite: Major standing.

MGT 444 Simulation in Management (4)

Identical with ECN 444.

MGT 467 Health Care Organization (4)

Identical with ECN 467.

MGT 490 Independent Research (1, 2, 3, or 4)

Independent individual research on a topic chosen by the student and approved by the Committee on Instruction prior to the semester in which the student elects this course. Offered every semester.

Prerequisite: Major standing and an approved contract.

MGT 494 Independent Group Study (4)

Students in this course determine which current management issues are of interest to them and prepare a program for pursuing these issues in depth. The course consists primarily of student participation, but students may draw upon the faculty for consultation and direction.

Prerequisite: Major standing and an approved contract.



SCHOOL OF EDUCATION

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UNDERGRADUATE CURRICULUM IN EDUCATION

The School of Education offers programs which prepare students for careers in teaching as well as related human service activities. The programs include a Bachelor of Science in elementary education, teaching certification for secondary education, and a Bachelor of Science in human resources.

The elementary education program enables a person to secure a Michigan teaching credential which certifies one to teach all subjects K-8, as well as the ninth-grade subject areas of one's major or minor fields. Students in this B.S. program must take the planned program in elementary education which is being developed along a competency-based teacher education model.

REQUIREMENTS FOR THE BACHELOR OF SCIENCE DEGREE IN ELEMENTARY EDUCATION

In order to complete the Bachelor of Science degree, the student must:

1. Complete 125 credits.
2. Complete at least 32 of these credits at Oakland University.
3. Complete at least 32 of these credits in courses at the 300 level or above.
4. Take the last 8 credits needed to complete the baccalaureate requirements in residence at Oakland University.
5. Have a cumulative grade point average of at least 2.50.
6. Be in substantial compliance with all legal curricular requirements.
7. Satisfy the university requirement of proficiency in English composition as described on page 40.
8. Complete or place out of by examination MTH 101, 102.
9. Complete a general education requirement of 25 credits.
10. Complete a core program of 24 credits.
11. Complete the childhood curriculum studies program of 24 credits.
12. Complete ED 455.
13. Complete a major concentration of 36 credits, or two minor concentrations of 24 credits each, in a field outside of education.

General Education Requirement

The student must complete all the following courses: ENG 240, SCS 105, ALS 176, MTE 310, MTE 311, and MUS 149. In addition, the student must also complete one of the following courses: SS 100, AS 210, 220, 230, 240, 250, or 260.

Admission to the Elementary Education Undergraduate Program

Students may apply for admission to the elementary education undergraduate program after satisfactory completion of ED 110. Criteria for admission include a grade point average of 2.50 for a minimum of 16 graded credits and a minimum grade of 2.5 in ED 110. Students who wish to obtain a major concentration in early childhood education may substitute ED 220 and 221 for ED 110, if a minimum grade of 2.5 is obtained in both ED 220 and 221. Courses which carry no numerical or letter grades are excluded from the calculation of grade point average.

A student who wishes to enter the elementary education program but whose grade in ED 110 is lower than 2.5 must repeat ED 110 with at least a 2.5 before applying for admission to the program. ED 110 is a prerequisite for all other elementary education courses.

Continuation in the Program

Grades in courses submitted for credit in the elementary education program must be 2.0 or better. To continue in the program, the student must maintain a minimum overall grade point average of 2.50. Students whose grades fall below the minimum may request review by the Elementary Education Coordinating Committee before registration for the next semester. Students who do not request a review will be dropped from the program.

A student will not be permitted to register for student teaching unless he/she has attained an overall grade point average of at least 2.50 at the time of application. Students not meeting this requirement may request one review by the Elementary Education Coordinating Committee before registering for student teaching.

Core Program

The student in elementary education must complete the following core program of 24 credits.

1. Foundation
ED 110 Public Education for the Future
2. Philosophy, Sociology, Anthropology, History
ED 210 Social and Philosophical Issues in
Elementary Education

Plus any two of the following:

- | | |
|---------|-----------------------------|
| ED 350a | Educational Implications |
| ED 350b | History of Public Education |

ED 350c	Private and Parochial Schooling
ED 350d	The Formal Education of Women
ED 350e	Schooling and Social Stratification
ED 350f	Education and Moral Development
ED 350g	Political Issues in Contemporary Education
ED 350h	Independent Study

3. Human Behavior

ED 215	Educational Psychology for Elementary Teachers
ED 355a	The Teacher and the Atypical Child
ED 355b	Testing and Assessment
ED 420	Interaction Laboratory for Teacher Development

Childhood Curriculum Studies

The student in elementary education must complete the following courses in childhood curriculum studies:

ED 331 and 333	Language Arts and Reading
MTE 312	Intuitive Euclidean Geometry
MTE 313	Geometry, Statistics, Probability
PE 163	Movement Education
PE 263	Teaching Physical Education and Play Activity, Preschool to Grade 5
or	
PE 264	Teaching Physical Education and Recreation Activity, Grades 4 through 6
SCS 305	Teaching Science in the Elementary School
SS 470	Teaching Social Studies in the Elementary School

MAJOR/MINOR CONCENTRATIONS

A major (36 credits) or two minor concentrations (24 credits each) are required as part of the elementary education program. These are academic areas in which the student specializes. Designated required courses previously listed can also be used as part of these concentrations. Modifications can be made with adviser approval.

MAJOR OPTIONS

Fine Arts

Music: MUT 111, MUS 210, and 321 or 322; and three courses from MUS 250, 300, 331, 345, 346, and 347. Cognate: MUS 401, AH 100, and THA 420.

Art History Concentration: AH 100, 102, and 104; AH 350, 364, and 490. Cognate: MUS 149, AH 100, and THA 420.

Theatre Concentration: THA 100, 267, and 350; and three courses from THA 230, 361, 363, 450, and 462. Cognate: MUS 149, AH 100, and THA 420.

Language Arts

English: ENG 240; two courses from ENG 200, 201, 202, 207, 208, 209, and 250; ENG 210 or 310; one course from ENG 300, 301, 312, and 342; and ED 333. Cognate: ALS 176 or LIN 207; one course from SCN 320, 321, THA 350, and 420; and ED 332.

Linguistics: ALS 176, LIN 207, 277, and 301; one course from ALS 260, 335, and 360; and ED 333. Cognate: ENG 240; one course from SCN 320, THA 350, and 420; and ED 332.

Speech Communication: SCN 201, 320 or 321, and THA 420; two courses from THA 230, 267, 350, 450, SCN 273, 274, 305, and JRN 200; and ED 333. Cognate: ALS 176 or LIN 207; ENG 240; and ED 332.

Mathematics

MTE 310, 311, and 317; STA 225 or 226; MTH 121-122 or MTH 123-124 or MTH 104-105; MTH 154; and MTE 410. Cognate: MTE 312 and 313 and an additional 4 credits in mathematics (MTE 418 suggested). (Mathematics courses not on this list may be taken with permission of the Department of Mathematics Education Committee.)

Mathematics/Science

MTE 310 and 311; SCS 105; MTE 410; any BIO course; any PHY course; and any CHM course. Cognate: MTE 312 and 313, SCS 305, and one mathematics course from the mathematics major or one science course from the science major. (The combined mathematics/science grouping certifies a person to teach science only in the ninth grade.)

History/Social Science

Afro-American Emphasis: AS 220; two courses from HST 291, 292, and 366; PS 103; SOC 205 or 331; AH 208 or MUS 346. Cognate: SS 470, ED 210, and ED 350.

Disciplinary Approach: SS 100 and ECN 169; one course from AS 210, 220, 230, 240, 250, and 260; and three courses from HST 201, 202, 214, 215, PS 100, 131, and 205 (select at least one from HST and at least one from PS). Cognate: SS 470, ED 210, and ED 350.

Ethnic Studies: SS 100; four courses from AS 210, 220, 230, 240, 250, 260, AN 371, and AN 381; and SOC 331. Cognate: SS 470, ED 210, and ED 350.

International Emphasis (African Studies): AS 230; HST 286 or 287; two courses from AN 251, 305, 352, SOC 381; and PS 333. Cognate: SS 470, ED 210, and ED 350.

Latin American Studies: AS 250; four courses from AH 307, HST 261, 262, 363, 365, 366, 367, PS 335, AS 300, 385, 390; and AS 490. Cognate: SS 470, ED 210, and ED 350.

Problems Approach: SS 100; four courses from HST 100, PS 110, PSY 130, 220, 221, 232, 271, AN 305, 310, 336, 460, 490, SOC 205, 260, 300, 308, 331, 335, and 336; and one course from HST 491, PSY 480, AN 480, and SOC 480. Cognate: SS 470, ED 210, and ED 350.

Urban Studies: SS 100; two courses from PS 205, ECN 308, and ECN 309; and HST 215, SOC 260, and SOC 470. Cognate: SS 470, ED 210, and ED 350.

Natural Science

BIO 104 and 105, or BIO 111 and 113; PHY 101-102, or PHY 106 and 107, or PHY 104 and 105; and CHM 104 and 105, or CHM 114-115. (The student is also strongly urged to take the accompanying 1-credit laboratories with each course, if available.) Cognate: SCS 105 and 305. Recommended: one course from ENV 181, ENV 212, and BIO 301.

Modern Language

Courses in the chosen language numbered 111 and 114; 112 and 115; 211 and 214; 212 and 215; and 216, 314, 316, 318, 320, and 355.

MINOR OPTIONS

Fine Arts

Music: MUT 111 and 210; and MUS 321 or 322. Cognate: same as major.

Art History Concentration: One course from AH 100, 102, and 104; AH 350; and any other AH course. Cognate: same as major.

Theatre Concentration: THA 100, 267, and 350. Cognate: same as major.

Language Arts

English: ENG 240, ED 333, and ENG 210 or 310. Cognate: same as major.

Linguistics: ALS 176 or LIN 270; LIN 301; and ED 333. Cognate: same as major.

Speech Communication: SCN 320 or 321, SCN 201, and ED 333. Cognate: same as major.

Mathematics

MTE 310, 311, 410, and one other mathematics course from the major list. Cognate: same as major.

Mathematics/Science

MTE 310 and 311, SCS 105, and one science course from science major listing. Cognate: MTE 312, 313, SCS 305, and one mathematics course from mathematics major listing.

History/Social Science

Afro-American Emphasis: AS 230; one course from HST 291, 292, and 366; and PS 103. Cognate: SS 470, ED 210, and ED 350.

Disciplinary Approach: SS 100; one course from AS 210, 220, 230, 240, 250, and 260; and one course from HST 201, 202, 214, 215, PS 100, 131, and 205. Cognate: SS 470, ED 210, and ED 350.

Ethnic Studies: SS 100; one course from AS 210, 220, 230, 240, 250, 260, AN 371, and 381; and SOC 331. Cognate: SS 470, ED 210, and ED 350.

International Emphasis — African Studies: AS 230; one course from HST 286 and 287; and AN 305. Cognate: SS 470, ED 210, and ED 350.

Latin American Studies: AS 250; and two courses from AH 307, HST 261, 262, 363, 365, 366, 367, PS 335, AS 300, 385, and 390. Cognate: SS 470, ED 210, and ED 350.

Problems Approach: SS 100; and two courses from HST 100, PS 110, PSY 130, 220, 221, 232, 271, AN 305, 310, 336, 460, 490, SOC 205, 260, 300, 308, 331, 335, 336, and 404. Cognate: SS 470, ED 210, and ED 350.

Urban Studies: SS 100; and two courses from PS 205, ECN 308, and 309. Cognate: SS 470, ED 210, and ED 350.

Natural Science

Any 4-credit BIO course, any 4-credit PHY course, and any 4-credit CHM course. Cognate: SCS 105, 305, and one course from ENV 181, 212, or BIO 301.

Health-Physical Education/Coaching of Sports

BIO 104, PE 202, 207, and 304. PE 101 is highly recommended;

electives (10 credits) to be chosen from aquatics, elementary physical education, coaching, and dance.

Optional Professional Concentrations

Students wishing to enhance the quality and breadth of their teaching credential may choose to use their free electives in one of a number of 12-credit professional concentrations. At present these are available in the following fields:

- Early childhood education
- Guidance and counseling
- International education/semester abroad
- Reading and language arts
- Bilingual-bicultural

Students interested in further information about professional concentrations should contact a member of the School of Education who specializes in the area of interest.

Advisement

It is important that students interested in the elementary education program contact the elementary education academic adviser for professional curriculum advisement. General information is available at the Office of Teacher Education. Faculty will assist with career counseling.

TEACHING CERTIFICATION FOR SECONDARY EDUCATION

The College of Arts and Sciences offers Bachelor of Arts degrees with certification for secondary teaching credentials provided by the School of Education. Majors are available in the following subject areas:

Biology	German	Music
Chemistry	Language arts	Physics
English	Latin	Russian
French	Mathematics	Spanish
Social studies		

Teaching minors are available in the following subject areas:

Art	Physics
Biology	*Political science
Chemistry	*Psychology
English	Science
Health/physical education	Social studies
History	*Sociology
Mathematics	Speech
Modern languages	

*These minors are for social studies majors only

SPONSORSHIP FOR MICHIGAN TEACHER CERTIFICATION

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

1. **Elementary Education:** Listed under requirements for B.S. degree in elementary education.
2. **Secondary Education:** Completion of a university baccalaureate program with a teaching major (including the required professional sequence) and one appropriate teaching minor; and successful completion of ED 344, 345, and 428.
3. **Elementary and Secondary Education:** Completion of ED 455 (internship) with a grade of 2.5 or better.

Students applying for state certification must be accepted to a degree program within the School of Education. Students seeking only state certification will not be accepted.

Graduate students who desire state certification must complete all degree requirements before they can student teach. Students who can complete all degree requirements either in the spring or summer sessions may schedule student teaching in the winter semester prior to completing their degree.

Students who expect to teach in a state other than Michigan should ascertain what requirements that state demands beyond those of Michigan. It is the student's responsibility to plan his/her program accordingly.

HEALTH-PHYSICAL EDUCATION

Through the Department of Teacher Education, the Department of Physical Education and Athletics offers a variety of activity and theory courses in aquatics, dance, movement education, physical education, and sports. Students may apply up to 8 credits in physical education toward the graduation requirement. Students working toward a teaching certificate in elementary or secondary education may earn a 24-credit minor in physical education. Students working toward a Bachelor of Science in human resources may use electives to earn a 24-credit concentration in physical education. See requirements, page 241. Students anticipating a minor or concentration in physical education must see an adviser in the Department of Physical Education and Athletics for course sequence before they have completed 6 credits in physical education.

HUMAN RESOURCES DEVELOPMENT

The School of Education offers a Bachelor of Science degree in human resources development. This program is designed to prepare students for service-action careers related to human problems, services, and social change. It provides an opportunity to acquire knowledge and skills which are usable in a wide range of human service activities. This includes a selection from areas such as: child care and early childhood education; youth guidance and assistance; manpower counseling and related manpower development services, such as career and employability development, vocational guidance and rehabilitation, and adult education; and assistance to persons regarding life adjustment needs and community needs, such as problems in drug abuse and alcoholism, community and cultural relations, corrections and law enforcement, family and human effectiveness, community mental health, and assistance to the aged.

A major goal is to develop potential leaders who have the analytic abilities, communication and organization skills, and the experimental know-how to respond to human needs in an era of rapid social change. The basic approach which permeates the program is the joining of understanding, skills, and service. Problem-solving and decision-making abilities are developed within a framework of practical field experiences and an on-the-job internship.

Students may select a major concentration in either early childhood education or manpower development. Additional specializations are being planned. This program does not lead to teacher certification.

Requirements for the Bachelor of Science Degree

Candidates for the degree of Bachelor of Science in human resources development must meet the following requirements:

1. Complete 124 credits.
2. Complete at least 32 of these credits at Oakland University.
3. Complete at least 32 credits in courses at the 300 level or above.
4. Take the last 8 credits needed to complete the baccalaureate requirements in residence at Oakland University.
5. Have a cumulative grade point average of at least 2.00.
6. Be in substantial compliance with all legal curricular requirements.
7. Satisfy the university requirement of proficiency in English composition as described on page 40.
8. Complete 32 credits of general education, covering at least five of the six designated field groups (see next page).

9. Complete a concentration of 60 credits in early childhood education or manpower development, which consists of:
 - a. 24-28 credits in area of specialization.
 - b. 24-28 credits in supporting cognate courses.
 - c. 8-12 credits in practicum or internship.

General Education

The designated field groups, and the courses applicable to each, are:

- a. **Symbolic Systems**
 - Computer and information sciences courses
 - Linguistics courses
 - Mathematics courses
 - Modern languages and literatures courses emphasizing grammar, composition, and conversation
- b. **Letters**
 - English courses
 - History courses
 - Philosophy and religion courses
 - Modern languages and literatures courses in literature, either in translation or in the foreign language. Other language courses satisfy the symbolic systems requirement.
- c. **Arts**
 - Art courses
 - Music courses
 - Theatre arts courses
- d. **Social Science**
 - Economics courses
 - Political science courses
 - Psychology courses
 - Sociology and anthropology courses
 - ENV 151
 - Speech communication and journalism courses
 - ED 344 and 345
- e. **Area Studies**
 - Area studies courses
- f. **Natural Science**
 - Biology courses
 - Chemistry courses
 - Physics courses
 - Environmental studies courses, except for ENV 151
 - Engineering courses

Concentration in Early Childhood Education

The human resources development degree program with a concentration in early childhood education develops competencies needed for the design, evaluation, and licensure of child care facilities and direction of child care centers, family and day care, and group day care homes. The program also provides education for training parents and paraprofessionals in the care and education of young children, as well as dealing effectively with young children and their development in a variety of settings.

Specific requirements are:

1. Area of Specialization: ED 220, 221, 223, 224, 225, 324, 325, and 326
2. Cognate Courses:
 - a. AN 102 or SOC 100; PSY 271; and one course from AN 305, PSY 376, SOC 335, or a family-oriented social science course.
 - b. Additional courses related to development of children, selected with adviser assistance. Possible choices are ED 320 or 450.
3. Internship: ED 456 (Internship in Early Childhood Education)

Concentration in Manpower Development

The concentration in manpower development was developed cooperatively with employers from community agencies and is designed to prepare personnel to function in a variety of human service and related professional roles. The applied course content in human interaction and in human resources development is based upon performance objectives which require the application of theory and knowledge and the use of human development skills and techniques.

Students have an opportunity to develop competencies for effective work with youth and adults through practical field experiences, special problems, and internship courses. Students may choose preparation in areas such as: manpower specialist and counseling work, drug abuse and alcoholism, youth assistance, social justice and corrections, vocational guidance and rehabilitation, community mental health, family and human effectiveness, human interaction, and assistance to the aged.

Opportunities for employment will continue to depend largely upon the willingness and capability of government to provide positions. Many who are currently employed in manpower development and related human services take course work in this program for the purpose of job upgrading. Some occupations in

social service fields require graduate work; however, many persons are employed who have a Bachelor's degree or less. Field experience courses, community service work, and internships usually provide contacts which may lead to employment.

Specific requirements are:

1. Area of Specialization
 - a. A minimum of 8 credits in human interaction (HI) courses
 - b. A minimum of 8 credits in human resources development (HRD) courses other than HRD 369 or 390
 - c. Other HI or HRD courses
2. Cognate Courses
 - a. One course in psychology, 200 level or above
 - b. One course in sociology or anthropology, 200 level or above
 - c. One social change course: HRD 401, SOC 441, ECN 309, ECN 368, PS 205, SOC 205, 336, or 370
 - d. HRD 301, 302, 402, or other social science courses
3. Research or statistics
One course in number one or two above must include a research or statistical component, such as HRD 362, HRD 390, PSY 252, SOC 203, or SOC 207
4. Internship: HRD 490 or equivalent

COURSE OFFERINGS

ED 100 Tutoring Experience in Social Studies (2)

Students work with teachers and secondary students in schools. Students commit 60 to 80 hours to a cooperating teacher to work as tutors, teacher aides, and leaders of group discussions. Transportation must be arranged by the student. To be taken in the freshman year, or for transfer students, during first semester, upon entering the secondary social studies program.

Corequisite: ED 200.

SCS 105 Science Skills for an Ever-Changing World (4)

See page 262.

ED 110 Public Education for the Future (4)

The course is designed to help beginning elementary education students make career decisions. Students work a minimum of four hours per week in educational institutions. An additional two hours per week of class time is spent examining school practices and evaluating students' professional capabilities.

ED 200 Micro-Teaching in Social Studies (2)

Students identify areas of inquiry related to secondary schools and design personal learning plans for investigating those areas. Learning plans also include personal goals for working effectively in a public school setting. Current educational literature is used to inquire into creativity, self perception, critical thinking, educational philosophy, motivation, and learning theory.

Corequisite: ED 100.

ED 206 Introduction to the Cross-Cultural Education Experience (4)

To acquaint students with the people and cultural setting of the international site. Basic concepts from the social sciences, language, linguistics, and education will assist students in developing greater multicultural understanding.

Prerequisite: One introductory course in education.

ED 207 Cross-Cultural Education Experience—Practicum (4)

Prospective teachers work with educators and students in a foreign country. Four to six weeks will be spent working in classrooms. Students may stay in the homes of teachers or children who attend the host school.

Prerequisite: ED 206.

ED 208 Cross-Cultural Education Experience—Seminar (4)

Prospective teachers identify and analyze curricular alternatives for application to their future teaching. The seminar is a complement exclusively for the practicum (ED 207).

Prerequisite: ED 206.

ED 210 Social and Philosophical Issues in Elementary Education (4)

An introduction to the use of philosophical and social science skills in analyzing and resolving education problems.

Prerequisite: ED 110.

ED 215 Educational Psychology for Elementary Teachers (4)

The course incorporates and places into perspective learning theories, developmental theories, biological theories, and evaluation, with emphasis on the effects of varied qualities of experience during childhood.

Prerequisite: ED 110.

ED 220 Early Childhood Development — Experiences with the Young Child (4)

Study of child development as it applies to observing and analyzing child behavior in settings with young children. Instruction, observation, and experience with focus on children and their developmental needs during infancy and early childhood, especially in the context of particular settings. Students must register concurrently for ED 221.

ED 221 Early Childhood Development Experience Block (1, 2, 3, 4)

Provides a block of experience in a setting with young children. Observation and participation is focused on children and their developmental needs during infancy and early childhood and on providing learning experiences to meet those needs, in the context of particular settings. One credit must be taken concurrently with ED 220 and 224. Students who take additional credits of ED 221 must be taking another early childhood course concurrently.

ED 223 Physical and Social Environment in Early Childhood Programs (4)

Emphasizes awareness of the various aspects of the social and physical environment for young children. Includes analysis of what makes a healthful, pleasant physical environment and how the roles and interpersonal relationships of various staff members contribute to this environment. Provides for study of the center team, including volunteers, para-professionals, teachers, directors, nutritionists, consultants, and referral resources as they relate to the effectiveness of the center's program.

ED 224 Early Childhood Programming Activities for the Young Child (4)

Demonstration, planning, and participation in activities for physical, social, and intellectual development. Uses of various media and materials, supportive play activities, and specific art, music, science, language, and other educational activities for young children. Provides a basic repertoire of skills for the early childhood staff member. Students must register concurrently for ED 221.

ED 225 Health and Nutrition—Childhood (4)

Includes knowledge of basic health and safety requirements and of basic nutritional and dietary needs for optimum development, with special emphasis on these as they relate to early childhood. Practical questions of menu planning will be stressed as well as methods for creating a healthful and safe environment.

ED 316 The Latino in the United States (4)

A historical analysis of Latinos from their arrival on the Western Hemisphere to the present. Contributions of Latinos to the development of the U.S. as well as sociopolitical issues are covered. Emphasis is on alternate techniques of teaching cultural awareness to children. Students will participate in field experiences for exposure to teaching cultural awareness in a multicultural setting.

Prerequisite: ED 386.

SCS 305 Science in the Elementary School (4)

See page 262.

ED 320 Topics in Early Childhood Curriculum (2,4)

A study of selected curriculum topics relevant to early childhood teachers. This course is designed to focus in-depth on specific curriculum areas identified by advanced early childhood students or special groups working in this field.

Prerequisite: Completion of at least two 200-level early childhood courses or permission of instructor.

ED 321 The Teacher and the Atypical Child (4)

The identification and management of atypical children in a regular elementary classroom setting. The course will deal particularly with those children requiring special management techniques and some modification of curriculum. These children may be hyperactive or withdrawn.

Prerequisite: ED 344 and 345 or ED 210 and 215.

ED 322 Introduction to Early Childhood: Theory and Practice (4)

Provides a basic introduction to the field of early childhood, including the period from birth to age eight. Three major areas will be emphasized: growth and development of infants and young children, analysis of optimal learning environments for the young child, and methods and materials which facilitate learning in early childhood. This course is for students who wish to have some background in early childhood but who are not HRD/EC majors. Students must register concurrently for ED 221.

ED 323 Education of the Spanish-Speaking in the U.S. (4)

This course is intended to provide an opportunity for teachers and other educators to become familiar with the various aspects of Latino education. Lectures, readings, and discussions will deal with background information about the Spanish-speaking in the U.S.

Prerequisite: ED 344 and 345.

ED 324 Parent and Community Involvement in Early Childhood Programs (4)

In-depth study of home/school coordination and education. Development of skills and sensitivities in the areas of parent education, parent-teacher conferences, utilization of parents in the classroom, and working with parents in the home. Includes an introduction to training parents for family day-care roles and exploration of family-based child care models. Prerequisite: At least two 200-level early childhood courses, or permission of instructor.

ED 325 Learning Environment in Early Childhood (4)

In-depth study of the learning environment and curriculum in early childhood education, including theoretical and practical aspects. Analysis of curriculum areas as they relate to individual children's needs and to the total learning environment. Child assessment and diagnostic techniques and development of programs which are appropriate for individual needs.

Prerequisite: At least two 200-level early childhood courses, or permission of instructor.

ED 326 Introduction to Early Childhood Program Operation (4)

Provides an overview of types of program operation in early childhood, including private, industrial, cooperative, governmentally funded programs, such as Headstart, Follow Through, and the current legislation pertinent to early childhood. The course is designed to give teacher and child care development majors the skills necessary to direct programs which are in operation.

Prerequisite: At least two 200-level early childhood courses, or permission of instructor.

ED 329 Practicum in Bilingual/Bicultural Education (4)

A specialized field experience in a bilingual/ bicultural classroom. Observation, tutoring, diagnostic-prescriptive teaching, writing lesson plans, and using bilingual materials are included.

Prerequisite: Completion of all other requirements for the bilingual education credential or permission of instructor.

ED 331 Teaching and Reading (4)

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. Must be taken with ED 333.

Prerequisite: ED 210 and 215 or ED 344 and 345.

ED 332 Literature for Children (4)

The ability to evaluate children's literature critically, to understand its history, to assess children's needs and developmental levels, and to be able to select and use quality literature effectively with children are major objectives of the course.

ED 333 Teaching the Language Arts (4)

Preparation for the teaching of language arts in the elementary, middle, and early secondary schools. Teaching of composition, creative writing, oral language development, listening, spelling, reading, and the application of linguistic principles to reading and writing are among the topics. Must be taken with ED 331.

ED 338 Teaching Reading in the Content Areas (4)

A basic course in reading for students planning to teach in secondary schools. Course content will deal with the nature of the reading process and methods and materials for teaching the reading of English, social studies, and other subjects to junior and senior high school students. Not open to elementary education majors.

ED 344 Social and Philosophical Issues in Education (4)

Education is viewed in broad perspective, as both an interpersonal activity and a social institution. An attempt is made to deal with the often implicit assumptions that underlie policy and action decisions. Among questions pursued are those about the social meaning of the schooling process, and the ultimate and immediate aims of education.

ED 345 Psychological and Field Studies in Education (4)

Psychological factors involved in learning and development are examined in lectures, class discussions, and observations of teaching. These may be observations of actual teaching in the schools, or of videotapes of teaching. Identical with PSY 215.

ED 350a Educational Implications of Family Roles and Child Rearing Practices (2)

This course will acquaint the student with the educational implications of anthropological, sociological, and psychological analyses of child-rearing practices in different cultures.

Prerequisite: ED 210 and 215.

ED 350b History of Public Education in the U.S. (2)

This course will acquaint the student with the social, philosophical, and historical ideas and events which led to the origin and development of the public school in the U.S.

Prerequisite: ED 210 and 215.

ED 350c Private and Parochial Schooling in the U.S. (2)

This course will acquaint the student with the social, historical, and philosophical origins, trends, effectiveness, and future possibilities of private and parochial schools in the U.S.

Prerequisite: ED 210 and 215.

ED 350d The Formal Education of Women (2)

This course will acquaint the student with the effects of the formal and informal structure of the school on the development of women in contemporary society.

Prerequisite: ED 210 and 215.

ED 350e Schooling and Social Stratification (2)

This course will acquaint the student with the role of public schooling in theory and in practice as it relates to patterns of social stratification in the U.S. and other nations.

Prerequisite: ED 210 and 215.

ED 350f Education and Moral Development (2)

This course will prepare a teacher-in-training to be competent in understanding and guiding the moral development of the child.

Prerequisite: ED 210 and 215.

ED 350g Political Issues in Contemporary Education (2)

This will be a forum on politically current and controversial educational issues of the day, using film, outside speakers, field trips, and symposia.

Prerequisite: ED 210 and 215.

ED 350h Independent Study (2)

The purpose of this course is to give students the opportunity to pursue a problem of particular interest to themselves, using the skills of philosophical and sociological analysis. Students will work in groups or individually under the guidance of a teacher or teachers.

Prerequisite: ED 210 and 215.

ED 355a Identifying and Diagnosing Learning and Behavior Problems in Children (2)

Students will demonstrate knowledge of individual differences among normal school population; develop competency in the delivery of educational services to handicapped persons; demonstrate understanding of various theoretical models of behavior and demonstrate knowledge of the various statutes that govern special education in the state of Michigan.

Prerequisite: ED 210 and 215.

ED 355b Testing and Assessment for Teachers (2)

The purpose of this course is to prepare a teacher-in-training to make effective use of formal, informal, and teacher-created assessment techniques in the process of planning, implementing, and evaluating instruction.

Prerequisite: ED 210 and 215.

ED 369 Field Experiences in Guidance (2, 4, 6, or 8)

Identical with HRD 369.

ED 370 Field Problems in Social Science (4)

To assist prospective social studies teachers in identifying and solving instructional problems. Students are placed in school to work with teachers and secondary students, operating through a written contract agreed upon by themselves, an appropriate secondary school official, and a representative of the social studies program. Transportation must be arranged by the student.

Prerequisite: ED 100 and 200.

ED 386 Education of the Spanish-Speaking in the United States (4)

Provides prospective elementary teachers with the philosophy and rationale for using bilingual education in the classroom. Students will become familiar with problems of Spanish-speaking students as well as prescriptive techniques. Field exposure to bilingual classrooms is essential. Some of the instruction will be in Spanish.

ED 420 Interaction Laboratory for Teacher Development (4)

This course is designed to acquaint students with the importance of human relations skills in teaching and to help students acquire a clearer understanding of the flexible line separating personal and professional behavior. The activities of the laboratory involve the student in role-playing and action-oriented problem solving.

Prerequisite: ED 110, 210, 215, 350, and 355.

ED 428 Teaching of the Major Field (4)

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. Must be taken concurrently with ED 455, except when other provisions have been made by the major department.

Prerequisite: ED 344 and 345. (For social studies majors, the following are also required: ED 100, 200, 370, and SS 100.)

ED 430 The Public School in Urban America (4)

The course deals with the role of schools in contemporary urban America, with special emphasis on the relationship between the school and the urban ethos, social stratification, racial identities, and the functioning of the school in the urban ecology.

Prerequisite: ED 344 and 345 or ED 210 and 215.

ED 450 Advanced Studies in Early Childhood (2, 4)

This course will focus on current issues affecting the field of early childhood, especially those related to current legislation, child advocacy, and the child welfare concern; research methodology appropriate for young children; and/or in-depth issues such as development of infants or exceptional children.

Prerequisite: Completion of all 200-level early childhood courses and at least two 300-level early childhood courses, or permission of instructor.

ED 454 Skill Development Laboratories for Teaching Social Studies (4)

Interns meet weekly with instructor and supervisors to identify and solve problems such as discipline, course planning, grading, motivation, and interpersonal relationships and to share effective strategies. Emphasis is on mutual problem solving. Must be taken concurrently with ED 455.

ED 455 Internship (12)

For elementary education students, the internship during the 15-week semester may be divided into two segments facilitating a dual assignment for students demonstrating the need and readiness. Throughout the semester, seminars will be held which will focus on the general concerns of the student interns regarding their student teaching experience. For secondary education students, the students will spend approximately 50 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.

Prerequisite: For elementary education majors, completion of core program, general education, and childhood curriculum as listed on page 236; for secondary education majors, ED 344, ED 345, concurrent registration in ED 428, and permission of both the student's major department and the School of Education. A student must perform his/her internship in his/her last or next to last semester (a last semester is one in which a student needs to complete no more than 16 credits to satisfy all graduation requirements). A student must sign up for his/her internship one full semester in advance. Except for ED 428, a student may not take any other course work concurrently with ED 455.

ED 456 Internship in Early Childhood Education (8-12)

Culmination of the early childhood education program in which the student works in practicum settings, such as the day-care center or other early childhood programs. The experience will be designed so that the students gradually assume total responsibility for an intensive field experience. At least one of the settings will be a team situation.

Prerequisite: 24 credits in early childhood education courses and permission of instructor.

ED 460 Special Project in Guidance (2, 4, 6, or 8)

Deals with specialized interests in various phases of guidance and personnel work. The specific topic will be determined by the student's particular interests. The course may be taken more than once, but for no more than a total of 8 credits. May be elected for independent study.

Prerequisite: Permission of instructor.

**ED 463 Group Procedures in Helping Relationships
(2, 4, 6, or 8)**

Includes a study of procedures used in small groups to help individuals understand themselves and others better in interpersonal relationships. Experience in such a group setting is provided as a major requirement of the course. Identical with HI 463.

Prerequisite: ED 420.

**ED 464 Teaching in Manpower Education Programs
(2, 4, 6, or 8)**

Emphasizes the principles and basic teaching skills required in manpower education programs. The student will develop skills in stating instructional objectives, planning activities appropriate for the attainment of the objectives, and techniques of evaluating instructional outcomes. Experiences in the teaching process will be provided through simulation and internships in programs.

Prerequisite: Permission of instructor.

SS 470 Teaching Social Studies in Elementary School (4)

See page 262.

ED 490 Independent Study and Research (2 or 4)

A program of directed individual reading and research.

Prerequisite: Permission of the Department of Teacher Education. Such permission will be granted only if a student presents written evidence that a faculty member has consented to supervise his/her study.

SCS 490 Independent Problems in Science Education (2 or 4)

See page 262.

ED 497 Apprentice College Teaching (2 or 4)

An elective course open to any well-qualified upperclassperson who has the consent of a faculty member to assist in presenting a regular college course to underclasspersons. The apprentice should be capable of assuming limited classroom teaching duties.

Prerequisite: Permission of the Department of Teacher Education. Such permission will be granted only if a student presents written evidence that a faculty member has accepted him/her as an apprentice.

HUMAN INTERACTION COURSES**HI 261 Fundamentals of Human Interaction (4)**

Provides an introduction to individual and small group interaction. Consideration is given to interpersonal communication, group leadership, decision-making, and self-awareness. The course helps students to operate more effectively in community service activities. Role-playing, demonstrations, video recordings, simulations, and other experimental activities constitute a major portion of the instruction program.

HI 361 Techniques of the Helping Interview (4)

Emphasizes listening and observation skills, establishing mutual trust and acceptance, and providing support in a one-to-one relationship to help persons in decision-making. Includes an introduction to the philosophy, theory, and research and the helping relationship. Techniques of instruction include role-playing, simulation interaction analysis, and experience with actual clients.

Prerequisite: HI 261.

HI 363 Dynamics of Human Relationships in Education and Work Settings (4)

Deals with interpersonal relationships among students and teachers, employees and supervisors, and peers in various settings such as: schools, industry, adult training classes, and in groups of teams of coworkers. Introduces sociological and psychological theories of dynamics of human group behavior.

Prerequisite: HI 261.

HI 461 Introduction to Counseling (4)

Covers theories and practices in the field of guidance and counseling. An emphasis can be elected in preparation for work with certain groups such as: youth, adults, disadvantaged persons, offenders, persons from a certain culture or ethnic group, etc. Includes opportunity for simulated and authentic experiences. Requirements include the development of basic competencies.

Prerequisite: HI 361 and 363.

HI 463 Group Procedures in Helping Relationships (4)

Identical with ED 463. Prerequisite: HI 363.

HI 464 Techniques of Consultation (4)

Deals with techniques of consultation designed to help teachers, parents, families, employers, peers, pre-professionals, volunteers, and other significant persons in the lives of human resources development clients to support and facilitate client growth. Includes preparation for those who are engaged in the process of helping children, youth, adults, or the aged to become more self-sufficient.

Prerequisite: Two courses in human interaction or equivalent.

HUMAN RESOURCES DEVELOPMENT COURSES**HRD 301 The Nature of Man (4)**

A study of the variety of ways in which human nature has been understood, with special attention given to the behavioral, humanistic, Marxist, and Christian beliefs about man and their implications for policies and practices in the teaching and helping professions. The aim of this course is to develop tolerance for alternative views of man, rather than propagate one view.

HRD 302 Ethics and Personal Crises (4)

Ethics as related to the personal crises of sexual behavior and lifestyles, abortion, suicide, euthanasia, parenthood, and criminal punishment. For students planning to enter the helping professions, especially counseling. Focus is on helping others make a moral decision and handling value conflicts in counseling. Alternative viewpoints are offered so that students may increase their understanding of viewpoints they do not personally hold.

HRD 331 Introduction to Community Mental Health (4)

Includes a critical examination of current mental health treatment programs in local institutions, community mental health centers, and family-care programs. Covers the role of social and cultural factors in the cause of mental illness. Introduces roles in the helping process as a member of a treatment team and provides experience in carrying out some facet of a treatment plan under supervision.

HRD 335 Problems of Drug Abuse and Alcoholism (4)

A comprehensive study of the modes of prevention and treatment programs for substance abuse. Readings and reports include basic informa-

tion about various drugs and alcohol, including history, categories and definitions, misuse, abuse, legitimate use, laws, attitudes, and reasons people abuse drugs. Provides a study of Methadone maintenance programs, support programs such as Synanon, and volunteer paraprofessional services. Reviews legal and ethical practices, confidentiality, etc.

HRD 362 Assessment of Youth and Adults (4)

Concerns an overview of techniques used in the assessment of youth and adults for purposes of deciding upon and implementing educational, occupational, and personal-social goals. Students will be introduced to measurement terminology as well as techniques of test administration and interpretation. Emphasis will be placed upon the synthesis of data in case studies and in case conferences.

HRD 364 Career Development and Community Resources (4)

Covers sources of occupation, education, and personal-social information, and techniques for using guidance information in the helping process. Establishes a repertoire of knowledge about community agencies and resources. Students gather firsthand information from site visitations as well as through audio visual and printed media.

HRD 365 Student Resources Development (4)

Provides a general overview of the process, philosophy, practice, organization, and evaluation of adult student resource development work in colleges and universities, as well as practical supervised experience in typical higher education settings, such as: career advising, residential living, financial aid, and orientation programs.

Prerequisite: Permission of instructor.

HRD 366 Techniques of Human Resources Development (4)

An introductory course intended to provide basic preparation to individuals for work in public service in the emerging field of human resources development. Emphasis is placed upon cooperation among pre-professional and professional workers such as: interviewers, teachers, and community agency personnel, including employability developmental work to assist disadvantaged youth and adults from various cultural backgrounds to discover and develop their fullest potential.

HRD 367 Employability Development Procedures (4)

Covers procedures to help persons make a transition from education or unemployment to work and development of skills to seek, obtain, and hold a job. Includes guidance practices to provide support and serve as an advocate for unemployed, underemployed, and disadvantaged persons.

Prerequisite: 8 credits in HI or HRD courses.

HRD 368 Work and Training Development (4)

Includes contact work with employers and educators to develop jobs and training courses for persons who are enrolled in related manpower training programs and other agency applicants. Stresses appraisal of the needs of employers for persons with certain performance skills, development of on-the-job training programs, and related education.

Prerequisite: 12 credits in HI or HRD courses.

HRD 369 Field Work in Human Resources Development (2, 4, 6, or 8)

Provides supervised experiences in a variety of helping relationships in work settings such as schools, employment offices, social services agencies, and industry. Includes an orientation to various local community cultural settings and lifestyles. Experiences emphasize helping young

people and adults adjust to education or work experience.

Prerequisite: Permission of instructor.

**HRD 390 Special Project in Human Resources Development
(2, 4, 6, or 8)**

A program of directed reading, research, and study in an aspect of human resources development work. May be elected for independent study or may be taught as a workshop based upon selected topics and issues in the field. The course may be taken more than once, but for no more than a total of 8 credits.

Prerequisite: Permission of instructor.

HRD 401 Organizational Analysis and Change Process (4)

Covers a study of the structure of organizations designed to provide human services and development and the process of effecting changes which facilitate improved individual client development. Concerns the assigned role of counselors, teachers, and other helpers within agencies and schools which often interferes with their helping functions.

Prerequisite: Junior standing and two courses in ED, HI, or HRD.

HRD 402 Human Services Delivery and Evaluation (4)

Covers systems analysis and experimental design for program development and research in human services. Emphasizes skills in developing performance objectives and in organizing and writing proposals for program development. Provides an opportunity to participate in the systems design for the delivery of a proposed human service or educational program.

Prerequisite: Junior standing and two courses in ED, HI, or HRD.

HRD 467 Workshop (2 or 4)

Provides an opportunity for community agency personnel and students engaged in preparation for applied human resources development work to develop various aspects of human services programs and practices. Sections are offered as needed for topics or areas of emphasis which meet the current objectives and/or requests of agency or business and industry employers and directors of training programs for personnel skilled in human resources development. Course may be taken more than once for a maximum of 8 credits.

Prerequisite: Course work or experience in the workshop topic.

HRD 469 Seminar (2 or 4)

The course is conducted in traditional seminar fashion. The scope is predefined and based upon a broad topic in the human resources development field. Class members select areas for research and share in contributing their findings to the group. Visiting consultants as well as the instructor provide direction and relevant content. Course may be taken more than once for a maximum of 8 credits.

Prerequisite: Course work or experience in the seminar topic.

**HRD 490 Internship in Human Resources Development
(8 or 12)**

Provides an opportunity for a culminating learning experience where a student may apply what he/she has learned in a supervised experience in some phase of human resources development work with youth and adults as an intern in a community agency program.

Prerequisite: 24 credits in HI and/or HRD courses and permission of instructor.

HEALTH-PHYSICAL EDUCATION COURSES

PE 101 Physical Conditioning and Special Activity (2)

Although primarily an activity course, one hour per week is devoted to lectures on physical lifestyle. Various forms of physical conditioning are used with emphasis on cardiovascular fitness.

PE 111 Swimming and Diving (2)

The principles, safety precautions, and procedures and participation in the basic, intermediate, and advanced swimming and diving skills.

PE 113 Skin and Scuba Diving (2)

The principles, safety precautions, and procedures and participation in basic and advanced skills in skin and scuba diving.

PE 121 Tennis and Volleyball (2)

To develop awareness of the facilities, equipment, supplies, courtesy, rules, and strategy. Includes participation in the basic and advanced skills of tennis and volleyball.

PE 125 Advanced Golf (2)

Review and modification of basic grips, stances, and swings. Attention given to developing advanced playing skills, interpreting rules, judging distance, club selection, and selective play.

PE 151 Golf and Badminton (2)

To develop awareness of the facilities, equipment, supplies, courtesy, rules, and strategy. Includes participation in the basic and advanced skills of golf and badminton.

PE 152 Handball, Paddleball, and Squash (2)

To develop awareness of the facilities, equipment, supplies, courtesy, rules, and strategy. Includes participation in the basic and advanced skills of handball, paddleball, and squash.

PE 155 Advanced Tennis (2)

Complete review of basic footwork, grips, and stroke movements. After the review attention is given to developing advanced playing skills and strategy.

PE 161 Beginning Gymnastics (2)

To develop awareness of the facilities, supplies, equipment, and safety rules. Includes participation in the basic fundamentals in conditioning, tumbling, stunts, and apparatus.

PE 162 Advanced Gymnastics (2)

To develop awareness of the facilities, equipment, supplies, and safety rules. Includes participation in advanced gymnastics skills and routines on the various items of apparatus.

PE 163 Movement Education, Low Organized Games, and Leadup Activities to Movement Skills (2)

Perceptual-motor development and sensory-motor development activities and their relevance to movement in low organized games, leadup activities, and games for basic sports skills.

Prerequisite: Sophomore standing.

PE 171 Elementary Dance and Movement (2)

Introduction to various dance techniques and styles and exploration of the many ways movement can be used for expression.

PE 172 Advanced Dance and Movement (2)

Advanced dance techniques. Reading and discussion will cover the broad historical and aesthetic basis of dance as art.

PE 175 Beginning Ballet (2)**PE 176 Intermediate Ballet (2)****PE 177 Advanced Ballet (2)**

This series of courses covers the technique of classical ballet in a three-semester progression. The technique, style, aesthetic interpretation, and historical significance of classical ballet are presented in theory and practical participation.

PE 180 Judo (2)

To develop awareness of the facilities, equipment, supplies, safety rules, and procedures. Includes participation in basic and advanced judo skills.

PE 182 Karate (2)

To develop awareness of the facilities, equipment, supplies, safety rules, and procedures. Includes participation in basic and advanced karate skills.

PE 202 Introduction, History, and Orientation to Health-Physical Education and Allied Fields (2)

To provide knowledge, interpretation, and understanding of health education, physical education, dance, intramural sports, extramural sports, sports clubs, school and community recreation, and interscholastic competitive athletics for boys and girls.

PE 207 American Red Cross Advanced First Aid and Prevention and Care of Activity-Oriented Injuries (4)

To provide knowledge, interpretation, understanding, and practice in the immediate and temporary care given to victims of accident or sudden illness until the services of a physician can be obtained. To aid in approaches and procedures of "safety-proofing" facilities, equipment, supplies, and participants in athletic activities.

PE 211 American Red Cross Senior Lifesaving and Water Safety Instructor Course (4)

Principles and procedures for swimming, lifesaving, and water safety with successful participation, including physical skills examination and written examination. ARC certification upon successful completion of course.

PE 212 Teaching and Coaching Competitive Aquatic Activities—Water Safety Instructors and/or Lifesaving (4)

Philosophy, theory, and instruction in basic and advanced skills of swimming and diving, synchronized swimming, and water games, with emphasis on conditioning, training, scheduling, and pertinent necessities.

PE 221 Teaching and Coaching Baseball (2)

Philosophy, theory, and practice in the fundamental skills of the game, conditioning, training, offensive and defensive strategy, and setting up practice schedules and drills.

PE 223 Teaching and Coaching Basketball (2)

Philosophy, theory, and practice in the fundamental skills of the game, mental and physical conditioning, training, offensive and defensive systems, strategy, and setting up practice schedules and drills.

PE 231 Teaching and Coaching Football (2)

Philosophy, theory, and practice in the fundamental skills of the game; mental and physical conditioning, training, offensive and defensive systems; and strategy and setting up practice schedules and drills.

PE 233 Teaching and Coaching Soccer (2)

Philosophy, theory, and practice in the fundamental skills of the game; conditioning, training, offensive and defensive systems; strategy, and setting up practice schedules and skill drills.

PE 243 Teaching and Coaching Golf, Bowling, and Archery (2)

Philosophy, theory, and practice in basic and advanced skills with strategy of play, including setting up practice schedules and drills.

PE 251 Teaching and Coaching Cross Country, Track, and Field (2)

Philosophy, theory, and practice in basic and advanced skills of various events, with emphasis on conditioning, training, form, and technique.

PE 261 Teaching and Coaching Gymnastics (2)

Philosophy, theory, and practice in basic and advanced skills of the various apparatus and tumbling events, with emphasis on conditioning, training, form, and technique.

PE 263 Teaching Physical Education and Play Activities for Children Preschool through Grade 3 (2)

Philosophy, theory, and practice in activities compatible with the needs, growth, and development patterns; possible interests at various levels for classroom, multi-purpose room, gymnasium, and playground.

Prerequisite: Sophomore standing.

PE 264 Teaching Physical Education and Recreation Activities for Children Grades 4, 5, and 6 (2)

Philosophy, theory, and practice in activities, compatible with the needs, growth, and development patterns; possible interests with emphasis on low organized games and leadup activities for team games.

Prerequisite: Sophomore standing.

PE 265 Teaching Physical Education, Recreation, and Play Activities for the Atypical Individual (2)

Philosophy and theory of various approaches and techniques. Planning, organizing, and implementing activities compatible with the varying abilities and interests of atypical children.

PE 271 Teaching Dance and Movement (4)

Explores movement as a means of artistic, emotional, and physical expression, and an aid to development in children.

PE 272 Teaching Dance Composition and Production (4)

Theory of dance composition through reading, discussion, observation, and experimentation. Production techniques of costume, lighting, props, and promotion are included.

PE 275 Beginning Dance Workshop (2)

Beginning dance students learn techniques and choreography. Movement improvisations are used to stimulate student compositions.

PE 276 Intermediate Dance Workshop (2)

For more advanced dance students who wish to choreograph and perform.

Prerequisite: Permission of instructor.

- PE 282 Sports Officiating, Fall Individual and Team Sports (2)**
Philosophy and theory of sports officiating. Study of National High School Federation rule books, interpretations, and officials' manuals. Practical experience officiating recreational, intramural, and/or interschool sports contests. Sports covered are basketball, football, soccer, and swimming.
- PE 283 Sports Officiating, Winter and Spring Individual and Team Sports (2)**
Philosophy and theory of sports officiating. Study of National High School Federation rule books, interpretations, and officials' manuals. Practical experience officiating recreational, intramural, and/or interschool sports contests. Sports covered are basketball, softball, volleyball, tennis, and track and field.
- PE 291 Recreation Programming and Leadership for All Ages (2)**
Philosophy and theory of recreation and play; including facilities, equipment, and supplies; with emphasis on quiet and active events and games with an opportunity to give leadership in same.
- PE 293 The Psychology and Sociology of Sports and Coaching of Sports (2)**
History and theory of the value of sports and the potential value of sports as related by philosophers, psychologists, psychiatrists, medical doctors, educators, coaches, and others to our personal, community, state, national, and international participation.
- PE 301 The Physical Education, Play, Dance, and Recreation Program for the Elementary School (4)**
Philosophy and theory of the title items in the total educational program of the elementary school through reading, discussion, and evaluation of curriculum and materials of state school districts, plus lecture and discussion with area of study materials of state school districts, plus lecture and discussion with area administrative, supervising, and teaching personnel.
- PE 304 Exercise Physiology (4)**
Examines the effects of exercise and physical training on the physiological systems of the body. Particular emphasis is placed on cardio-respiratory systems. Course content includes muscle contraction mechanisms, circulatory and respiratory adjustment during exercise, and nutrition for athletes. Laboratory experiences are provided for the purpose of developing insight into the dynamics of human performance. Prerequisite: BIO 104.
- PE 312 The Organization, Promotion, and Administration of Aquatic Programs and the Operation and Management of Aquatic Facilities (4)**
Philosophy and theory of the title items through reading and discussion of articles, promotional pamphlets, State Department of Health Rules and Regulations, and textbooks; guest operators' lectures and discussion; observation trips; and actual participation in management and operation approaches and procedures.
- PE 321 The Organization, Promotion, and Administration of Physical Education and Athletic Programs and Allied Areas in the Secondary Schools (4)**
Philosophy and theory of the title items in the total education program of

the secondary schools through reading, discussion, and evaluation of curriculum and materials of many state high school athletic and activity associations, plus lecture and discussion with area coaches and directors.

**PE 391 Practicum in Physical Education and/or Dance with
Preschool and Primary School Children (2 or 4)**

Experience in teaching and leadership in physical education and/or dance with preschool or primary elementary school children. One period per week involves group discussion of teaching and leadership experiences. Prerequisite: PE 211, 263, 264, or 271.

**PE 491 Problem Solving in Physical Education, Recreation,
and Competitive Athletics (4)**

Survey of areas of concern with opportunity to seek solutions through group observation, visitation, and interaction with area professionals and visiting professionals.

**PE 493 Cooperative-Independent Study in Physical Education,
Dance, Recreation, or Competitive Athletics (4)**

Cooperative-independent study with student recognizing a concern, outlining same and possible steps to a solution, building a bibliography and reading, building an observation schedule and observing, building an interview schedule and interviewing, consulting with instructor on regular basis, and completing written summation.

**PE 495 Practicum-Seminar in Physical Education and Allied
Areas (4)**

Individual students delve into philosophy, theory, and practice in areas of concern with observation and possible participation in the area of concern and sharing of the experience regularly with the group.

SCIENCE STUDIES COURSES

SCS 105 Science Skills for an Ever-Changing World (4)

A course designed to allow students to experience science as process. Prerequisite: Admission to education degree program.

SCS 305 Science in the Elementary School (4)

Content and methodology appropriate to students in the elementary education program. A field experience is available. Prerequisite: SCS 105, ED 110, 210, 215, and junior standing.

SCS 490 Independent Problems in Science Education (2 or 4)

For students who wish to pursue individual work in science methods and materials. The credits earned may be applied to a teaching major or teaching minor in science/mathematics. May include a field placement as well as development of specific teaching materials. Prerequisite: SCS 305 and permission of instructor.

SOCIAL STUDIES COURSE

SS 470 Teaching Social Studies in Elementary School (4)

Opportunity is provided to examine sources of instructional objectives and strategies, curriculum materials, and evaluative procedures relative to social studies education. Students completing the course should be able to develop, defend, and implement an elementary social studies program. Prerequisite: ED 110, 210, 215, 355, and junior standing.

For a description of the social studies program leading to secondary teacher certification, see page 207.

SCHOOL OF ENGINEERING

OFFICE OF THE DEAN

Howard R. Witt, Acting Dean and Associate Dean

PROFESSORS: Benjamin F. Cheydleur, August J. Durelli (John F. Dodge Professor), David H. Evans, William G. Hammerle, Richard E. Haskell, J. Carroll Hill, Joseph D. Hovanesian, Keith R. Kleckner, Howard R. Witt

ASSOCIATE PROFESSORS: David E. Boddy, Robert H. Edgerton, Donald R. Falkenburg, Glenn A. Jackson, Gilbert L. Wedekind, Tung H. Weng, Michael J. Wozny

ASSISTANT PROFESSORS: You Yan Hung, Cho Ling Liang

ADJUNCT PROFESSORS: Martin A. Erickson, John G. Gievers, Ralph M. Grant, Kenneth A. Meade

BOARD OF VISITORS

The Board of Visitors for the School of Engineering is composed of leaders of industry in southeast Michigan. They assist the School of Engineering in developing educational and research programs to meet the rapidly expanding requirements in the technical world. The board is available as a body or individually for consultation on such matters as curriculum, facilities, equipment requirements, special subjects, and long-range planning. Members of the board are:

Dr. Paul F. Chenea, Vice President Research Laboratories, General Motors Corporation

Dr. W. D. Compton, Vice President, Scientific Research, Ford Motor Company

Dr. Robert R. Johnson, Vice President of Engineering, Burroughs Corporation

Mr. H. L. Misch, Vice President, Engineering Staff, Ford Motor Company

Dr. E. N. Petrick, Chief Scientist/Technical Director of Laboratories, U.S. Army Tank Automotive Command

Mr. C. B. Sung, President and Chief Executive Officer, Cleveland Metal Abrasive, Inc.

Dr. John W. Weil, Vice President and Chief Technical Officer, The Bendix Corporation

Mr. R. Jamison Williams, Director, Lear Siegler, Inc.

Mr. F. J. Winchell, Vice President of Engineering Staff, General Motors Corporation

Programs

The School of Engineering at Oakland University, which is an interdisciplinary academic unit without the traditional division into departments, offers two baccalaureate programs. Students may earn a Bachelor of Science with a major in engineering or with a major in computer and information science.

In addition to their major, students may pursue concentrations in specific areas at their option. The areas of concentrations offered for engineering majors by the School of Engineering are: electronics, mechanical and thermal sciences, systems engineering, and computer and information science. The concentrations approved for engineering majors but offered outside the School of Engineering are in economics, management, statistics, and preprofessional studies in medicine and dentistry.

For students who do not wish to follow the engineering or computer and information science programs as majors, the School of Engineering offers a concentration in computer and information science for nonmajors. Requirements for this concentration are given on page 199 of this catalog.

The School of Engineering also offers work leading to the degrees of Master of Science and Doctor of Philosophy. These degree programs are also interdisciplinary, and further details may be found in the *Oakland University Graduate Study Catalog*.

Plan of Study

Each student in the School of Engineering is assigned an adviser who should be consulted at regular intervals for assistance in planning a program of study. Engineering and computer and information science majors are required to complete a Plan of Study form, which is a timetable of courses to be taken for undergraduate credit. It must be submitted no later than the end of the semester in which the student completes 48 credits. Transfer students should submit a Plan of Study at the time they enter Oakland, regardless of the number of credits they already have earned. The forms are completed by the student in consultation with his/her adviser, and they are then approved by the dean's office. The student is responsible for updating the plan regularly, preferably each semester. The first update must occur before the completion of 80 credits and the second update must occur before completion of 108 credits. Although advisers are obligated to assist students in planning their programs, the responsibility for fulfilling degree requirements remains with the student.

General Education

Oakland University requires all undergraduates in degree programs to share in a series of courses distributed so as to provide a broadening intellectual experience in liberal education. To satisfy the general education requirements, students with a major in engineering or computer and information science must:

1. Complete 24 credits in general education courses. Up to 8 credits in English composition courses may be presented as part of the 24 credits in general education, but they are not applicable to any of the designated field groups.
2. Complete at least 4 credits in three of the five designated field groups, and at least 8 credits in one of the field groups. The field groups are arts; history, philosophy, and area studies; language and thought; literature; social sciences. For a description of the field groups, see the College of Arts and Sciences section on pages 48-52. In addition to those courses listed on page 51, engineering and computer and information science majors are permitted to use management courses towards satisfaction of the social science requirement.

Engineering and computer and information science majors may also meet the general education requirement by completing the general education program of New Charter College or the Honors College of the Faculty of Arts and Sciences.

UNDERGRADUATE CURRICULUM IN ENGINEERING

Oakland's general engineering program is designed to prepare students for a successful career in today's industrial based society. The general approach addresses the fact that today's engineering is becoming more interdisciplinary in nature and is largely concerned with the applications of engineering principles to the solution of problems that do not fit into a single specialized category. Graduates from Oakland are prepared to enter the traditional fields of product design, development, manufacture, sales, service, and systems analysis, the newer areas of application such as transportation and pollution control, or to continue their education through graduate study. A growing number of students also find that their undergraduate engineering education provides excellent preparation for careers such as business, law, and medicine.

Accreditation

The undergraduate engineering program of Oakland University has been fully accredited by the North Central Association of Colleges and Schools and by the Engineers' Council for Profes-

sional Development, which is the official accrediting agency for the engineering profession in the United States and Canada.

Preparation for Admission

Entering freshmen planning to major in engineering should present at least three years of high school mathematics, including one-half unit of trigonometry. Additional high school courses in mathematics, physics, chemistry, and English are most desirable. Preparation in elementary drafting and machine shop practice is useful but not necessary.

A student planning to transfer in the program should present as many as possible of the following: four courses in analytic geometry and calculus including linear algebra and differential equations; two courses in introductory college physics using calculus in their instruction; and one or two courses in college chemistry. Other credits presented in mathematics, science, or engineering will be evaluated with reference to courses required for graduation in the engineering curriculum at Oakland University. Technician course credits are not generally applicable to these requirements.

Students enrolled in a community college and planning to transfer into an engineering program are advised to take the engineering transfer program, as prescribed by the Engineering College — Community College Liaison Committee. A brochure describing this transfer program is available from any community college or from the School of Engineering. Generally, community college graduates with the associate degree have satisfied the general education requirements of Oakland's School of Engineering. See page 9 for other information regarding admission of transfer students.

Requirements for the Degree of Bachelor of Science with a Major in Engineering

A student with a major in engineering must meet the following requirements in order to graduate:

1. Have completed at least 128 credits, 32 credits of which must be in courses at the 300 level or above.
2. Have completed 32 credits at Oakland University. At least 16 of these credits must be in required engineering courses.
3. Have taken the last 8 credits needed to complete baccalaureate requirements in residence at Oakland University.
4. Have a cumulative grade point average in courses taken at Oakland University of at least 2.00.
5. Have demonstrated writing proficiency by meeting the uni-

versity standard in English composition.

6. Have completed 24 credits of general education as specified by the School of Engineering.
7. Have completed the engineering core program of 42 credits consisting of EGR 101, 172, 215, 222, 325, 326, 341, 345, and 361.
8. Have completed the science and mathematics core program of 34 credits consisting of CHM 114 or 124; CIS 180; MTH 154, 155, 254; APM 255; and PHY 151 and 152.
9. Have completed the elective package which consists of:
 - a. 20 credits of directed electives satisfied in one of the following ways:
 1. 12 credits in 400-level engineering courses and 8 credits from the approved list of courses in mathematics and the physical sciences.
 2. 16 credits of 400-level engineering courses and 4 credits chosen from the approved list of courses in mathematics and the physical sciences.
 3. 12 credits of 400-level engineering courses and 8 credits of courses used to complete requirements for one of the following nonengineering concentrations: CIS, MGT, ECN, STA.
 - b. 8 credits of free electives.
10. Have attained a cumulative grade point average of at least 2.00 in the engineering core courses and the 400-level directed elective courses.
11. Have completed an application for degree card at the Office of the Registrar.
12. Be in substantial compliance with all legal curricular requirements.

Students are encouraged to participate in a graduation check-off in the Office of the Dean during the first two weeks of the semester in which they expect to graduate.

Approved Directed Electives in Mathematics and Physical Sciences

All chemistry courses except CHM 101, 104, 114, 124, 191, 201, 209, 400, and 497.

PHY 271 and physics courses numbered 317 and higher, except 341.

APM courses numbered 263 and higher.

STA courses numbered 226 and higher.

MOR courses numbered 342 and higher.

MTH courses numbered 275 and higher, except MTH 414, 497, and special topics and independent study courses.

Standard Engineering Program

The engineering curriculum, particularly in the first two years, is

a highly structured program. The standard program is not a required sequencing of courses, but a suggestion as to how best to schedule a program that is fairly prescribed. Each student, in consultation with his/her adviser, will develop a program to meet his/her individual needs.

Semester 1

English composition or
distribution requirement

EGR 101 or CIS 180*

MTH 154 or 104-105

CHM 114 or 124

Semester 3

Distribution requirement

EGR 215

MTH 254

PHY 151

Semester 5

EGR 325

EGR 341

EGR 361

Semester 7

Distribution requirement

Directed elective

Directed elective

Free elective

Semester 2

English composition or
distribution requirement

EGR 172 or elective*

MTH 154 or 155

CIS 180 or EGR 101*

Semester 4

Distribution requirement

EGR 222

APM 255

PHY 152

Semester 6

Distribution requirement

EGR 326

EGR 345

Free elective

Semester 8

Directed elective

Directed elective

Directed elective

Free elective

*Students who are not prepared to take MTH 154 in their first semester should take the courses marked with an asterisk. These students are encouraged to take MTH 155 and EGR 172 during the spring session following their freshman year.

Career Preparation in Engineering

The elective package in the engineering program permits engineering majors to choose courses to meet their individual career objectives. The student, in consultation with his/her adviser, makes this course selection in the junior year. Courses are available to provide depth in the areas of computer and information science, electronics and electrical engineering, systems engineering, fluid and thermal sciences, mechanical engineering, and engineering management. By appropriate selection of advanced courses, students may satisfy requirements for one of the engineering concentrations described in the next section.

Students interested in engineering management should consider the concentration in economics or the concentration in management which are offered by the School of Economics and Management and are described on pages 221-222. The University Committee on Applied Statistics offers a concentration in statistics

which is described on page 308. Students planning a medical or dental career are advised to take the concentration in preprofessional studies in medicine and dentistry described on page 203.

Students with other career interests may augment their general engineering program with electives from other academic units. For example, engineering chemistry may be emphasized through a cooperative venture with the Department of Chemistry. Students with such interests should consult their adviser early in their program to ensure that the proper prerequisites are obtained for more advanced work. Prospective students should consult the Associate Dean of Engineering on the availability of preparation for any particular field of interest.

CONCENTRATIONS FOR ENGINEERING MAJORS

Students who wish to add an established concentration or otherwise participate in an interdepartmental program must apply to the coordinator of the appropriate concentration committee or of the department involved.

Students may earn more than one concentration; however, engineering students interested in the concentrations in computer and information science, electronics, mechanical and thermal sciences, and systems engineering should note that not more than one 400-level course may be counted toward more than one concentration.

Concentration in Computer and Information Science

CONCENTRATION COORDINATOR: G. A. Jackson

CONCENTRATION COMMITTEE: D. E. Boddy, B. F. Cheydleur, C. Chipman, R. E. Haskell

Engineering majors desiring greater depth in computer software and technology should complete the concentration in computer and information science. The minimum requirement for the concentration for students with an engineering major is:

1. CIS 181, 290, and EGR 488.
2. Two courses from the following: EGR 409*, 426, 470, 480, and 485.
3. An additional course from number two above or CIS 382 or 385.

Concentration in Electronics

CONCENTRATION COORDINATOR: H. R. Witt

CONCENTRATION COMMITTEE: D. H. Evans, D. R. Falkenburg, R. E. Haskell, J. C. Hill, T. H. Weng, M. J. Wozny

The electronics concentration has been designed to permit students to acquire greater depth in the area of circuit analysis and design. Minimal requirements for the concentration are completion of:

1. EGR 425, 426, and 473.
2. EGR 431, or 470, 488, or 409*. A student may also satisfy this requirement by selecting, in consultation with his/her adviser, any other 400-level engineering course, provided prior approval is granted by the Electronics Concentration Committee.

Concentration in Mechanical and Thermal Sciences

CONCENTRATION COORDINATOR: H. R. Witt

CONCENTRATION COMMITTEE: A. J. Durelli, R. H. Edgerton, D. R. Falkenburg, W. G. Hammerle, J. D. Hovanesian, Y. Y. Hung, C. L. Liang, and G. L. Wedekind

The concentration in mechanical and thermal sciences emphasizes the students' preparation for career opportunities in the areas of mechanics, materials, energy conversion and transport, fluid and thermal systems, and other aspects of mechanical engineering. Minimum requirements for the concentration are:

1. 16 credits taken from among EGR 448, 449, 453, 454, 461, and 462, or
2. 12 credits taken from number one above and an additional 4 credits from EGR 405*, 409*, 431, 480, or any other 400-level course selected by the student in consultation with his/her adviser and with prior approval of the Mechanical and Thermal Sciences Concentration Committee.

Concentration in Systems Engineering

CONCENTRATION COORDINATOR: H. R. Witt

CONCENTRATION COMMITTEE: D. H. Evans, D. R. Falkenburg, R. E. Haskell, J. C. Hill, T. H. Weng, M. J. Wozny

The concentration in systems engineering is directed toward students wishing further study in the analysis and control of a variety of industrial systems. Minimal requirements for the concentration are:

1. EGR 431, 432, and 436.

2. 4 credits chosen from EGR 425, 453, 480, 488, or 409*. This requirement may also be satisfied by another 400-level course chosen by the student in consultation with his/her adviser and which has prior approval of the Systems Concentration Committee.

*Must be a 4-credit project which has been directed and approved for the concentration by a member of the appropriate concentration committee, or it must have prior approval of the committee.

CURRICULUM IN COMPUTER AND INFORMATION SCIENCE

The program in computer and information science, which leads to the degree of Bachelor of Science, has as its main thrust the provision of a solid foundation for a career in computer science. It will prepare the student for professional practice in systems programming and computer applications or for graduate study in computer science.

The digital computer has come to assume a central role in our society. Nearly all phases of business, commerce, industry, education, and research employ the computer as an important tool. Persons interacting with computers have diversified complementary interests; thus, a viable computer and information science program is one which encourages a broad outlook and multi-disciplinary viewpoint. The Oakland program emphasizes a balance of the practical along with the abstract in providing the requisite technological training, while simultaneously ensuring broad educational experience.

Requirements for the Degree of Bachelor of Science

A student with a major in computer and information science must meet the following requirements in order to graduate:

1. Have completed at least 124 credits, 32 credits of which must be in courses at the 300-level or above.
2. Have completed 32 credits at Oakland University. At least 16 of these credits must be required CIS courses.
3. Have taken the last 8 credits to complete baccalaureate requirements in residence at Oakland University.
4. Have a cumulative grade point average in courses taken at Oakland University of at least 2.00.
5. Have demonstrated writing proficiency by meeting the university standard in English composition, page 40.
6. Have completed 24 credits to satisfy the School of Engineering general education requirement as specified on

page 265.

7. Have completed 36 credits with a minimum grade point average of 2.00 in computer and information science courses, including:
 - a. CIS 180, 181, 290, 382, and 385.
 - b. 8 credits of 400-level CIS electives of which a maximum of 4 credits may be from CIS 409.
 - c. 8 credits to be chosen by the student subject to the written approval of his/her CIS adviser.
8. Have completed the following mathematics sequence: MTH 154, 155, APM 255, and 263.
9. Have completed STA 226 or 325 or an approved course in statistics in the student's cognate area.
10. Have completed 8 credits in either biology, physics, or chemistry such as:
 - CHM 114 and 115 or 124 and 125 or
 - PHY 101 and 102 or 151 and 152 or
 - BIO 104 and 105 or 111 and 113.
11. Have completed 20 credits beyond those listed above in approved course work in a cognate area such as engineering, mathematics, statistics, economics, or management.
12. Have completed an application for degree card at the Office of the Registrar.
13. Be in substantial compliance with all legal curricular requirements.

Students are encouraged to participate in a graduation check-off in the Office of the Dean during the first two weeks of the semester in which they expect to graduate.

The following programs illustrate possible cognates:

Engineering Cognate

EGR 222, 326, and 488

Plus two courses selected from either Group A or Group B

Group A: (Electronics oriented) EGR 409, 425, 426, 470, 473

Group B: (Systems oriented) EGR 409, 425, 431, 432, 436, 480

Mathematics Cognate

MTH 254, APM 335, STA 226, and one course selected from APM 336, APM 463, STA 325, MOR 342.

Statistics Cognate

STA 226, 325, 326, and one course from STA 425, STA 427, EGR 436, or an approved 400-level statistics-related course.

Economics Cognate

ECN 200, 201, 304 plus two 300- or 400-level electives.

Management Cognate

ECN 200, 201, MGT 200, 330, plus any 300- or 400-level MGT elective.

Students should consult with their advisers when planning a cognate program.

COURSE OFFERINGS IN ENGINEERING**EGR 101 Introduction to Engineering Design (Core) (4)**

Engineering analysis and solution of design problems in mechanics and other engineering sciences, using graphical data reduction, numerical analysis, probability and statistics, vector concepts, and economics. Offered fall and winter semesters.

Corequisite: MTH 154.

EGR 108 Drawing (2)

Introduction to the use of drafting instruments and drafting procedures. Geometric construction, geometric projection, dimensioning, tolerancing, and graphical symbols.

Prerequisite: Permission of instructor.

EGR 111 Shop Practice (2)

Introduction to basic machining principles and machine shop techniques, use of lathes, milling machines, and other power machines. Emphasis is on practical experience.

EGR 172 Properties of Materials (Core) (4)

The atomic, molecular, and crystalline structure of solids, including a description of x-ray analysis, metallography, and other methods for determining structure; correlation of structure with the electric, magnetic, and mechanical properties of solids. Offered winter semester and spring session.

Prerequisite: EGR 101. Corequisite: CHM 114.

EGR 205 Engineering Topics (4)

Introductory and intermediate study in special areas. Offered normally on an individual basis. In this self-study format the student must obtain, prior to registration, the approval of the instructor who will supervise work. The class will be offered in a scheduled class format only as the occasion demands. May be taken more than once. Offered every semester.

EGR 209 Engineering Project (2 or 4)

Introductory work on laboratory projects; topics to be chosen by the student in consultation with an instructor prior to registration in the course. May be taken more than once. Offered every semester.

EGR 215 Statics and Dynamics (Core) (5)

Introduction to mechanics, particle statics and dynamics, equilibrium, analysis of structures, and dynamics of rigid bodies about fixed axes. Offered fall and winter semesters.

Prerequisite: MTH 155. Corequisite: PHY 151.

EGR 222 Introduction to Electrical Circuits (Core) (5)

Logic circuits, introduction to logic gates, and Boolean algebra; resistive DC circuits, Kirchhoff laws, Thevenin and Norton theorems, transients in RL and RC circuits, and reactance. Offered fall and winter semesters.

Prerequisite: MTH 155.

EGR 325 Lumped-Parameter Linear Systems (Core) (5)

A unified approach for steady-state and transient analysis of electrical, mechanical, fluid, and thermal lumped-parameter linear systems. Network elements and formulation procedures for differential equations. Analogies, phasors, impedance concept, natural and forced behavior, resonance, complex frequency plane, Laplace transforms, frequency response, and network theorems. Use of analog and digital computers to solve differential equations for these systems. Offered fall and winter.

Prerequisite: EGR 222 and APM 255.

EGR 326 Electronic Circuit Design (Core) (5)

Analysis and design of solid-state electronic circuits. Nonlinear dissipative characteristics, large-signal analysis of amplifiers, small-signal analysis of active two ports, voltage amplification, transducers, and feedback. Offered fall and winter semesters.

Prerequisite: EGR 222 and MTH 155.

EGR 341 Thermodynamics (Core) (5)

Introduction to fundamental concepts, thermal energy, thermodynamic properties and equilibrium, basic physical laws of thermodynamics, entropy and its consequences, reversible energy transfers in both open and closed systems, and application of thermodynamics to systems involving energy conversion and transport. Offered fall and winter semesters.

Prerequisite: CHM 114 or 124. Corequisite: MTH 254.

EGR 345 Introduction to Fluid and Thermal Energy Transport (Core) (5)

Fundamentals of fluid mechanics: properties of fluids; conservation principles; viscous and inviscid flow; laminar and turbulent flow; boundary layer theory; basic concepts of heat transfer; fundamental modes; conduction, convection, and thermal radiation; and applications to problems of engineering interest. Offered fall and winter semesters.

Prerequisite: CHM 114 or 124, MTH 254, and EGR 215.

EGR 361 Mechanics of Materials (Core) (4)

An introduction to the mechanics of deformable bodies: the distribution of stress and strain in beams, shafts, columns, pressure vessels, and other structural elements. Yield and fracture criteria of materials with applications to design. Experimental and computer-generated solutions to complex stress analysis problems, including laboratory use of strain gauges, photo-elasticity, etc. Offered fall and winter semesters.

Prerequisite: EGR 215 and MTH 155.

EGR 363 Modern Architecture and Urban Design (4)

Identical with AH 363.

EGR 400 Engineering Seminar (1)

Lectures and discussions conducted by members of the faculty, graduate students, and invited speakers from industry and other universities. Various topics will be covered, but emphasis will be on current research interests of the school. May be taken twice.

EGR 405 Special Topics (4)

Advanced study in special areas. Offered normally on an individual basis. In this self-study format the student must obtain, prior to registration, the approval of the instructor who will supervise the work. The class will be offered in a scheduled class format only as the occasion demands. May be taken more than once. Offered every semester.

EGR 409 Senior Engineering Project (2, 4, 6, or 8)

Independent work on advanced laboratory projects; topic to be chosen by the student in consultation with an instructor prior to registration in the course. May be taken more than once. Offered every semester.

EGR 415 Environmental Engineering (4)

A course in design that includes environmental factors. Consideration of resources and recycling in terms of available energy; economic-thermodynamic combined factors are related to environmental decisions. Problems and solutions in environmental situations are illustrated through field trips and guest speakers. A group or individual project is

required. Offered winter semester.

Prerequisite: EGR 341.

EGR 425 Analog, Digital, and Optical Filtering (4)

Analog, digital, and optical filtering techniques for one and two dimensional data studied from a common theoretical viewpoint. Lowpass, high-pass, and bandpass filtering in the time and spatial domains. Continuous and discrete Fourier transforms. Offered fall semester.

Prerequisite: EGR 326.

EGR 426 Advanced Electronics (4)

Fundamentals of linear and diode wave-shaping networks. Design and analyses of electronic switching circuits with emphasis on the design of digital circuits. Included are multivibrators and logic circuits. Additional topics include resonant-load amplifiers, frequency response, impedance matching. Offered fall semester.

Prerequisite: EGR 326.

EGR 431 Automatic Control Systems (4)

Review of basic methods for determining the equations of motion of various types of linear components and systems. Transient response to deterministic inputs and the definition of Lagrangian stability. The root locus method. Open- and closed-loop frequency response. Bode and Nyquist diagrams. Compensating networks. Use of analog computers in control system design. Offered fall semester.

Prerequisite: EGR 325.

EGR 432 Analysis of Nonlinear Systems (4)

Analysis of nonlinear physical systems with engineering applications. Phase-plane analysis for autonomous systems, singular points, and characterization of equilibrium points. Stability analysis via theorems of Liapunov, existence of limit cycles, harmonic analysis, and describing functions. Offered winter semester.

Prerequisite: EGR 325.

EGR 436 Production Systems (4)

This course includes quantitative methods for analyzing general types of systems. The focus is on production or manufacturing systems. Topics include basic economics, production scheduling, inventory control, resource allocation, congestive aspects of systems, quality control, and tolerancing. Offered winter semester.

Prerequisite: MTH 254.

EGR 448 Thermal Energy Transport (4)

A continued study of the basic concepts, properties, and descriptions of the three fundamental modes of heat transfer (conduction, convection, and thermal radiation), theoretical, numerical, and analogical methods of analysis of steady, transient, and single- and multi-dimensional problems. Includes laboratory. Offered winter semester.

Prerequisite: EGR 345 and APM 255.

EGR 449 Fluid Transport (4)

A continued study of the fundamentals of fluid mechanics and their applications, potential flow of inviscid fluids, laminar and turbulent boundary layer theory, compressible flow, similarity, modeling, and dimensional analysis. Offered fall semester.

Prerequisite: EGR 345 and APM 255.

EGR 453 Fluid and Thermal Systems (4)

A study of systems involving fluid and thermal phenomena. Includes

systems with conventional and unconventional energy conversion, fluid and thermal energy transport, environmental pollution and its abatement, associated measurement, and control devices. Analysis, design, and optimization of systems is emphasized via application of basic integral, differential, and lumped parameter modeling techniques. The course bridges conventional engineering disciplines. Offered fall semester. Prerequisite: EGR 341 and 345.

EGR 454 Energy Conversion (4)

A study of various processes and systems associated with conventional and unconventional energy conversion, fuel processing, chemical to thermal conversions, nuclear to thermal conversions, thermal to mechanical conversions, solar and geothermal conversion processes, thermoelectric devices, fuel cells, etc. Offered fall semester. Prerequisite: EGR 341 and 345.

EGR 461 Advanced Mechanics of Materials (4)

Advanced topics in mechanics, such as beams on elastic foundations, curved and composite beams, theory of plates, membrane theory of shells, torsion of noncircular cross-sections, thick-wall cylinders, contact stresses, stress concentrations, energy methods, and introduction to stability. Offered fall semester. Prerequisite: EGR 361.

EGR 462 Mechanical Properties of Materials (4)

Mechanical behavior of materials with an emphasis on defect structures in metals. True stress-strain properties of real materials. Plastic deformation and fracture of metals and nonmetals: dislocations, mechanical twinning, and slip phenomena. Theories of yield strength, fracture, and phenomenological fatigue behavior. Work-hardening theories for metals and strengthening mechanisms in solids. Offered winter semester. Prerequisite: EGR 361.

EGR 470 Microprocessors and Microcomputers (4)

Identical with CIS 470.
Prerequisite: EGR 485 or 488.

EGR 473 Electronic Devices (4)

A study of the principles of operation of various electronic devices including passive circuit elements and vacuum, gaseous, semiconductor, and quantum electronic devices. Measurement of the operating characteristics of such devices as vacuum tube triodes, voltage regulator tubes, semiconductor diodes, photoconductivity, junction transistors, field effect transistors, and lasers. Offered winter semester. Prerequisite: EGR 326.

EGR 480 Applied Numerical Methods (4)

Identical with CIS 480.
Prerequisite: EGR 325 and CIS 180.

EGR 483 Pattern Recognition (4)

Application of digital computer techniques to a variety of problems in pattern recognition; linear decision functions, Bayes decision theory, maximum likelihood estimation, multivariate normal features, non-parametric techniques, feature selection, clustering and unsupervised learning. Applications include industrial inspection and the processing of remote sensing, bio-medical, and pictorial data. Identical with CIS 483. Offered fall semester. Prerequisite: STA 226, APM 255, and CIS 382.

EGR 485 Switching Theory (4)

Boolean algebraic symbolization for nets of binary switched circuits such as counters, timers, and coders for typical computer subsystems. Constructive computation of nonredundant expansions by formal matrix methods are translated into laboratory devices with building block computer elements for computation and on-line data reduction. Introduction to sequential switching decomposition for control and programming of systems. Offered fall semester.

Prerequisite: EGR 326.

EGR 486 Computer Architecture (4)

Identical with CIS 486.

Prerequisite: CIS 290 and 382.

EGR 488 Design of Digital Systems (4)

Development of the components and techniques at the gate and flipflop level needed to design digital systems for instrumentation, communication, control, and related fields. Topics covered include combinational logic circuits, memory devices, sequential circuits, organization of digital systems, system input-output considerations, and algorithmic processes. Offered winter semester.

Prerequisite: EGR 326.

COURSE OFFERINGS IN COMPUTER AND INFORMATION SCIENCE**CIS 120-121 Introduction to Computer Programming (2 each)**

Introduction to computer programming and problem solving for nonengineering and noncomputer science majors. CIS 120 includes the programming language BASIC and is offered during the first seven weeks of fall and winter semesters. CIS 121 includes the programming language FORTRAN and is offered during the last seven weeks of fall and winter semesters. CIS 120-121 may be taken separately or they may be taken together in one semester for 4 credits. Credit applicable to graduation but not the major.

Prerequisite: At least two years of high school mathematics are strongly recommended.

CIS 180 Introduction to Computer Science I (4)

Introduction to digital computers and digital computation, problem solving and elementary applications, and algorithmic programming languages such as BASIC and FORTRAN. This course presumes a good background in high school mathematics. Students lacking such background or interest in mathematics should enroll in CIS 120-121. Offered every semester.

CIS 181 Introduction to Computer Science II (4)

An introduction to numerical methods; data structures and nonnumerical applications; another important algorithmic language such as ALGOL. Offered fall and winter semesters.

Prerequisite: CIS 180. Corequisite: MTH 154.

CIS 205 Special Topics in Computer and Information Science (4)

Introductory and intermediate topics in special areas of computer and information science. Offered normally on an individual basis. In this self-study format the student must obtain, prior to registration, the approval of the instructor who will supervise the work. The class will be offered in a scheduled class format only as the occasion demands. May be taken more than once. Offered every semester.

CIS 209 Project in Computer and Information Science (2 or 4)

Independent project work in computer and information science. Topic to be chosen in advance of registration by the student in consultation with an instructor. May be taken more than once. Offered every semester.

CIS 220 Computer-Based Information Systems (4)

Introduction to the structure, design, and use of large-scale, computer-based information systems in the business environment. Includes contemporary data base concepts utilizing mass storage devices. Emphasizes case studies involving the COBOL programming language. Offered winter semester.

Prerequisite: CIS 180 or 120-121 or knowledge of FORTRAN or equivalent programming language.

CIS 290 Introduction to Computer Organization and Assembly Programming (4)

Introduction to the internal structure and operation of a digital computer. Hardware organization, machine language, instruction execution, digital arithmetic, addressing techniques, and digital representations of data. Assembly language, macro- and micro-programming, program segmentation, and linkage. Several assembly programs will be written by the student. Offered fall semester.

Prerequisite: CIS 180 or 120-121.

CIS 382 Introduction to Information Structures (4)

Introduction to information structures and their application in digital computer programming. Topics include: linear lists, trees, lists, and their various representations using sequential and linked allocation. Emphasis is on the application of these general concepts to particular programming problems in data manipulation, discrete simulation, and formal symbolic manipulation. Offered fall semester.

Prerequisite: CIS 181.

CIS 385 Programming Languages (4)

Formal definition of programming languages, including specification of syntax and semantics. Global properties of algorithmic languages including scope of definitions, storage allocation, statement grouping, internal and external program blocks, binding time of constituents, functions, subroutines, coroutines, and tasks. Comparison of general purpose languages and categorization; comparison of the more important languages for list processing, string manipulation, and simulation. Offered winter semester.

Prerequisite: CIS 181 and 290.

CIS 405 Advanced Special Topics in Computer and Information Science (4)

Advanced study in special areas of computer and information science. Offered normally on an individual basis. In this self-study format the student must obtain, prior to registration, the approval of the instructor who will supervise the work. The class will be offered in a scheduled format only as the occasion demands. May be taken more than once. Offered every semester.

CIS 409 Directed Research in Computer and Information Science (2, 4, 6, or 8)

Independent work on advanced projects. Topic to be chosen in advance of registration by the student in consultation with an instructor. May be taken more than once. Offered every semester.

CIS 419 Application Software Design (4)

A project-oriented course in which students are assigned diverse projects sponsored by faculty/staff from various departments at Oakland. The course will study, in a realistic environment, the techniques and methodology of developing programs for user applications. Topics include specifications, top-down modular design, structured programming, documentation, testing, and verification. Offered fall semester.

Prerequisite: CIS 382.

CIS 460 Operating Systems (4)

Introduction to computer operating systems. A multi-programming operating system is viewed as a collection of cooperating processes designed to provide efficient utilization of the resources of the computer. Process control and synchronization, memory management, and device management will be the major topics. Offered fall semester.

Prerequisite: CIS 290 and 382.

CIS 465 Translation of Computer Languages (4)

The student is directed through the development of a compiler for a simple language that can be executed on a simulated computer. Topics include: overview of the formal definition of grammars and languages; scanning input strings from a source language; parsing via bottom-up methods; precedence grammars; internal forms for source programs; semantic routines; and symbol tables organization. The compiler is constructed in a high-level language such as ALGOL. Offered winter semester.

Prerequisite: CIS 382. Corequisite: CIS 385.

CIS 470 Microprocessors and Microcomputers (4)

An introduction to microprocessors and microcomputers; the CPU on a chip; interfacing microprocessors with external systems; programming considerations; logic design with microcomputers; hands-on laboratory experience. Identical with EGR 470. Offered winter semester.

Prerequisite: CIS 290 and 382.

CIS 480 Applied Numerical Methods (4)

Classical methods for solving general algebraic equations, polynomial factoring, Runge-Kutta and predictor-corrector methods for solution of ordinary differential equations, matrix computer methods, and the Fast Fourier Transform. Emphasis on student development of general purpose subroutines for use in engineering applications. Identical with EGR 480. Offered winter semester.

Prerequisite: APM 255 and CIS 181.

CIS 483 Pattern Recognition (4)

Identical with EGR 483.

Prerequisite: STA 226, APM 255, and CIS 382.

CIS 486 Computer Architecture (4)

Interchangeability between software and hardware; automatic parsing, stacking and list structure management; near-term future structures for mini-processors and networks; Boolean models for sequential control in processor systems; exercises in microprogramming of the CPU and Input/Output flows. Identical with EGR 486. Offered winter semester.

Prerequisite: CIS 290 and 382.

CIS 488 Design of Digital Systems (4)

Identical with EGR 488.



SCHOOL OF NURSING

OFFICE OF THE DEAN

Geraldene Felton, Dean
Nancy Kleckner, Assistant Professor in the Library, and Assistant to the Dean
of the School of Nursing

PROFESSOR: Geraldene Felton

ASSOCIATE PROFESSOR: June Kuczynski

ASSISTANT PROFESSOR: Nadia Boulos

INSTRUCTORS: Elizabeth Birney, Shirley Laffrey, Shirley McMann, Carol Milewski, Joyce Paape, Pamela Reed, Antoinette Renaud, Pamela Tisdale, Diane Wilson

SPECIAL INSTRUCTORS: Joan Finn, Connie Johnson

LECTURERS: Ellen Cary, Muriel Elmer, Marilyn Lotas

ADJUNCT INSTRUCTOR: Jean Mohan

ADJUNCT CLINICAL INSTRUCTORS: Otis L. Matlock, Virginia H. Matlock

The Nursing Program

The course of study combines general education in the humanities and the behavioral, biological, and physical sciences with special education in the theory and practice of nursing. Graduates will be qualified for employment as nurse practitioners in a variety of settings such as homes, community health agencies, hospitals, extended care facilities, and federal nursing services. Also, graduates will have the educational background necessary for graduate study in nursing.

The major purposes of the program are:

1. To prepare practitioners capable of independent functioning able to develop nursing regimens and to enter into the health care system for the purpose of meeting the nursing needs of individuals, families, groups, and communities.
2. To inculcate the nature and operation of identity in conduct for an image of self that is consistent, believable, and sustainable.
3. To prepare individuals capable of self-directed inquiry who view learning as a life-long process.

The Prenursing Year

Students wishing to enter the prenursing year should have completed two years of high school mathematics (including algebra), one year of biology, and one year of chemistry (a grade of B or better is desirable). Overall, a grade of B or better is required.

For diagnostic purposes, all students before or during orientation take the Multi-Stage Math Placement Test, the Science Proficiency Test, and the English Proficiency Test.

Prenursing students are not nursing students. During the freshman (prenursing) year students will complete a minimum of 28 credits (or the equivalent) of general education college work consisting of introductory courses in the physical and behavioral sciences and the humanities. These courses serve to introduce the student to the knowledge and principles embodied in the academic disciplines which he/she will need to incorporate into nursing practice. The decision as to whether the School of Nursing will accept a student into the professional part of the program will be made after completion of the prenursing requirements at Oakland University or equivalent courses at another institution. Successful completion of the freshman requirements provides evidence of the probability of succeeding in the nursing program. The School of Nursing encourages and actively seeks applicants among males and minority students.

Admission to the School of Nursing

Admission to the professional part of the program occurs in the fall semester of the sophomore year, is restrictive and selective, and may occur either by progression of freshman students currently enrolled at Oakland, or by transfer from other institutions. The School of Nursing has an enrollment quota which is filled with preference given to those applicants judged to be best qualified to undertake the program. Therefore, grades are important, as they serve a natural, logical, and defensible function in evaluating and reporting.

Nursing students are required to attend the spring session in the sophomore and junior years. Completion of required courses at the sophomore level is required to enter the junior year.

Minimum Criteria for Admission to the Nursing Program

Consideration of students for the nursing program (sophomore year) will be based on the following:

1. Applicant's admissibility to and retention in the university.
2. Overall grade point average of 3.00 in courses required for

consideration for entrance into the professional program, including courses that are transferable from other institutions.

3. Additional specifics to be met at the student's expense before beginning the sophomore year:
 - a. Health history and physical examination to include inoculation for tetanus, skin testing for tuberculosis (and possibly chest x-ray), and correction of any physical defects.
 - b. Malpractice insurance (\$1,000,000).
4. Submission of all required information to the School of Nursing by specified deadlines.

Plan of Study

During the first semester of the sophomore year each student will complete a Plan of Study in the Student Program Planning Office in the School of Nursing. The Plan of Study is a timetable of courses to be taken, and assures orderly progress toward satisfying degree requirements. The plan is completed by the student in consultation with the Program Planner and reviewed by the Coordinator for Program Planning.

Requirements for the Bachelor of Science Degree in Nursing

In order to graduate with the B.S.N. degree a student must:

- a. have demonstrated writing proficiency by meeting the university standard in English composition (see page 40).
- b. have been admitted to candidacy for the B.S.N. by the university and the School of Nursing.
- c. have completed all credits and courses prescribed in the B.S.N. curriculum:
 1. 58 credits in the nursing component as prescribed by the School of Nursing.
 2. 54 credits in the humanities and the physical, biological, social, and behavioral sciences as corequisites to the nursing component and as prescribed by the School of Nursing.
 3. A minimum of 8 credits in mathematics.
 4. A minimum of 8 credits in electives.
- d. have a cumulative grade point average of 2.50 in all nursing courses.
- e. have completed a minimum of 128 credits.
- f. have completed at least 32 credits in courses at the 300 level or above.
- g. be in substantial agreement with all legal curricular requirements.
- h. be in compliance with all legal regulations of the School of Nursing.

The Standard Nursing Program

The nursing program is highly structured. A model schedule has been adopted for freshmen entering in fall 1977.

FALL

Prenursing	Sophomore	Junior	Senior
BIO 111 (4)	NRS 211 (4)	NRS 311 (8)	NRS 411 (12)
LS 100 (4)	BIO 205 (4)	Elective* (4)	or NRS 412
MTH 101, 102 (if necessary)	BIO 206 (1)		Elective* (4)
MTH 123 (4)	PSY 271 (4)		
AN 102 or SOC 100 (4)	CHM 201 (4)		

WINTER

PSY 100 (4)	NRS 212 (4)	NRS 312 (8)	NRS 411 (12)
LS 101 (HBS)(4)	BIO 207 (4)	PHL 318 (4)	or NRS 412
CHM 104 (4)	BIO 208 (1)	STA 225 (4)	NRS 490
MTH 123 (4)	BIO 231 (4)		(optional)
(if not taken)	PSY 274 (4)		
PHY 141 (4)			

SPRING

PHY 141 (4)	NRS 213 (4)	NRS 313 (6)	
(if not taken)			

SUMMER

NRS 411 (12)

*It is suggested that electives be chosen at the 300 level from the humanities, physical, biological, social and behavioral sciences, and independent study.

National Student Nurses Association

Prenursing students and nursing students are eligible and are encouraged to join and remain members of the National Student Nurses Association. NSNA is the mechanism through which students will participate in planning and formulating policies related to the school.

Approval and Accreditation

Approval to initiate the nursing program has been obtained from the Michigan State Board of Nursing. Application for review for accreditation of the program by the National League for Nursing will be initiated near the time of graduation of the first class (1977-78 academic year).

Qualification for Licensure

Licensure is obtained through satisfactory performance on the

licensing examination prescribed by the state of Michigan. Upon registration of the license, the nurse is known as a Registered Nurse (R.N.). Licensure in one state entitles a qualified holder to licensure by endorsement in other states.

COURSE OFFERINGS

All nursing courses involve student learning experiences in the following settings: classroom, autotutorial laboratory, and clinical agencies in the community. All nursing classes must be taken in numerical order.

NRS 211 Introduction to Nursing (4)

Orientation to the professional program, the facilities, and the community. Includes identification of aspects of adaptation theories as a conceptual framework for nursing practice, the health care system, beginning socialization into nursing, and the nursing process.

NRS 212 Dimensions of Human Response (4)

Description, definitions, predictors, and approaches to control of the phenomena to which nursing attends, situational and maturational stressors, and practical adaptive responses of individuals.

NRS 213 Family Health (4)

Theory and experiences focusing on health maintenance and conservation, and prevention of illness. Health and developmental assessment will be emphasized. Responses of "well" children and families experiencing relatively normal pregnancy will be compared to responses of sick and handicapped children and families in crises.

NRS 311 Nursing of the Adult I (8)

Focus is on the study of implications of increasingly complex variables related to health and illness in the adult, and analysis of research in nursing and other disciplines that is relevant to nursing practice.

NRS 312 Nursing of the Adult II (8)

The study of interrelated maturational and situational stressors resulting in adaptive response deficits provides the base for expanding competency in nursing skills centering on care functions and the student's ability to make more sophisticated assessments.

NRS 313 The Nurse and the Care of the Aged (6)

Focus is on the care of the aged as an important facet of nursing practice. The concept of accountability as it relates to nursing is extended through examining criteria for assessing practice, formulating goals for professional development, and exploring the prospectus of nursing's contribution to society.

NRS 411 Community Organization for Health (12)

Exploration of the functions of the community health nurse with the individual, the family, and the community involves the student in health assessment and health teaching in selected home and community situations where multiple health programs exist. Students will have several options for in-depth study of families in communities.

NRS 412 Advanced Nursing (12)

Organization, implementation, and evaluation of nursing care to individuals and groups, and principles of leadership applicable to working with other members of the health team.

NRS 490 Independent Study (Credit varies up to 12)

Options include the opportunity for selected students to participate in faculty research or preceptorships in areas of special interest.



CENTER FOR GENERAL AND CAREER STUDIES

ASSOCIATE PROVOST AND DIRECTOR: Billie C. DeMont

ASSISTANT DIRECTOR: Kevin T. Kenney

FACULTY COUNCIL FOR GENERAL STUDIES: David C. Bricker, Associate Professor, Education; Elizabeth Conner, B.G.S. student; Jennie B. Cross, Assistant Professor, Kresge Library, Documents; Robert Edgerton, Associate Professor, Engineering; Peter G. Evarts, Professor, Learning Skills; Leonardas V. Gerulaitis, Associate Professor, History; Alice Gorlin, Assistant Professor, Economics; Roy A. Kotynek, Associate Professor, History; Kenneth A. Meade, Adjunct Professor, Engineering; Billy Joe Minor, Assistant Professor, Education; Donald Morse, Professor, English; Louis J. Nachman, Associate Professor, Mathematical Sciences; Carl R. Osthaus, Assistant Professor, History; James Ozinga, Associate Professor, Political Science; Gerald Reeves, B.G.S. student; Antoinette Renaud, Instructor, Nursing; S. Rita Sparks, Instructor, Kresge Library; John E. Tower, Assistant Dean, Economics and Management; Harold Zepelin, Assistant Professor, Psychology

The Center for General and Career Studies is an administrative, instructional, and research unit for the advancement of nontraditional learning. The center provides experimental courses and credit programs for the unique learning objectives of adult students, part-time students, evening and weekend clientele, and returning students. The programs of the center are specifically designed to maximize the effectiveness of university-wide academic and support services for the nontraditional student populations.

The center cooperates with organized faculties, departments, and support services to study, design, and implement appropriate instructional, advisement, and counseling programs. This broad objective is achieved through the center's evening degree programs and extension offerings, special institutes for individualized instruction, innovative course offerings and subject matter experimentation, instruction in reading and composition, courses in study and research skills, and out-of-country study. In addition, the center administers the Bachelor of General Studies program, New Charter College, the Department of Learning Skills, and the Evening Program Office.

Bachelor of General Studies Degree

The Bachelor of General Studies (B.G.S.) degree is a university-wide baccalaureate program that offers maximum flexibility and opportunity for student decision-making about courses of study at Oakland University. The degree allows students to specialize and select areas of study according to their unique educational and career objectives. The B.G.S. degree is primarily for students interested in obtaining a broad liberal arts education without specializing in a particular discipline. Students may select courses from any field of study or academic department which enables them to develop desired knowledge and competencies. Courses available to B.G.S. students are offered by other academic major departments.

Two-Plus-Two Program for Associate Degree Holders

The B.G.S. degree allows a student to combine a broad liberal arts education with an approved associate degree program from a community college.

Students who have associate degrees in applied science, industrial technology, labor studies, business administration, or similar areas of study and who have taken 12 semester credits in liberal arts may transfer to Oakland with 62 credits and secure a B.G.S. degree with an additional 62 credits of course work.

Students planning to enter a career or to engage in graduate study should secure counseling for appropriate vocational training and academic specialization.

Requirements for the Bachelor of General Studies Degree

Students eligible for the B.G.S. degree must:

1. Complete 124 semester credits.
2. Complete 32 of those credits at the 300 or 400 level.
3. Complete 32 credits at Oakland University and successfully complete the last 8 credits at Oakland University.
4. Achieve a minimum cumulative grade point average of 2.00 in courses taken at Oakland University.
5. Demonstrate writing proficiency by meeting the university standards in English composition (see page 40).
6. Be in substantial agreement with legal curricular requirements of the state of Michigan.
7. Have been admitted to candidacy for the B.G.S. degree by the university and the Faculty Council for General Studies. Admission to candidacy will require student participation in a system of faculty advising.

Advising

Because the B.G.S. program is relatively nontraditional by design, faculty advising is central to the program. Each B.G.S. student must follow a specific advising procedure, including:

1. **Assignment of Advisers.** Each student receives a faculty adviser when he/she declares enrollment in the B.G.S. program. (Students declare B.G.S. enrollment either on applications for admission or Request to Change of Major forms). The student may choose a faculty adviser from a list published by the center which includes advisers' names, office, advising hours, and areas of special interest. All members of the Faculty Council for General Studies are also B.G.S. faculty advisers. If a student does not select an adviser, the chairperson of the B.G.S. Advising Committee will assign one.
2. **Initial Advising Session.** The student and the faculty adviser will meet initially to discuss the student's goals in pursuing the B.G.S.
3. **Plan of Work and Rationale.** As a result of the initial advising session, the student will prepare a Plan of Work and Rationale for the course selection, which must be submitted to his/her faculty adviser within five weeks of declaring enrollment in the B.G.S. program.
4. **Advising Committee Approval.** After a student and faculty adviser discuss the Plan of Work and it is approved by the adviser, the document must be approved by the B.G.S. Advising Committee. In order to be accepted, the Plan of Work must reflect adequate prerequisites for upper-level courses. The Plan of Work also should not be an attempt to circumvent a major in a certain field by bypassing specific courses which may be basic requirements in that field. Further, the goals must indicate a general studies orientation rather than narrow focus in one field.
Finally, the Plan of Work must be consistent with the Rationale developed by the student in consultation with a faculty adviser.
5. **Maintenance Advising.** The B.G.S. student must meet with his/her faculty adviser every semester the student is enrolled to evaluate progress on the Plan of Work. The adviser will complete a maintenance advising form for each B.G.S. candidate every semester.

Questions regarding the B.G.S. degree requirements should be directed to a faculty adviser or to the Center for General and Career Studies office, 264 South Foundation Hall.

CREDIT EVENING PROGRAM

The Center for General and Career Studies also directs the university's evening program, consisting of undergraduate degree

courses taught after 4 p.m. at the university's main campus, as well as undergraduate courses and credit institutes taught at extension sites in southeastern Michigan.

On-Campus Evening Degree Programs

Students may earn undergraduate degrees at night in eight major areas: economics, English, history, human resources development, management, political science, psychology, and sociology. In addition, concentrations are available for students attending only in the evening in journalism, theatre arts, and social justice and corrections.

General education & courses are offered in almost all other program areas of the university.

Undergraduate Extension Program

The university offers undergraduate courses at various sites in southeastern Michigan including: Shrine High School, 3500 West Thirteen Mile Road, Royal Oak; Central High School, 300 West Huron, Pontiac; and Birmingham Center for Continuing Education, 746 Purdy Street, Birmingham.

Extension courses are also offered to business, government agencies, private agencies, and civic groups to provide specialized instruction to the clientele of such organizations. Most courses can be taught at the organization's facility, and the course content structured to address specific needs or goals identified by the organization.

Nonmatriculating Admission

Potential evening students who have never attended Oakland University and were unable to secure regular admission to the university because of time may register for classes on a nonmatriculating basis.

A nonmatriculating admission is valid for one semester only. During the first semester of nonmatriculation the student must secure regular admission to the university. To be considered for regular admission a student need only: submit a second application for admission to the Director of Admissions with the required application fee; forward transcripts from past colleges, universities, or high schools attended; and receive a letter of admission. Students attending on a nonmatriculating basis will receive full academic credit for courses in which they are enrolled.

General Studies Information and Course Bulletins

Information on course registration is contained in the Oakland

University Schedule of Classes and the Center for General and Career Studies Bulletin. Copies of the Bulletin and B.G.S. program information are available at the center office.

Extension Class Cancellation

The university reserves the right to cancel any extension course that does not have sufficient enrollment. All tuition and fees applicable to the canceled section are refunded automatically when a class is canceled.

NEW CHARTER COLLEGE

COCHAIRPERSONS: Dolores M. Burdick (*Modern Languages*) and James D. Graham (*History*)

Faculty for 1977-78 will be drawn from the following list:

Daniel Armstrong (*English*), Edward A. Bantel (*Psychology*), Peter J. Bertocci (*Anthropology*), Cordell Black (*Learning Skills*), Marc E. Briod (*Education*), Richard W. Brooks (*Philosophy*), Harvey Burdick (*Psychology*), John B. Cameron (*Art History*), F. James Clatworthy (*Education*), John D. Cowlshaw (*Biology*), Joseph W. Dement (*English*), DeWitt S. Dykes, Jr. (*History*), Peter G. Evarts (*English*), Robert Fink (*Psychology*), William C. Fish (*Education*), Thomas Fitzsimmons (*English*), Leonardas V. Gerulaitis (*History*), Carol Halsted (*Education*), Marvin Halladay (*Music*), Christopher Holliday (*Philosophy*), Roy A. Kolynek (*History*), Margaret Kurzman (*Learning Skills*), Abraham R. Liboff (*Physics*), David W. Mascitelli (*English*), Gadis Nowell (*Economics and Management*), James Ozinga (*Political Science*), Margaret Pigott (*Learning Skills*), Helen J. Schwartz (*English*), Robert L. Stern (*Chemistry*), Ronald M. Swartz (*Education*), John E. Tower (*Economics and Management*), Richard Tucker (*History*), Gertrude M. White (*English*)

ADJUNCT FACULTY: Thomas A. Aston (*Theatre Arts*), Johnetta C. Brazzell (*Urban Affairs*), Hal Liphart (*Human Interaction Center*)

Drawing on faculty from departments and schools throughout the university, New Charter College (NCC) offers an interdisciplinary, individualized approach to learning. Students pursuing a major in the College of Arts and Sciences, the School of Economics and Management, or the School of Education (HRD) may fulfill their general education requirement through 32 credits of interdisciplinary coursework in New Charter College and 4 or 8 credits in Language and Thought (see page 49). B.G.S. degree candidates will find the New Charter offerings to be broad, flexible, and challenging. Although New Charter College does not offer a major or a degree, degree candidates in any of Oakland's schools or departments may augment their studies through coursework in New Charter.

General Education Requirements in New Charter College

New Charter students are defined as those who fulfill 32 credits of their general education distribution requirements in New Charter College and those who pursue the B.G.S. degree, in part, through 28 or more credits of New Charter classes. New Charter students are required to plan individual programs of study with assistance from a New Charter faculty adviser. The programs are planned in accordance with the following considerations:

1. NCC courses at 100, 200, and 300 levels demand increasingly more advanced skills in cross-disciplinary inquiry, as well as increasingly rigorous course requirements.
2. Courses at the 100 or 200 level carry no prerequisites. Courses at the 300 level generally require English Proficiency Certification and 48 college credits, in addition to any prerequisites listed under the course description.
3. Courses on all levels ending in numbers from 11-19 designate an orientation toward the creative arts, those ending in 21-29 emphasize humanities, those ending in 31-39 are rooted in social sciences, those ending in 41-49 grow out of natural sciences, and those ending in 51-59 are oriented toward community studies.
4. NCC students are encouraged to take courses from differently-numbered sequences on different levels to assure breadth in their general education.
5. New Charter students are expected to complete at least 8 credits of NCC coursework at the 300 level, and to take at least 6 of their NCC credits in core courses of interdisciplinary studies — NCC 100 or 200 and NCC 151 or 152.

COURSE OFFERINGS

NCC 100 Introduction to Problem-Solving (2)

A symposium in which problem-solving techniques employed in different disciplines are introduced and analyzed. Guest speakers are invited to present their approaches. Offered every year.

NCC 101 Explorations in Interdisciplinary Studies (2 or 4)

An introductory course enabling students to sample various interdisciplinary approaches and to develop broader perspectives on interdisciplinary matter. Offered every year.

NCC 112 Creative Expression (4)

An exploration of communication with self and others within structured forms of dance, music, and drama. Visual arts and other media are used to implement expression where appropriate and possible. Graded S/N. Offered every year.

NCC 121 Images of Humanity (4)

Literature as a cross-cultural mirror. Literary works of various types will be explored, with emphasis on the ways that writers look outward in order to reflect the world in which they live.

NCC 122 Alienation in Youth (4)

This course focuses on problems and questions about why students and adolescents may reject the values of their native society, as well as the difficulties in bringing about genuine change in society and self. Offered every year.

NCC 123 Science Fiction, Detective Stories, and the Scientific Method (4)

Using representative works from science fiction, detective stories, and the philosophy of science, this class focuses on how scientific discoveries might affect human life and culture. Offered every year.

NCC 127 Perfect Societies, Old and New (4)

An exploration of utopian thought in Western culture, from Plato and More to Skinner and Huxley. What constitutes the good society? Is it possible, given human nature, to create ideal social conditions?

NCC 131 Studies in Human Organization (4)

An introduction to the behavioral sciences through interdisciplinary focus on a particular topic or problem area to be chosen by the instructor. Topics may range from the cross-cultural study of human relations and lifestyles to examination of the dimensions of a contemporary American social problem. Offered every year.

NCC 135 Human Sexuality (4)

Explores the notion that sexuality connotes the totality of being. Designed to provide opportunities to contemplate human sexuality with openness, depth, and compassion. Offered every year.

NCC 141 20th Century Science (4)

An exploration of current frontiers in scientific thought and conceptualization, in relation to contemporary society and its problems. No advanced specific knowledge of modern science is required. Offered every year.

NCC 147 History of Science (4)

A look at various relationships between science and society. Several historical periods, from antiquity to the present, are examined to see how the development of science has been influenced by the prevailing intellectual climate of the era, and how new insights in the sciences have helped to shape different societies' perceptions of reality.

NCC 151 Introduction to Urban Studies (4)

A forum providing an introduction to the interdisciplinary subject matter of urban studies. Guest speakers are invited to provide a wide range of perspectives on the problems and possibilities of human growth in modern American cities. Offered every year.

NCC 152 Introduction to Women's Studies (4)

A forum designed to examine the varieties of female experience through the viewpoints of various traditional disciplines such as biology, psychology, history, and economics. There will be guest lecturers, and major feminist writings will be explored. Offered every year.

NCC 200 The Individual in the University (2)

A symposium to clarify the nature of general education in relation to life experiences and career development. Explorations include personal competencies, goals, and needs as they pertain to academic subject matter, the history and structure of the university, and critical evaluation of the processes and possibilities of higher learning. Offered every year.

NCC 201 Topics in Interdisciplinary Studies (2 or 4)

An intermediate course enabling students to sample various interdisciplinary approaches and to develop broader perspectives on interdisciplinary subject matter. Offered every year.

NCC 212 Theatre Dance (4)

An exploration of dance styles through history, including folk, baroque, Renaissance, musical comedy, and avant-garde dance. Includes practical experience in various styles as well as historical background in theatre dance. Graded S/N. Offered every year.

NCC 213 Mime (4)

An introduction to the art of gesture and movement. Classical and traditional forms are explored, emphasizing active involvement in mime. Graded S/N. Offered every year.

NCC 223 Personal Worlds (4)

Philosophical and literary sources are used to explore the dreamlike and dramatic inner quality of personal worlds. Analogies are drawn between the fictional lives of others and the stranger within the self. Offered every year.

NCC 227 Those Were the Days (4)

From a contemporary perspective, cultural history and social alienation in America during the 1950's and 1960's are studied and discussed. Themes of alienation as seen by different generations, sexes, and ethnic groups are analyzed in relation to prominent individuals in popular music, television, and film.

NCC 235 Perspectives on Psychic Research (4)

A survey and analysis of contemporary research into parapsychology and a wide range of observed or purported psychic phenomena — such as clairvoyance, mediumship, faith-healing, precognition, astral projection, etc. Offered every year.

NCC 241 Body and Soul (4)

Explores multiple approaches to self-knowledge, based on the writings of different authors who attempt to integrate human biology with psychology and culture. The question of reality of body and soul is examined in light of a systems approach to the life sciences, so that no advanced disciplinary training is necessary. Offered every year.

NCC 251 Religion and Contemporary Morality (4)

An examination of selected personal and social problems from a variety of religious and moral points of view. Topics include sexual deviance, abortion, birth control, pacifism, violence, civil disobedience, suicide, and death. Offered every year.

NCC 252 Interpersonal Relationships: Marriage, Family, and Divorce (4)

This course facilitates the critical evaluation of individual feelings about tradition and change in marriage and parenthood, male and female roles, sexuality and companionship, marital conflict and divorce, and the single life. Offered every year.

NCC 300 Independent Study (2 or 4)

Advanced interdisciplinary reading on a topic of specific interest to the student, who assumes initiative for planning this reading project in conjunction with NCC faculty sponsor and approval of the NCC Executive Committee. Graded S/N. Offered every semester.

Prerequisite: Approved NCC contract.

NCC 301 Seminar in Interdisciplinary Studies (2 or 4)

An advanced course enabling students to sample various interdisciplinary approaches and to develop broader perspectives on interdisciplinary subject matter. Offered every year.

Prerequisite: Previous NCC coursework or permission of instructor.

NCC 310 Creative Arts Contract (2 or 4)

An opportunity to develop artistic skills within a broader context of aesthetic history and criticism. The student must submit a learning contract, signed by an NCC faculty sponsor and approved by the NCC Executive Committee, by way of applying for permission to take this class. Graded S/N. Offered every semester.

Prerequisite: Approved NCC contract.

NCC 312 Dance and Creative Movement (4)

An investigation of people's physical and psychological growth in relation to creative movement and the integration of traditional learning experiences with movement. Actual experience in dance and creative movement is included. Graded S/N. Offered every year.

Prerequisite: Previous coursework in dance or creative movement.

NCC 321 Remedial Wisdom (4)

An attempt to confront the student with the totality of problems facing an educated person today and explore various attempts being made to solve them.

Prerequisite: Senior standing or permission of instructor.

NCC 327 The Afro-American Experience in Michigan (4)

Focus is on the life experiences of Afro-Americans in the recent history of Michigan, emphasizing black migrations and settlement in the Pontiac and Detroit areas during World War II. Students are expected to interview people and collect, edit, and evaluate oral histories. Offered every year.

Prerequisite: Permission of instructor.

NCC 335 Love and Death (4)

Investigates the genesis of our conceptions about death and love, as well as their conceptual impact on our lifestyles and the ways in which we love and die. Achievement, power, violence, scholarship, and other human activities or motivations can be seen as ways of escaping the real problems posed by death and love. Offered every year.

Prerequisite: Permission of instructor.

NCC 336 Ways of Knowing (4)

An intensive exploration of personal integration and growth, bridging the distance between reading and experience, through the study of humanistic psychology, transactional analysis, bio-energetic theory and technique, and Jungian syntheses.

Prerequisite: Permission of instructor.

NCC 347 Tooling Toward 2001 (4)

An exploration of future possibilities, through readings and classroom discussion. The connection and conflict between alternative goals and plans for the future are investigated with specific reference to energy, food, social structure, etc.

Prerequisite: Previous NCC coursework or permission of instructor.

NCC 351 The Geography of Values (4)

Explores community values in the context of change and development. Changing values and community development in local areas are re-

searched and analyzed to reach a deeper understanding of the techniques and uses of social cartography.

Prerequisite: Previous NCC coursework or permission of instructor.

NCC 400 Independent Research (2 or 4)

Advanced interdisciplinary research on a topic of specific interest to the student. The student assumes initiative for planning this research in conjunction with an NCC faculty sponsor and approval of the NCC Executive Committee. A substantive, well-documented paper is required. Offered every semester.

Prerequisite: Approved NCC contract.

DEPARTMENT OF LEARNING SKILLS

CHAIRPERSON: Peter G. Evarts

PROFESSOR: Peter G. Evarts

ASSISTANT PROFESSORS: Rose C. Clark, Barbara B. Hamilton, Margaret B. Pigott, L. Martin Lewis

SPECIAL INSTRUCTORS: Cordell W. Black, Bernadette Dickerson, Wilma Garcia, Margaret Kurzman

STAFF OF READING CENTER: Rose C. Clark

STAFF OF SKILL DEVELOPMENT CENTER: George A. Jackson, Director of Special Programs; Margaret Kurzman, Coordinator of Tutorial Services, Carole Johnson

The Department of Learning Skills helps freshmen in the university acquire basic learning skills necessary for the performance of college-level academic work. While the emphasis in departmental courses is on coherent and generally effective writing, all modes of communication, including library search skills and research and annotation, are included within the curricula of learning skills courses.

Students are placed in learning skills courses according to the results of preregistration diagnostic testing and, unless exempted, are encouraged to enroll in a two-course sequence in the form and content of composition. The courses are designed so that a student who completes the sequence should also be able to meet the university's certification proficiency in writing for graduation.

Assistance is available for students who need extra help in reading and study skills. Students may use the Reading and Skill Development centers on a voluntary basis or upon referral by their instructors for short, noncredit courses, or they may be assigned to the center for regular credit tutorial courses. Students who are enrolled in courses below the 100 level should be in close contact with their advisers to insure that they do not exceed the specific limitation of four such courses counting toward the completion of the baccalaureate.

COURSE OFFERINGS

The following courses represent the core writing, reading, and study skills courses for freshmen. Students are assigned to the courses on the basis of diagnostic tests and should enroll in the course assigned at orientation or registration.

LS 060 Supervised Study (1)

A seven-week course offered within the Skill Development Center. The student is assigned to a tutor for a regular and concentrated series of lessons in the study techniques associated with a variety of subjects including mathematics, biology, physics, and composition. Graded S/N.

LS 075 Tutorial in Writing Skills (4)

A one-to-one course in writing. Instruction by the faculty of learning skills for at least six hours per week (two hours conference, four hours preparation). May be taken separately or in conjunction with LS 050, 100, or 101. Graded S/N. Open to all students by referral and permission of staff. Hours arranged.

LS 076 Tutorial in Reading Skills (4)

A course, designed for students who have problems in reading, utilizing the services of the Reading Center. It is offered on a one-to-one basis and includes initial diagnosis of reading difficulty and an individualized program of study. Graded S/N.

LS 100 Basic Writing Skills II (4)

A course emphasizing the formal and functional elements in expository writing. Students are introduced to syntactic and rhetorical patterns of the English sentence and related patterns of paragraph development. Enrollment by assignment.

LS 101 Basic Writing Skills III (4)

A course emphasizing the development of extended rhetorical structures, with focus on organizational patterns and the principles of logic, coherence, and unity. The course introduces students to techniques of persuasive argument and to fundamental methods of research and annotation. Enrollment by assignment.

Prerequisite: LS 100.

LS 103 Effective Study Skills (4)

A course designed to improve skills in the following areas: notetaking, memory and concentration, vocabulary building, preparing for and taking exams, basic library research, analytical reading.

LS 105 Efficient Reading (2 or 4)

This seven-week course is designed for the able reader. Any student who enrolls should comprehend basic material, have established a working vocabulary for the course, and have a primary need for more efficient study habits. Topics include skimming/scanning techniques, adjustment of rate, spotting authors' patterns of organization, drawing inferences and conclusions before and during reading, and proper use of textbooks. Graded S/N.

LS 110 Introduction to Critical Reading (4)

A course in critical reading skills, examining patterns of logical thinking, sentence and paragraph forms, tone, fallacious reasoning, etc. Intensive practice in analyzing arguments.



CENTER FOR HEALTH SCIENCES

ASSOCIATE PROVOST FOR HEALTH SCIENCES AND DIRECTOR:

Moon J. Pak

The Center for Health Sciences is an academic and administrative unit offering degree and nondegree programs in health and medically-related fields. The center offers health science programs leading to the Bachelor of Science degree in environmental health, medical physics, and medical technology. These health-related programs are keyed to state and national needs.

Graduates of the medical technology and medical review programs are required to take certification or licensing examinations. In such programs a judicious effort has been made to follow guidelines set by external agencies. On-the-job and clinical training is provided to make students employable in specific health fields.

ENVIRONMENTAL HEALTH PROGRAM

DIRECTOR: Paul Tomboulion (Chemistry)

This program prepares students as environmental generalists for a wide variety of professional opportunities existing mainly in government and industry. Graduates of the program should be able to identify and offer technical solutions to the broad range of environmental problems which impact on human health and well-being. These include such areas as health and safety in the workplace, air resources, land resources, and environmental planning.

Students learn to identify and evaluate alternative solutions to environmental problems. Short- and long-range implications of human activities are analyzed as they affect resources and public policy. The emphasis is on a multidisciplinary approach using problem-solving methods, decision-making programs, and benefit-risk analyses.

Requirements for the Bachelor of Science Degree

1. 128 credits.

2. 24 credits of general education. The student must complete at least 4 credits in four of the five designated field groups, and at least 8 credits in one of the field groups. For field group descriptions see the College of Arts and Sciences entry, page 48. The designated field groups are arts; history, philosophy, and area studies; language and thought; literature; and social sciences.
3. An introductory core program, including BIO 111, 112, 113, and 114; CHM 114, 115, 117, 118, 203, and 204; PHY 101, 102 (or for students considering graduate education, PHY 151 and 152); MTH 123, STA 225 (MTH 154, 155 is recommended for those considering graduate school).
4. CHM 217 and selection from an intermediate core program of 30 credits, including such courses as BIO 237, 238, 281, 301, 303, 343; CHM 351; PHY 106, 107, 158, 271; ECN 200, 201; PHL 318; and STA 226.
5. Selection from advanced courses, including ENV 212, 233, 271, 313, 362, 372, 373, and 421; or coursework in the options listed below.
6. Admission to major standing and an approved program of study. Individualized curricula are possible providing maximum flexibility to match interests, talents, and subject specialties.

Option in Occupational Health and Safety

This option is offered in cooperation with the College of Arts and Sciences. The curriculum provides a combination of coursework and laboratory experiences designed to prepare students for professional careers relating human health and safety factors to working conditions. Students learn to recognize and evaluate environmental hazards and identify potential problems. This is followed by training in sampling, monitoring, and controlling harmful agents. Finally, students learn corrective procedures and prescriptive methods for control or elimination of undesirable occupational health and safety conditions and practices. Emphasis is on air and water pollutants, noise, radiation hazards, and disease vectors. Techniques of assessing actual and potential risks of exposure to environmental hazards are evaluated, along with philosophies, methodologies, and applications of tolerances, thresholds, and limits.

The long-range goal of the curriculum is to prepare undergraduates to be directly employable in the fields of occupational health and safety. Although details of the curricula and course are still being developed, the program will be based on the core courses, along with upper-level OSH courses. Anticipated upper-level offerings will include human anatomy and physiology, epidemiology and biostatistics, occupational health and safety courses, analytical chemistry, sampling and

instrumentation laboratory, environmental measurement techniques, OSH laboratory, and occupational health internship.

Option in Environmental and Resource Management

Students in this option emphasize the management of resources as they affect human health and well-being. Opportunities for study in air pollution, water pollution, demography, land resource management, control applications, and planning functions are anticipated. Professional careers are available for graduates in planning agencies, industry, and government. Alternatively, program options offer ideal training for a variety of graduate school opportunities and environmental studies, planning, natural resource management, and environmental and public health.

Advanced course offerings may include BIO 301, 303; PHY 106, 107, 308; ENV 212, 221, 271, 313, 362, 372, 373, 421; PS 205, 302, 350; and ECN 208.

CONCENTRATION IN HEALTH BEHAVIORAL SCIENCES

DIRECTOR: Carl R. Vann

The concentration in the health behavioral sciences is planned to be taken in conjunction with a regular departmental major or independent major. Its purpose is to offer a multidisciplinary perspective of the behavioral sciences on the many and varied aspects of the health disciplines, problems, and concerns. It provides a cross-cultural as well as an American perspective. It is especially relevant to students seeking careers in health-related fields and also offers significant insights and opportunities for study to students pursuing programs of general education, administration, and law.

Requirements for the concentration in the health behavioral sciences are 20 credits to be chosen from: HBS 200, 250, 251, 300, 400, 499, AN 420, SOC 368, and ECN 467.

Students in the premedical program and majors in any of the natural sciences, with an adviser's approval, may count 4 credits of their major coursework toward this concentration.

COURSE OFFERINGS

HBS 200 Health Care Dimensions (4)

The development, present status, and dynamics of the American health care system emphasizing the structure of the various health professions and the problems, opportunities, and constraints related to health care delivery, and professionalism. Role choice and role integration in health

care will be studied. Other topics are relationships between the health care cultures and personality and professional roles of health care practitioners, and issues involving hospitals, health care teams, planning, public policy, client relationships, and factors affecting health.

HBS 250-251 Health Behavioral Sciences (4 each)

Human behavior, institutions, professions, and professionalism in the health-medical fields, with emphasis on concepts of health and illness, death and dying, the sick role, doctor-patient relationships, organization and delivery of health care, legal and ethical problems and culture, and politics of health and health care.

HBS 300 Independent Study in the Health Behavioral Sciences (4, 8, 12, or 16)

A semester of off-campus independent study and applied research. Projects will be developed in cooperation with and supervised by faculty within the framework of methodology and explanation in the behavioral sciences.

HBS 400 Field Practicum in Health Behavioral Sciences (4, 8, 12, or 16)

Primarily for students seeking careers in health-related fields, this course is a supervised field placement experience combined with academic content and individually guided research. Students are placed through arrangements with hospitals, government and voluntary health agencies, comprehensive medical service organizations, pharmaceutical companies, and other community agencies.

HBS 499 Senior Seminar in Health Behavioral Sciences (4)

MEDICAL PHYSICS PROGRAM

DIRECTOR: Abraham R. Liboff (Physics)

Medical physics, a relatively new health-related professional program, is concerned with the use of physical techniques to diagnose and treat disease. In the past the subject was most closely associated with radiation therapy in the development of which it played a vital part. Today it also includes the physical aspects of X-ray diagnosis, nuclear medicine, radiation safety, ultrasonics, lasers, thermography, image intensification, EKG, and EEG. It is also involved in related areas such as patient monitoring and general medical instrumentation. In addition to clinical duties surrounding these techniques, medical physicists are engaged in research and development, consultation and service, and teaching of residents, hospital personnel, and undergraduates. Much of the progress made in the last decade in both diagnosing and treating cancer can be traced directly to the increasing use of physics in medicine.

The medical physics program is based on a group of physics courses, with relevant biology, chemistry, and mathematics courses added. During the fourth year, students take part in an internship at a local hospital and, along with hospital residents, take courses in such areas as physics, radiology, nuclear

medicine, and medical instrumentation.

Interested students must consult with the program director to obtain specific information on the required courses and to receive counseling.

Requirements for the Bachelor of Science Degree

1. 128 credits.
2. 24 credits of general education. The student must complete at least 4 credits in four of the five designated field groups, and at least 8 credits in one of the field groups. For field group descriptions see the College of Arts and Sciences entry, page 48. The designated field groups are arts; history, philosophy, and area studies; language and thought; literature; and social sciences.
3. PHY 158 or 159 and 38 additional credits in physics at or above the 200 level, including PHY 247 or 341, PHY 271 or 371, PHY 441-442, PHY 443, PHY 490 (practicum).
4. 16 credits of mathematics, at a level not below MTH 154.
5. 20 credits of chemistry, at a level not below CHM 114.
6. 12 credits of biology, at a level not below BIO 111.
7. 2 credits of computer programming.

MEDICAL TECHNOLOGY PROGRAM

ACTING DIRECTOR: Moon J. Pak (Health Sciences)

The program prepares students for professional health career opportunities in clinical pathology laboratories in hospitals. Medical technologists work under the supervision of a pathologist and are primarily responsible for the operation of the laboratory, performing a wide variety of tests on which physicians base their diagnosis of a disease and formulate therapeutic plans. They also direct the work of medical laboratory technicians and laboratory assistants whose scope of training is much less extensive.

Medical technology students take a three-year academic program at Oakland based on the educational guidelines set forth by the Council on Medical Education of the American Medical Association. The fourth year is spent in an affiliated and approved hospital school of medical technology. Prior to receipt of the degree, the student must pass a national certification examination to become a registered medical technologist. Completion of the medical technology program is contingent upon the student's admission to one of the hospital schools of medical technology affiliated with the university. Currently, the following hospitals are affiliated with Oakland:

1. Crittenton Hospital, Rochester
Director: Alexander Ullmann, M.D.
Educational Coordinator: Marion Buszek, M.T.
2. Pontiac General Hospital, Pontiac
Director: John Libeke, M.D.
Educational Coordinator: Tom Neumann, M.T.
3. Providence Hospital, Southfield
Director: Wyant Shively, M.D.
Educational Coordinator: Agnes Klarr, M.T.
4. St. Joseph Mercy Hospital, Pontiac
Director: William Reid, M.D.
Educational Coordinator: SHERALYN JOHNSON, M.T.
5. William Beaumont Hospital, Royal Oak
Director: Richard Walker, M.D.
Educational Coordinator: Lenore Johnson, M.T.
6. Port Huron Hospital, Port Huron
Director: Clemens M. Kopp, M.D.
Educational Coordinator: Katherine S. Schnur, M.T.

Requirements for the Bachelor of Science Degree

1. 128 credits, including the 28 credits earned in the fourth-year internship.
2. 24 credits of general education. The student must complete at least 4 credits in four of the five designated field groups, and at least 8 credits in one of the field groups. For field group descriptions see the College of Arts and Sciences entry, page 48. The designated field groups are arts; history, philosophy, and area studies; language and thought; literature; and social sciences.
3. A major program of 76 credits, including: BIO 111, 112, 113, 114, 221, 222, 223, 224, 281, 361, 362, 407, 408, or CHM 351, 357; CHM 114, 115, 117, 118, 203, 204, 206, 207; MTH 123; PHY 101, 102, and 158.

Concentration in Histotechnology

The medical technology program offers a concentration in histotechnology which prepares students majoring in medical technology for a specialized employment opportunity in the anatomic pathology departments of hospitals as a certified histotechnologist. Clinical training in this program is at William Beaumont Hospital, Royal Oak, School of Histotechnology, with the following personnel:

DIRECTOR: Jay Bernstein, M.D.

FACULTY: Edward G. Bernacki, M.D.; A.A. Al-Saadi, Ph.D.; Dorothy Cummings, M.T.; Robert V. Weimer

Requirements for the concentration in histotechnology include the following:

1. 128 credits.
2. 24 credits of general education. The student must complete at least 4 credits in four of the five designated field groups, and at least 8 credits in one of the field groups. For field group descriptions see the College of Arts and Sciences entry, page 48. The designated field groups are arts; history, philosophy, and area studies; language and thought; literature; and social sciences.
3. BIO 111, 112, 113, 114, 221, 222, 223, 224, 281, 361, 362, 429, 430, 445, 446; CHM 114, 115, 117, 118, 203, 204, 206, 207; PHY 101, 102, 158; MTH 123.
4. 28 credits in clinical courses: HT 301, 302, 303, 401, 402, 403.

COURSE OFFERINGS

HT 301 Basic Histotechnique (5)

Designed to prepare students to become qualified histotechnologists, who process, cut, and stain tissue specimens which have been removed by biopsy, autopsy, or from laboratory animals for microscopic examination and diagnostic interpretation by pathologists.

HT 302 Advanced Histotechnique (5)

Continuation of HT 301, with emphasis on unique procedures in special pathology laboratories, e.g. neuropathology, dermatopathology, ophthalmic pathology, bone marrow pathology, renal pathology. An introduction to techniques of medical photography, museum specimens, cytogenetics, and frozen sectioning.

HT 303 Histologic Staining Methods (4)

The use of dyes and chemical agents to identify different cells, tissues, and numerous biological and chemical substances present in tissues.

HT 401 Clinical Electron Microscopy (5)

Basic biological electron microscopy, including basic fixation, embedding and sectioning of human and animal tissues, and the uses of electron microscopy and related equipment. Electron microscopic histochemistry and special techniques are also covered. Emphasis is on the electron microscope as a medical diagnostic tool.

HT 402 Immunopathology (5)

Basic techniques of fluorescent antibody tracing including preparation of tissues, staining with fluorescent labeled antibodies, and use of fluorescent microscopes. Immunoperoxidase methods and special problems are also covered. Emphasis is on the use of the techniques as applied to medicine.

HT 403 Advanced Electron Microscopy (4)

Continuation of HT 401. An advanced course emphasizing immuno-electron microscopy and special individual research projects.

MEDICAL REVIEW PROGRAM

DIRECTOR: Moon J. Pak (Health Sciences)

STAFF: Robert Church

BOARD OF COORDINATORS: Robert Church, B.A. (Health Sciences), Arthur Lewandowski, Ph.D. (Psychology), Thomas Lyons, M.A. (Audio Visual Service), William Schwab, Ph.D. (Linguistics), Alexander Ullmann, M.D. (Crittenton Hospital), Barry S. Winkler, Ph.D. (Institute of Biological Sciences)

CLINICAL ASSOCIATES: George Gerber, M.D. (Obstetrics and Gynecology), Shamsul Haque, M.D. (Psychiatry), Satish Khaneja, M.D. (Internal Medicine), John Libcke, M.D. (Pathology), Robert Locey, M.D. (Public Health), Moufid Mitri, M.D. (Surgery), Haralappa Paramesh, M.D. (Pediatrics)

BASIC SCIENCE ASSOCIATES: L. Nichols Grimes, Ph.D. (Anatomy), Chian Huang, Ph.D. (Pharmacology), Brian Livermore, Ph.D. (Microbiology), Arun Roy, Ph.D. (Biochemistry), Barry S. Winkler, Ph.D. (Physiology)

Oakland University offers a comprehensive medical review program for physicians preparing for various licensure examinations. It is a three-month, full-time residence program offered twice a year.

The basic science disciplines are taught by members of the faculty of various science departments of the university. The clinical faculty are physicians affiliated with hospitals of the Oakland Health Education Program (OHEP).

OFFICE OF THE PROVOST

PROVOST: Frederick W. Obeare

VICE PROVOST: George T. Matthews

Two active academic programs are administered by the Office of the Provost: The Center for Community and Human Development and the University Concentration in Applied Statistics. In addition, there are two inactive programs currently undergoing extensive reorganization: The School of Performing Arts and the University Course Program.

CENTER FOR COMMUNITY AND HUMAN DEVELOPMENT

DIRECTOR: Wilma Ray-Bledsoe

ASSOCIATE DIRECTOR: Harvey R. Hohaus

DIRECTOR, COMMUNITY SERVICE PROGRAM: Anne C. Frey

The center is an academic agency that seeks to coordinate activities between the university's academic programs and off-campus community needs and interests. The center offers the community service course sequence described below.

CS 201-202 Community Service (4, 6)

A program devoted to volunteer service activity in the local community. A regular but modified schedule of class meetings and a series of academic assignments will also be required. Students are placed in an agency service activity of their own interests, as approved by the program director and faculty. CS 201 is a survey of the human service field including career options, skill development, client needs, and specialized services, while CS 202 emphasizes the skill areas of funding techniques (grantsmanship), public relations, and training design/implementation. Inquire at Urban Affairs, 374 South Foundation Hall.

CS 205 Volunteers and Professionals in Criminal Justice (4)

An overview of the criminal justice system and volunteerism; roles of volunteers; the effective volunteer program, and research and evaluation of volunteer programs in criminal justice. A training course—information and skill development focus.

University Committee for Applied Statistics

CHAIRPERSON: Professor Harvey Arnold

MEMBERS OF THE COMMITTEE: William Bezdek, Anita Bozardt, Thomas Casstevens, David Doane, David Evans, Richard Pettengill, Amos Spector, T. H. Weng

The university concentration in applied statistics, available to all undergraduates, is supervised by the University Committee on Applied Statistics. In order to be certified by the committee as having fulfilled the requirements of the university concentration in applied statistics, the student must:

1. Have completed at least 16 credits in statistics as approved by the University Committee on Applied Statistics, including one course at the introductory level, STA 325 and 326, and one course at the advanced (400) level.
2. Have completed such other requirements as may be added at the discretion of departments which have accepted the concentration as part of a modified major.

Questions concerning the university concentration in applied statistics should be addressed to Professor Harvey Arnold, 563 Vandenberg Hall, or any member of the committee.

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This list reflects faculty appointments effective June 1, 1977, as they were available on the publication date.

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