GRADUATE CATALOG OF EASTERN MICHIGAN COLLEGE

ANNOUNCEMENTS FOR 1958-1959

ACCREDITED OR APPROVED BY

The North Central Association of Colleges and Secondary Schools
The National Council for Accreditation of Teacher Education
The American Association of University Women

VOLUME XLVIII NUMBER 2

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The Edwin A. Strong Physical Sciences Building.
CALENDAR

SUMMER SESSION 1958

June 23, Monday ................................................. Registration
June 24, Tuesday ............................................... Classes begin
July 4, Friday ...................................................... Fourth of July recess
July 28, Monday ................................................. Convocation to honor summer school graduates
July 31, August 1, Thursday, Friday ........... Final examinations, six-week session
August 1, Friday ...................................................... Six-week session closes

POST-SUMMER SESSION 1958

August 4, Monday through August 15, Friday ........................................ Daily 9 to 4

FALL SEMESTER 1958

August 25 - September 10 ............................... Pre-registration conferences
September 10, Wednesday ......................... Mail registrations accepted if postmarked on or before this date
September 16, 17, 18, 19, TWThF ................. Campus registration in Bowen Field House for all students who have not registered by mail
September 19, Friday .............................................. Last day for registration without a late fee
September 20, 22, 23, 24, 25, SaMTWTh ........ Classes begin
September 26 ...................................................... Last day for late registration
October 3 ...................................................... Last day a registered student may add a new course
September 10, Wednesday ......................... Mail registrations accepted if postmarked on or before this date
September 16, 17, 18, 19, TWThF ................. Campus registration in Bowen Field House for all students who have not registered by mail
September 19, Friday .............................................. Last day for registration without a late fee
September 20, 22, 23, 24, 25, SaMTWTh ........ Classes begin
September 26 ...................................................... Last day for late registration
October 3 ...................................................... Last day a registered student may add a new course
November 26, 27, 28, 29, W (after 5 PM) ThFSa ........ Thanksgiving recess
December 20, Saturday noon .................... Holiday vacation begins
January 5, Monday .................................................. Classes resume
January 12-24 ..................................................... Final examinations
January 25 ...................................................... Mid-year Commencement

SPRING SEMESTER 1959

January 19 - February 4 ............................... Pre-registration conferences
February 4, Wednesday ......................... Mail registrations accepted if postmarked on or before this date
February 10, 11, TW .............................. Campus registration in Bowen Field House for all students who have not registered by mail
February 11, Wednesday ......................... Last day for registration without a late fee
February 12, 14, 16, 17, 18, ThSaMTW ........ Classes begin
February 20 ...................................................... Last day for late registration
February 27 ...................................................... Last day a registered student may add a new course
March 27 - 29, Friday noon through Sunday .......... Easter recess
April 4, Saturday noon ....................................... Spring vacation begins
April 13, Monday .................................................. Classes resume
May 16, May 23 - June 4 ..................................... Final examinations
June 7, Sunday ...................................................... Baccalaureate
June 13, Saturday .................................................. Alumni Day
June 13, Saturday .................................................. Commencement
SUMMER SESSION 1959

June 22, Monday .......................................................... Registration
June 23, Tuesday ........................................................ Classes begin
July 4, Saturday .......................................................... Fourth of July recess
July 27, Monday ........................................................ Convocation to honor summer school graduates
July 30, 31, Thursday, Friday ........................................ Final examinations, six-week session
July 31, Friday .......................................................... Six-week session closes

POST-SUMMER SESSION 1959

August 3, Monday through August 14, Friday ...................... Daily 9 to 4
EASTERN MICHIGAN COLLEGE
YPSILANTI, MICHIGAN

GOVERNMENT OF THE COLLEGE

The constitution of the State of Michigan places the Michigan state colleges, of which Eastern Michigan College is one, under the authority of the State Board of Education, subject to such legislation as may be prescribed by the Legislature. The State Board of Education is elected by the people of the state. The State Superintendent of Public Instruction is an ex officio member of the board. Financial support for the college comes from tax monies paid by the people of Michigan.

STATE BOARD OF EDUCATION

Walter F. Gries ................................................. President
Stephen S. Nisbet ............................................. Vice President
Lynn M. Bartlett ................................................ Secretary
Chris H. Magnusson ........................................... Member

STATE SUPERINTENDENT OF PUBLIC INSTRUCTION

Lynn M. Bartlett

ADMINISTRATIVE OFFICES

President ......................................................... Eugene B. Elliott
Vice President for Instruction ......................... Bruce K. Nelson
    Dean of Teacher Education ............................... R. Stanley Gex
Vice President for Student Affairs ....................... William C. Lawrence
    Dean of Student Activities .............................. Ralph F. Gilden
    Registrar .................................................. Everett L. Marshall
    Dean of Men ............................................... James M. Brown
    Dean of Women ............................................ Susan B. Hill
General Controller ........................................... Benjamin Klager
Director of College Planning and Development
    and Assistant to the President ........................ James E. Green

DIVISION OF GRADUATE STUDIES:

Dean ............................................................ James H. Glasgow

FIELD SERVICES:

Director ....................................................... Carl R. Anderson

PLACEMENT:

Director ........................................................ Richard J. Nisbet
Division of Graduate Studies

Dean: James H. Glasgow

GRADUATE COUNCIL, 1957-1958


FACULTY

Professors

Robert O. Belcher, Ph.D., Natural Science; Susan M. Burson, A.M., Home Economics; Kenneth H. Cleeton, Ed.D., Education; Martha E. Curtis, Ph.D., Natural Science; Harry DeVries, Ph.D., History; Eugene B. Elliott, Ph.D., Education; William D. Fitch, Ph.D., Music; August L. Freundlich, A.M., Art; Mary F. Gates, Ph.D., Education; R. Stanley Gex, Ed.D., Education; Richard A. Giles, Ph.D., Natural Science; James H. Glasgow, Ph.D., Geography; Ralph A. Haug, Ph.D., English; Kathleen B. Hester, Ph.D., Education; Carl Hood, A.M., Education; Egbert R. Isbell, Ph.D., History; Hoover H. Jordan, Ph.D., English; Muriel Potter Langman, Ph.D., Education; Marian W. Magoon, Ph.D., English; Everett L. Marshall, Ph.D., Education; Haydn M. Morgan, A.M., Music; Bruce K. Nelson, Ph.D., Education; J. Henry Owens, Ph.D., Foreign Languages; Julius M. Robinson, Ed.D., Business Studies; George Ruwitch, A.M., Education; John W. Settler, Ph.D., English and Speech; Harry L. Smith, Ph.D., Physics and Astronomy; John B. Virtue, Ph.D., English; Elizabeth Warren, Ph.D., History; Edgar W. Waugh, A.M., Political Science; George A. Willoughby, A.M., Industrial Arts; Morvin A. Wirtz, Ed.D., Special Education.

Associate Professors

George Brower, Ph.D., Education; Roger J. Callahan, Ph.D., Special Education; Duane G. Chamberlain, Ph.D., Industrial Arts; George C. DeLong, Ph.D., Geography; Milton P. Foster, Ph.D., English; Herbert J. Gaukerke, Ph.D., Foreign Languages; Frances M. Herrick, O.T.R., Occupational Therapy; Dorothy James, M.M., Music; Bert M. Johnson, Ph.D., Natural Science; Frank J. Manley, M.A., Education; Edward E. Potter, Ph.D., English; Maurice W. Riley, Ph.D., Music; Earl A. Roth, Ed.D., Business Studies; Margaret E. Sill, A.M., Geography; John W. Simpson, Ph.D., Economics; Ralph Spielman, Ph.D., Sociology; W. Fred Totten, Ph.D., Education; M. Doane Wolfe, A.M., Foreign Languages; William Work, Ph.D., Speech.

Assistant Professors

Assistant Professors (Cont.)

Richard G. Oltmanns, M.S., Education; David E. Palmer, A.M., Special Education; Ralph G. Peterson, A.M., Education; Charles A. Rice, Ed.D., Education; Beverly Risk, A.M., Education; Agnes L. Rogers, A.M., Special Education; Gertrude Roser, A.M., Special Education; Bernard M. Treado, A.M., Special Education; Frank J. Wawrzaszek, Ed. M., Special Education; John T. Wescott, A.M., Industrial Arts; Israel Woronoff, Ph.D., Education; Sara E. Wright, A.M., Special Education.

Instructors


Lecturer

Floyd N. Reister, Ed.D., Education.

Visiting Lecturers

Carl Baumgardner, Ph.D., Education; Myrtle Black, Ph.D., Education; George Chamis, Ph.D., Education; Anita Fielder, M.S., Home Economics; Lawrence Hawkins, M.A., Education; Barbra Holland, M.S., Education; John Jickling, A.I.A., Education; Albert C. Johnsen, A.M., Education; Kristen D. Juul, Ph.D., Education; Lucy Ann McCall, M.A., Art; Benjamin Moulton, Ph.D., Geography; Harrison H. Way, Ph.D., Education.
HISTORY

Eastern Michigan College (originally Michigan State Normal School) was founded by an act of the state legislature in the spring of 1849, the sixth such state supported school to be founded in this country. In the fall of that year it was located in Ypsilanti by the State Board of Education. In the fall of 1852 it opened its doors to its first classes.

In the act creating the school, the legislature declared the purpose of the school to be "... the instruction of persons, both male and female, in the art of teaching and in all the various branches that pertain to a good common school education ... to give instruction in the fundamental laws of the United States, and in what regards the rights and duties of citizens." In over 100 years the college has not changed its function; it has expanded it and has added new functions. It has grown with the public school systems of Michigan and the nation. As our concept of public education has grown, so has our concept of teacher education.

In 1897, recognizing that a good institution of teacher education must also be a good college, the legislature authorized the State Board of Education to designate the school as Michigan State Normal College. In 1899 this became its legal name. By act of the state legislature in the session of 1955, the college became Eastern Michigan College. A substantial proportion of the students who come to Eastern Michigan College come to get a good liberal education. It is the basic judgment of those concerned with the operation of the college that teachers are not "trained" but are educated and that the education needed for a good teacher is also the education for a good citizen.

Since 1953 the college has offered the degree of Master of Arts in Education.

LOCATION

Ypsilanti, in which Eastern Michigan College is located, is thirty miles west of Detroit and seven miles southeast of Ann Arbor. It is the center of an area which provides many outlets for cultural and recreational interests. It is on the main Detroit-Chicago line of the New York Central Railroad and is at the center of a network of bus lines providing direct connection with most larger cities. Frequent bus service is available to the greater Detroit area. The Willow Run Airport, on the outskirts of the city, provides air transportation to all parts of the world.

COLLEGE HOUSING

The college offers housing in its residence halls for men and women, and apartments for married students in Pine Grove Terrace Apartments on the college campus. At the present time, there are five residence halls for women, three for men, and 169 apartment units for married students. Under construction as this is written are two additional residence halls for women which will complete a complex of four around a central kitchen-dining room unit. Other residence halls for men and women are in the planning stages. Graduate students are eligible to live in any of these units, as they are available.
Students living in the residence halls are required to board there also. Room and board in the residence halls is currently $666.00 for the school year. Apartment units rent for $65.00 per month for one-bedroom apartments and $75.00 per month for two-bedroom apartments. The college reserves the right to revise these rates when necessary. Applications for accommodations in the residence halls should be made to the Dean of Men for the men students, and to the Dean of Women for the women students. Applications for residence in the married student apartments may be secured from the Vice President for Student Affairs. Only full-time students are eligible for residence in these apartments.

RECREATION AND SOCIAL LIFE

Detailed information concerning recreational and social life on the college campus may be found in the undergraduate catalog. Except for intercollegiate athletics, graduate students are eligible and urged to participate in all phases of the college's extracurricular life.

STUDENT EMPLOYMENT POSSIBILITIES ON CAMPUS

Employment for students is handled through the offices of the Dean of Men and the Dean of Women. Students interested in earning money with which to pay in part their expenses will be given advice and detailed information upon application. Students are urged not to come to the college unless they have at the time of entering enough money to meet the expenses of the first semester.

 TUITION AND FEES

A student who holds a bachelor’s degree will pay graduate tuition and fees regardless of the type of credit received. A senior electing both graduate and undergraduate courses will pay only the undergraduate tuition and fees.

Late Enrollments

No enrollments will be accepted after the second meeting of a class. This rule will be set aside only during the summer session when campus classes overlap the last week of school of an in-service teacher. However, such a student must complete registration in advance, either by mail or during the registration period.

Graduate Division Fees

<table>
<thead>
<tr>
<th>Sem Hrs</th>
<th>Residents of Michigan</th>
<th>Nonresidents</th>
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<tbody>
<tr>
<td></td>
<td>Tuition</td>
<td>Local Fees</td>
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<td>1 and 2</td>
<td>$12.00</td>
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<td>3 and 4</td>
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<tr>
<td>5 and 6</td>
<td>36.00</td>
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<td>7 and 8</td>
<td>48.00</td>
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<tr>
<td>9 or more</td>
<td>66.50</td>
<td>47.50</td>
</tr>
<tr>
<td>Sem Hrs</td>
<td>Residents of Michigan</td>
<td>Nonresidents</td>
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<td>36.00</td>
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</table>

**Late Enrollment Fee**

A late fee of $5.00 is charged after the last official day of registration.

**DETERMINATION OF RESIDENCE FOR PAYMENT OF TUITION**

For the purpose of registration, residence in Michigan shall be determined according to the state constitutional provision governing the residence of electors (See Article III, Sections 1 and 2), that is, for the purpose of registration in Eastern Michigan College, no one shall be deemed a resident of Michigan unless he has resided in this state for six months next preceding the date of his proposed enrollment, and no person shall be deemed to have gained or lost a residence in this state while a student in any institution of learning.

It shall be the duty of every student, if there be any possible question as to his right to legal residence in Michigan under the rules stated above, to raise the question with the Controller and have such question passed upon and settled previous to registration.

In determining the residence status the designated official will apply the following rules:

1. The residence of any student under the age of 21 will be determined by the residence of his parents or guardians.
2. Any student who starts as a nonresident and who attends college continuously from the date of his first enrollment (semester after semester exclusive of summer session) will retain the same residence status with which he started out, except as outlined in No. 3 below.
3. Any student over the age of 21 residing in Michigan and enrolling as a nonresident student can be given residence status as soon as he proves that he has been accepted by an election official as a resident elector in the State of Michigan and files a written statement with the college declaring his intention to continue his residence status in Michigan after leaving the college.

**Refund of Fees**

**Fall and Spring Semesters**

A. Withdrawal from all classes

When a graduate student withdraws from all classes the following refund will be made:

1. Before the final official registration day—100% of total.
2. Seven calendar days or less after the final official registration day—90% of total.
3. More than seven calendar days and less than 22 days after the final official registration day—80% of total.
4. More than 21 calendar days and less than 36 days after the final official registration day—40% of total.
5. More than 35 calendar days and less than 50 days after the final official registration day—20% of total.

In all cases the date of reporting withdrawal to the Graduate Office will be used.
B. Withdrawal from one or more classes

When a graduate student finds it necessary to withdraw from one or more classes the following refund will be made:

1. Before the final official registration day—100% of the difference between fees for the two programs.
2. Seven calendar days or less after the final official registration day—90% of the difference between fees for the two programs.
3. More than seven calendar days and less than 22 days after the final official registration day—60% of the difference between fees for the two programs.
4. No refund will be granted for decrease in academic load after the 21st day.

In all cases the date of reporting withdrawal to the Graduate Office will be used.

Summer Session

When a graduate student withdraws from all classes the following refund will be made:

1. On or before the final official registration day—100% of total.
2. Seven calendar days or less after the final official registration day—90% of total.
3. More than seven calendar days after the final official registration day—none.

When a graduate student withdraws from one class after enrolling in two or three classes no refund will be made.

In all cases the date of reporting withdrawal to the Graduate Office will be used.
Instructional Program

PURPOSE

The graduate program at Eastern Michigan College is designed to provide training for teachers, supervisors, and administrators. Primary emphasis at all times is on a program of work which shall produce a master teacher. The offerings of the Division of Graduate Studies are sufficiently flexible to permit a program of courses adapted to the individual needs of the student.

ADMISSION TO GRADUATE STUDY

Admission to the Division of Graduate Studies of Eastern Michigan College is open to anyone who holds a bachelor's degree from a college or university of recognized standing and who is qualified to pursue with profit a program leading to the master's degree. Seniors in their last session at Eastern Michigan College may carry a combined schedule of graduate and undergraduate courses.

A student enrolling for the first time in graduate work at Eastern Michigan College must complete an Application for Admission form and return it to the Graduate Office, together with official transcripts of undergraduate and graduate work taken at other institutions. Transcripts are not required for work taken at this college. A student who has not completed all admission requirements shall not be given course credit or receive an official transcript for such credit.

SPECIAL ADMISSION

Special admission to the Division of Graduate Studies at Eastern Michigan College is granted to a student who expects to transfer credit to another institution, or who is not working toward a degree, or who is uncertain as to the goal sought. Special admission is usually granted for 6 semester hours of graduate work, although 15 hours of work in Special Education may be transferred to the School of Education at the University of Michigan.

A student who is not working toward a degree may elect more than 6 hours only after supplying a transcript of undergraduate credits and sending to the Graduate Office a statement that he does not seek the master's degree at the college. In case a student exceeds the 6 hours originally granted for special admission and then applies for regular admission, the application of all credit on a master's degree is not automatic. Only those courses applicable on a required and suggested program of courses will be applied toward the degree.

MASTER'S DEGREE AWARDED ONLY TO IN-SERVICE TEACHERS

The Graduate Council of the college has ruled that only graduate students who have had teaching experience or who hold a contract to teach will be granted the master's degree. Graduate students, therefore, must take the initiative in completing all requirements, both graduate and undergraduate, for a Provisional Certificate. The Registrar's Office of the college will supply information concerning certificate requirements.
PROGRAM OF WORK

The Graduate Counseling Committee is charged with the task of preparing for each student a required and suggested program of courses leading to the master's degree. This is a "tailor-made" program and is dependent upon the student's undergraduate training and upon his professional goal.

The Counseling Committee will examine the undergraduate record of the student to determine proficiency in the following five areas of competence: (a) Individual and Group Learning, (b) The School and Community Foundations, (c) Contemporary Culture and Its Background, (d) Science and Scientific Method, and (e) Contemporary Civilization and Its Background.

Students are encouraged to elect one or more Field Study Projects, which will be investigations of problems arising in the public school employing the student. Written reports will detail the findings of these investigations.

CREDIT REQUIREMENT

The minimum credit requirement for the degree of Master of Arts in Education is thirty hours. This minimum is sufficient, however, only if the student's undergraduate record is satisfactory as to grade level achieved and exhibits competency in the broad subject areas with which the graduate program is concerned.

A student who has completed twelve hours of graduate work, with at least six hours on the campus at Ypsilanti, and who has met any special restrictions imposed at the time of admission may apply for admission to candidacy. The Graduate Council considers the initial twelve hours of graduate work as probationary and the granting of admission to candidacy as approval of the student for additional graduate courses.

It is possible to transfer six hours of graduate work taken at other institutions, provided the work is included on the required and suggested program of courses for the student. Final approval of transfer credit rests with the Graduate Council. Grades of B−, C+, C, and C− are not accepted for transfer credit.

COURSE LOADS

A student who is engaged in full-time teaching may elect a maximum of four hours of work during a semester. A student employed in a non-teaching position must raise the question of restriction on load of courses to be elected.

Fall and Spring Semesters

A student enrolled in eight hours or more of graduate work is considered a full-time student. The maximum course load is twelve hours. For some students on a combined program of graduate and undergraduate courses a maximum of thirteen hours may be approved by the Graduate Counseling Committee. A student enrolled in six hours of graduate work is considered to be carrying a three-quarter load. A student enrolled in four hours of graduate work is considered a half-time student.

Six-Week Summer Session

A student enrolled in four hours of graduate work is considered a full-time student. The maximum course load is six hours. A student enrolled in two hours of graduate work is considered a half-time student.
Post-Summer Session

A student may enroll in only one course for a two-week session.

ELECTION OF GRADUATE COURSES BY SENIORS

A senior at Eastern Michigan College may elect graduate courses to be applied on the master's degree. Not more than 10 hours may be earned in such courses, and in general the work will be elected during the session at the close of which the bachelor's degree is to be awarded. Such credit may be applied toward only one degree.

An in-service teacher who is within 15 hours of a bachelor's degree at Eastern Michigan College and who is unable to enroll in courses applicable on that degree may be admitted to graduate courses for graduate credit. The credit may be applied toward the master's degree only after the bachelor's degree is received. The six-year limitation applies from the date of first enrollment in a graduate course.

UNDERGRADUATE COURSES APPROVED FOR GRADUATE CREDIT

For a limited number of students the Graduate Counseling Committee may approve upper class courses for graduate credit. Certificate requirements and recognizable gaps in certain undergraduate subject matter areas usually constitute the reasons for granting such approval. A maximum of three undergraduate courses may be approved for graduate credit. A graduate student admitted to such undergraduate courses should normally expect to do additional work for graduate credit.

Only students with regular admission are given permission to enroll in undergraduate courses and receive graduate credit by completing additional work. A student who expects to transfer graduate credit to another institution may not be admitted to such courses.

GRADUATE ASSISTANTSHIPS

The Graduate Council offers a certain number of graduate assistantships each year. A full assistantship carries a stipend of $900 per academic year of two semesters and requires 20 hours of work per week; the course load is limited to 8 semester hours. A half-time assistantship carries a stipend of $450 per academic year of two semesters and requires 10 hours of work per week. The work required of a graduate assistant shall be under the direct supervision of a member of the faculty.

From time to time, graduate assistantships will be available for the summer session. The stipend will be $150 for a full assistantship, with the course load limited to 4 semester hours.

Quality of undergraduate and graduate credits, the possession of a teaching certificate or its equivalent, and breadth of training will be among the factors considered by the Graduate Council in the granting of assistantships.

STANDARDS AND POLICIES

The College Year

The college year is divided into two semesters of eighteen weeks each and two summer sessions, one of six weeks and one of two weeks. Students may enroll at the opening of any semester or session. The calendar is printed on one of the first pages of this bulletin.
Credits

The unit of work and of credit is the "semester hour." A semester hour is the credit granted in a course meeting once a week for eighteen weeks.

Unless otherwise noted, all graduate courses carry two semester hours of credit.

Grades

The grades used in the Division of Graduate Studies of the College are listed together with their grade point values.

<table>
<thead>
<tr>
<th>Grade</th>
<th>Grade points per semester hour</th>
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<tbody>
<tr>
<td>A+</td>
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<tr>
<td>A</td>
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<td>A-</td>
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<td>E Unsatisfactory</td>
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<td>I Incomplete</td>
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<td>W Withdrawal</td>
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</tbody>
</table>

Application for Graduation

A candidate for graduation must make application for a diploma at the time of registration for the session at the close of which he expects to receive the master's degree. Application blanks are available in the Graduate Office.

A candidate for graduation should check with the Placement Office to make certain that all placement forms have been completed. Completion of a personnel folder in the Placement Office is one of the requirements for graduation.

Financial Obligations

A student is eligible for registration or for graduation only after his financial obligations with the college have been met. Report of grades, transcript of credits, or other statements of record will be withheld should the student be in arrears at the close of any session.

Campus Credit

For all graduate students there is a requirement of at least 6 semester hours on the campus at Ypsilanti. This requirement may be met by attendance in afternoon and evening classes during the year or in classes of a summer session. Normally, Field Study Problems (597, 598, 599) may not be counted as campus credit.

Withdrawing from Classes

During the first eight weeks of a semester, a student initiates withdrawal from one or more graduate classes in the Graduate Office. During this period a "W" is assigned when justifiable reasons are presented; otherwise, an "E" is assigned.

Beginning with the ninth week of a semester, it is not possible for a student to withdraw from a class with a "W" unless there are extraordinary extenuating circumstances. Such proof should be presented to the Vice President for Student Affairs for validation.
Removal of Incompletes

An incomplete should be removed by a student within four weeks from the beginning of the next session in which he is enrolled, but not later than one year after the incomplete was received.

TIME LIMITATION

All requirements for the master's degree must be completed within six years from the time of first enrollment in graduate courses at this institution or elsewhere.
Course Offerings

Courses are grouped below into five general areas into which the graduate program is divided. Course listings are in numerical order within each group. Note that the designation of a course includes the two-letter code in addition to the number.

- Individual and Group Learning (LE)
- The School and the Community (CO)
- Contemporary Culture (CU)
- Science (SC)
- Contemporary Civilization (CI)

INDIVIDUAL AND GROUP LEARNING

LE 500 Human Development. 2 sem hr
Heredity, genetics, physiological changes, and physical growth of the child. Learning differences, mental abilities, and intelligence testing. The gifted and mentally limited. ANDERSON, KNIGHT, WORONOFF

LE 501 Psychology of Adolescence. 2 sem hr
Physical, intellectual, emotional, and social development from puberty to adulthood with emphasis on the significance for teachers and others interested in youth. ANDERSON, DAISHER, WORONOFF

LE 503 Reading Methods. 2 sem hr
Historical development of the teaching of reading in the United States, emphasizing methods; interpretation of the modern reading program to the community; the pattern of good reading development; selection and use of techniques of teaching appropriate to the developing capacities and interests of elementary school children; use of groups in teaching reading; relationship between reading skills and curriculum materials; and others. Not open to students who have credit in 310 The Teaching of Reading. HESTER, LANGMAN

LE 504 Diagnostic Techniques Related to Hearing Problems. 2 sem hr
Recognition, evaluation, and handling of problems which are often associated with hearing loss such as language disorder, brain injury, and emotional disturbances. FULTON

LE 505 Mental Hygiene. 2 sem hr
The role and responsibility of the teacher in promoting good mental health. Emphasis on a practical approach to understanding factors and conditions contributing to maladjustment; the nature of mental disorders and diseases, school and agency services in prevention and treatment. Provisions are made for consideration of individual classroom problems. Not open to students who have credit in 206 Mental Hygiene. ANDERSON, BAUMGARDNER, GATES, JUUL

LE 506 Education of Exceptional Children. 2 sem hr
Problems and methods involved in the adjustment and training of exceptional children in the school, i.e., the mentally retarded, the gifted, the crippled, the deaf, the blind, the emotionally unstable, and the delinquent. Not open to students who have credit in 351 Education of Exceptional Children. ADAMS, HERRICK, WAWRZASZEK, WIRTZ
LE 507 Education and Social Control of Mental Deviates. 2 sem hr
Nature and causes of mental deficiency, physical and mental characteristics of mental defec­tives; different types and the possibility of development; psychology of backward and borderline children in relation to their training and instruction; the social control of these types. Prerequi­site: 506 Education of Exceptional Children. CALLAHAN

LE 508 Hearing Problems in the Regular Classroom. 2 sem hr
Recognition of children with hearing problems in the regular classroom and suggestions for meet­ing the needs of these children in terms of presentation of materials, educational retardation, language training, and speech development. BALTZER

LE 509 Problems in Child Psychology. 2 sem hr
Ways in which children may be helped to accept greater responsibility; possible approaches for reducing tensions and increasing motivation of pupils will be explored. The nature of the course content will be determined by the needs of the students and the availability of community re­sources. Prerequisite: 321 Child Psychology. ANDERSON, WORONOFF

LE 510 Education and Treatment of Cerebral Palsied Children. 2 sem hr
Provides an interpretation of the cerebral palsied child. It is primarily a background course for teachers. Major attention is given to the characteristics of the types of cerebral palsy. The problems of education and treatment are reviewed and opportunity is provided to observe children in the classroom and treatment room. Prerequisite: 506 Education of Exceptional Children. WRIGHT AND STAFF

LE 511 Orthopedics for Teachers of Crippled Children. 2 sem hr
A comprehensive view of the medical and surgical aspects of orthopedic conditions common among children. Includes lectures by specialists in anatomy, physiology, bacteriology, orthopedic and neurological lesions, cardiology, preventive and reconstructive measures. Clinical observation of orthopedic children. Several meetings will be held at the University of Michigan Hospital; trans­portation to Ann Arbor is provided. Prerequisite: 506 Education of Exceptional Children. WRIGHT AND STAFF

LE 512 Methods of Audio-Visual Instruction. 2 sem hr
A survey course for teachers and administrators in which the nature and effective use of teaching materials is considered and fully demonstrated. Provisions are made for actual use of materials and equipment. Not open to students who have credit in 344 Audio-Visual Methods in Teaching. OLMANNS, PETERSON

LE 513 Measurement and Evaluation of Learning. 2 sem hr
Introduction to materials and methods available for classroom use in the analysis of educational achievement and individual prognosis. The course includes a study of the construction and use of standardized and teacher-made educational tests, rating scales, questionnaires and similar de­vices. Not open to students who have credit in 340-341 Educational Tests and Measurements. CLEETON, WAY, WORONOFF

LE 514 Measurement and Diagnosis in Special Education. 2 sem hr
Deals with the theory and practice of psychological evaluation and assessment. The role of tests in this function will be explored. Emphasis is on the use of such techniques and instruments with exceptional children in the assessment of intellectual capacity, educability, emotional adjustment, and visual and auditory limitations. Prerequisite: 506 Education of Exceptional Children. CAL­LAHAN

LE 516 Classroom Problems in Reading—Elementary School. 2 sem hr
Study of classroom problems in reading. Analysis of various types of difficulties encountered by children; techniques for correcting such difficulties; materials and procedures for developing an improved reading program. Prerequisite: 503 Reading Methods or equivalent. HESTER, LANGMAN, B. RISK
LE 517 Classroom Problems in Reading—Secondary School. 2 sem hr
Designed to give practical assistance in developing an improved reading program in junior and senior high schools. Study of types of problems encountered by students in reading various subject materials. Techniques for overcoming these difficulties and for improving reading in each content area. HESTER, LANGMAN

LE 522 Problems in Audio-Visual Programs. 2 sem hrs
An analysis of the function of an audio-visual teaching materials program; the qualifications and duties of staff; the selection and evaluation of materials and equipment; unit costs, school plant requirements; the problems of developing a program and the measures for appraising its adequacy and effectiveness. Prerequisite: 512 Methods of Audio-Visual Instruction or 344 Audio-Visual Methods in Teaching. OLTMANNNS, PETERSON

LE 527 Juvenile Delinquency. 2 sem hr
Nature, meaning, basic causal factors and conditions of delinquency in home, school, and community; problems in personality and behavior; the juvenile court; delinquency prevention and control programs. Opportunity to study problems of particular individual interest. Not open to students who have credit in 354 Juvenile Delinquency. ANDERSON, GATES, HAWKINS

LE 528 Adaptive Equipment and Appliances. 2 sem hr
Emphasis will be placed on the techniques of creating braces and splints for the upper extremities through the use of materials such as aluminum, royalite, plastic, celastic, plaster of paris, wood and leather. In addition, the student will learn the neuro-muscular theory of hand splinting with emphasis placed on necessary precautions. Training will be given on how to make, repair, fit, and purchase adaptive equipment and appliances. MOORE

LE 529 Schools and Rehabilitation. 2 sem hr
A broad general approach to the field of rehabilitation showing what and how the schools contribute; the future for those handicapped by TB, cardiac conditions, deafness, blindness, polio, cerebral palsy, epilepsy. Speakers and movies from agencies that work in the field of rehabilitation. Open to all qualified graduate students. HERRICK

LE 539 Speech Correction. 2 sem hr
The more important problems of speech, their causes, and the remedial procedures which the classroom teacher may employ. Special attention will be given to the disorders of articulation. PALMER, SATTLER

LE 541 Curriculum—Elementary School. 2 sem hr
Beginning with a consideration of the fundamentals of curriculum development including such areas as the basic determinants of curriculum, the various approaches to curriculum organization, the types of curriculum, the concept of curriculum change, current problems and issues, and the role of the teacher in curriculum building, the course moves to a problem census approach to determine the real curriculum problems facing the group. A cooperative approach in the study of these problems is employed in the course. Major course requirements are linked to the daily work of the students enrolled. Not open to students who have credit in 315 Curriculum—Early Elementary. MONAHAN

LE 542 Curriculum—Secondary School. 2 sem hr
Students in this course are encouraged to concentrate on curriculum problems within their own schools. The development and present status of the secondary curriculum, principles of curriculum revision, and factors involved in curriculum changes are considered. CLEETON, G. FIELDER, REISTER

LE 543 Core Curriculum. 2 sem hr
An insight into the nature and techniques of core teaching. G. FIELDER, MacDONALD, REISTER, SLAY

LE 544 Guidance. 2 sem hr
Basic principles of guidance in the public schools are emphasized with attention to gathering pupil information, informational services, counseling, group guidance, placement, follow-up, staff organization for guidance purposes, and the relation between guidance and the curriculum. Not open to students who have credit in 405 Guidance Function. CLEETON, DAISHER, GEX, REISTER, WORONOFF
LE 545 Counseling Techniques. 2 sem hr
Study of the different approaches to counseling and techniques of interviewing, using pupil and environmental information, utilizing community resources and working with the school staff in a guidance role. Prerequisite: 544 Guidance. DAISHER, G. FIELDER, REISTER

LE 546 Information Services. 2 sem hr
Actual experiences in getting information of cultural, social, educational, and occupational opportunities within the community. Visits to industry, community service agencies, and educational institutions will supplement the experiences of the members of the class. Oral and written reports on the latest research in the area of information services. Prerequisite: 544 Guidance, DAISHER, REISTER, WORONOFF

LE 558 Education of the Mentally Handicapped I. 2 sem hr
A consideration of problems in the selection and preparation of curriculum materials for mentally handicapped children; the methods and devices used in presenting this material. Opportunities provided for functional experiences. TREADO

LE 559 Education of the Mentally Handicapped II. 2 sem hr
A consideration of problems in the selection and preparation of curriculum materials for mentally handicapped children; the methods and devices used in presenting this material. Opportunities provided for functional experiences. TREADO

LE 582 Problems in Reading and Science for Elementary Grades. 2 sem hr
A course in which teachers may work on their own classroom problems in developing reading through science and science through reading; the construction and use of curricular materials best suited to the individual need of the child in the elementary school. Prerequisite: One course from: Education 310, 311, 312, 503, 516 and one course from: Natural Science 401, 402, 580. HESTER, CURTIS

LE 591 Supervision of Student Teachers. 2 sem hr
Preparing the public school teacher to work with student teachers; roles of various people involved, preparation, evaluation of the student teacher, community relationships, as well as general problems in teacher education. Experienced supervising teachers will be used as resource people. RICE

LE 594 Research Techniques. 2 sem hr
Kinds of research in a variety of settings; the student will review reports of research as well as develop an interest in participating in research activities. Opportunities are provided students to present a plan for a research problem. CLEETON, WORONOFF

LE 597, LE 598, LE 599 Field Study Problems. 2 sem hr each
An intensive study of a problem or group of problems which is usually generally related to the school system in which the graduate student is employed. Each problem will be under the direction of a college faculty member with the cooperation, where possible, of the supervisory staff of the school system involved.

THE SCHOOL AND THE COMMUNITY

CO 515 Parent Education. 2 sem hr
Places major emphasis upon discovering and analyzing the home problems which have educational implications for the child. Gives consideration to methods and techniques for providing parent education. BURSON, CHAMIS, A. FIELDER, FRENCH

CO 519 Administration and Supervision of Special Education. 2 sem hr
This course is designed to aid school administrative personnel in organizing or improving a program for exceptional children. The philosophical, legal, and practical aspects will be investigated. Prerequisite: 506 Education of Exceptional Children. WIRTZ
CO 524 Contemporary Education. 2 sem hr
Contemporary educational systems of the principal countries of the world with emphasis on the English, French and German programs; conferences with foreign educators and graduate students together with a visit to a Canadian school. Stressed throughout is the relationship of education to the total cultural scene. HOOD

CO 525 Philosophy of Education. 2 sem hr
Through a study of the development of educational thought, the student is enabled to find his way through the maze of conflicting current opinions. The course should help him to find a tenable and satisfying philosophy to guide his own educational thinking. HOOD, MICHAEL

CO 526 History of American Education. 2 sem hr
This course is designed to provide a sound historical foundation upon which to base judgments about our present educational practice in the United States. It assumes that present practice and proposals for the future rest upon some interpretation of the past. HOOD

CO 527 Religion and Public School Education. 2 sem hr
A workshop for the public school teacher and administrator (elementary and secondary). Designed to identify, define, and discuss problems relating to religion in public school education. The general problem is well stated by F. Ernest Johnson as follows: "How can public education, in accord with its function of putting each generation in possession of its full cultural heritage, do justice to the religious phase of that heritage without doing violence to religious liberty as constitutionally safeguarded in the First Amendment to the American Constitution and in similar provisions in the constitutions of the several states?" ISBELL, DeVRIES

CO 540 Community Organization. 2 sem hr
Designed to develop an understanding of the community as a social group. Emphasis on community analysis, leadership, criteria of a good community, community change and action, and community problems. Should improve the individual's ability to work as a representative of a community agency. Not open to students who have credit in 394 Community Relations. BROWER

CO 551 Administration—Elementary School. 2 sem hr
Educational leadership in the elementary school as it specifically relates to school-community relations, curriculum, instruction, special services, buildings and equipment, pupil relations, and personnel relationships and development. Emphasizes contemporary problems in these areas with reference to contributions of current theory. MICHAEL

CO 552 Supervision. 2 sem hr
Examines theory and techniques of the improvement of instruction in elementary and high schools. Analyzes the functions and development of supervision, characteristics and behaviors of supervisors, reactions of teachers and the relationship of teachers and supervisors. Views supervision as a specialized activity of the educational leader. CLEETON, MICHAEL, RICE

CO 553 Principles of School Finance. 2 sem hr
This course is designed to give the student a comprehensive appreciation of financial resources, budgetary procedures, fiscal controls, and accounting practices of the public schools. Related problems of school law, taxation, community relations, salaries, service of supplies, and school offerings are studied in relationship to school finance. CLEETON, ELLIOTT, JOHNSEN, RUWITCH

CO 554 Administration—Secondary School. 2 sem hr
The relation of the secondary school principal to the superintendent and to the teaching staff in the solution of administrative problems such as employing staff, curriculum development and articulation with elementary schools and colleges. CLEETON, COATES, GEX, RICE

CO 555 Problems in School Building Planning. 2 sem hr
Consideration of the functional layout and location of school buildings in the light of recent trends toward involvement of staff and community. Specific building problems of the student will be considered. JICKLING
CO 556 Principles of Community School Organization. 2 sem hr
The basic principles in the organization and administration of community school activities. Observations of community schools and their varied programs together with textual and research materials. The Flint Community Schools will receive particular attention. TOTTEN

CO 557 Problems in Community School Administration. 2 sem hr
Selected problems in community school administration for students who are directors or instructors in a community school. Prerequisite: 556 Principles of Community School Organization and approval of Graduate Counseling Committee. TOTTEN, MANLEY

CO 577 Principles of Outdoor Education. 2 sem hr
The several methods in utilizing the school camp as an educational laboratory; the administration, organization, and evaluation of camp experiences. The evaluation of camp facilities with one or more class periods scheduled at a camp. HOLLAND

CO 589 Social and Cultural Aspects of Personality. 2 sem hr
The imprint on personality from contacts with many groups; personality types in different societies, with particular reference to selected patterns of group membership and the consequences for individual behavior. McQUEEN

CO 592 Leadership and Human Relations Skills. 2 sem hr
The detection and measurement of leadership qualities; the anatomy of leadership and the several methods, procedures, and activities used in the development of leaders. Prerequisite: 556 Principles of Community School Organization. MANLEY AND STAFF

CO 593 The School and Community Understanding. 2 sem hr
Interpreting the school to the community; some basic understandings in the use of the community as a laboratory to enrich the education of the child and to serve the needs of the community. A companion course to 540 Community Organization. BROWER

CO 594 Adult Education. 2 sem hr

CO 595 Workshop in Citizenship Education. 2 sem hr
The purpose of this workshop is to provide an opportunity for teachers to develop a comprehensive, workable program of citizenship education in the public schools. To these ends, the class will: (a) explore and analyze the values, techniques and skills basic to good citizenship; (b) review research and existing programs of citizenship; and (c) design individual programs in terms of local school needs. MacDONALD

CO 597, CO 598, CO 599 Field Study Problems. 2 sem hr each
An intensive study of a problem or group of problems which is usually generally related to the school system in which the graduate student is employed. Each problem will be under the direction of a college faculty member with the cooperation, where possible, of the supervisory staff of the school system involved.

CONTEMPORARY CULTURE

CU 511 Teaching Modern Languages—Secondary School. 2 sem hr
The history, theories and techniques of modern language teaching at the high school and college levels. Open to students with a satisfactory competence in French, Spanish or German. Not open to students who have credit in 411 Methods of Teaching Modern Language. OWENS

CU 512 Teaching Modern Languages—Elementary School. 2 sem hr
An examination of the reasons for teaching foreign language in the elementary grades, the generally accepted concepts of methods and techniques. Observation, evaluation of teaching materials, and preparation of experimental lessons. The use of realia, specific games, songs and other teaching devices, and the sources of such teaching material. Open to students with sufficient background in oral Spanish or French to conduct such classes. Not open to students who have credit in 412 Methods of Teaching Modern Language in the Elementary Grades. WOLFE
CU 520 Selection and Organization of Subject Matter in Industrial Arts. 2 sem hr
To provide an opportunity for graduate students to analyze, organize and prepare for reference or presentation, areas or units of subject matter in Industrial Arts at various grade levels. WILLOUGHBY

CU 521 Graphic Representation 2 sem hr
Illustrations of ideas, plans, and proposals presented graphically. Production of examples of graphs, charts, and similar representations used by teachers and administrators. WILLOUGHBY

CU 522 General Crafts I. 2 sem hr
The selection and use of industrial materials, devices, and machines in the home, the school, and in business and industry. Opportunities are provided for shop and laboratory experience. WESCOTT

CU 530 Creative Dramatics. 2 sem hr
The theory of creative dramatics; opportunities will be provided for actual practice in the various techniques and activities involved in introducing creative dramatics to children at various age levels. WORK

CU 531 Masterpieces of Music. 2 sem hr
A course to promote interest, enjoyment, and understanding of some of the important works of great composers. The importance of music as a factor in human experience and as a mode of thought will be emphasized. Not open to students who have a minor or major in Music. JAMES

CU 532 Masterpieces of Literature. 2 sem hr
A study of various literary forms—drama, poems, and prose works—to provide greater understanding of the significance of literature to the individual and to society. Chosen for their excellence in themselves and for their relevance to contemporary life are works of Homer, Sophocles, Euripides, Shakespeare, Wordsworth, and Ibsen. JORDAN

CU 533 Basic Studies for Teachers of Language Arts. 2 sem hr
The course aims to increase the student's understanding of the nature and function of language to the end that he may deal more effectively with the communication problems of his pupils. No special knowledge of grammar is assumed. POTTER

CU 534 Teaching of Children's Literature. 2 sem hr
An appreciation of the several types of books available for children with suggested uses which might be made in the elementary schools. Not open to students who have credit in 207 Children's literature. MAGOON, MILLER

CU 535 Teaching of Music. 2 sem hr
An intensive examination of the elementary vocal music curriculum giving strict attention to: the care of the child voice, artistic song interpretation, music reading, part singing, creative experiences, integration, rural school music problems and other related subjects. Not open to students who hold a teaching certificate in Music. MORGAN

CU 536 Problems in Art Education—Elementary School. 2 sem hr
Contemporary art forms—reading, slides, discussion of current works in the visual arts, with reference to the immediate antecedents in the field. Teaching methods—reading, discussion, observation in the philosophy and psychology involved in teaching Art to children. Laboratory experience in the techniques useful for the various age levels. Observation of exhibits in the department gallery and elsewhere. (In the laboratory experience Part I will be of direct occupational usefulness; Part II will develop the student on his own level.) Not open to students who have a major in Art. FREUNDLICH
CU 537 Problems in Art Education—Secondary School. 2 sem hr
A study of historical art forms with readings, slides, and discussions of historical works in the visual arts. Design principles involved in the creation of the visual arts, as applied both to famous works and the work of the student. Teaching methods, reading, discussion, observation in the philosophy and psychology involved in teaching Art to older children and adults. (In the laboratory experience, Part I will be of direct occupational usefulness; Part II will develop the student on his own level.) Not open to students who have a major in Art. CALKINS, FREUNDLICH

CU 538 Problems in Industrial Arts. 2 sem hr
The skills, understandings, and appreciations which are basic to the teaching of Industrial Arts. The laboratory approach to problem-solving techniques; the creative utilization of metal, plastics, wood, paper, textiles, clay, and others. Individualized instruction based on the needs of the student together with a correlation of the manipulating techniques of Industrial Arts and the work in subject matter areas. Not open to students who have a major in Industrial Arts. WILLOUGHBY, CHAMBERLAIN

CU 539 Moliere. 2 sem hr
The work of the semester is devoted to France's greatest comic playwright. A study of source material, and influence upon later French and English writers is included. OWENS

CU 540 Play Production. 2 sem hr
Principles and techniques of play production with emphasis on problems encountered in secondary schools. Dramatic structure, play selection, directing, scene design and construction, stage lighting, make-up, costuming, properties, and business management; improvement of effectiveness in both curricular and extracurricular theater. WORK

CU 541 Masterpieces of French Literature. 2 sem hr
A study of the outstanding specimens of French literature in the various genres: the epic, the theater, the novel and short story, and the lyrics. Selections will be generally those which have wide acceptance as monuments of world literature. OWENS

CU 543 Masterpieces of Art. 2 sem hr
Historical art forms with readings, slides, and discussions of historical works in the Visual Arts; a study by the block and gap method rather than a chronological survey. Design principles involved in the creation of the Visual Arts are applied both to famous works and the work of the student; laboratory experience in media for adults. Not open to students who have a major in Art. DART, FREUNDLICH, TYLER

CU 547 Modern Home Furnishings. 2 sem hr
Problems in planning home furnishings for specific family situations. Newer concepts in use of space and materials. BECKWITH

CU 549 Seminar in Homemaking Education. 2 sem hr
Organized around the problems of homemaking teachers; i.e., the interrelations of homemaking education and the total school and community; effective materials and techniques for use with various groups; evaluation in relation to pupils and programs. BURSON

CU 553 The Development of Modern English. 2 sem hr
The history of the English language; the scientific principles involved in linguistic evolution, the structure, the sources of the English vocabulary, and the political, social, and cultural influences which have influenced the language. POTTER

CU 560 The Religious Tradition in European Literature. 2 sem hr
The reading and analysis of great European literature concerned with man's search for a religious faith. Works to be studied include The Book of Job; The Confessions of St. Augustine; Everyman; Milton's Paradise Regained; Bunyan's Pilgrim's Progress; selected short stories of Tolstoy; and Shaw's Androcles and the Lion. FOSTER
CU 561 The Making of the Modern Mind. 2 sem hr
The emergence of the moral, social, political, and religious dilemmas that confront thinking men and women of the twentieth century, studied chiefly through works of British and American literature. VIRTUE

CU 569 Philosophy Through Literature. 2 sem hr
Readings and discussion of some of the great ideas in philosophy as they have been considered by leading writers in poetry and prose. HAUG

CU 589 Discussion and Conference. 2 sem hr
The principles and practice of discussion in problem solving and learning groups: conference, committee, panel, symposium, and forum. Not open to students who have credit in 259 Discussion and Conference. SATTLER

CU 596 Seminar in Music Education. 2 or 4 sem hr
Students will participate in observing, auditing and conducting the high school summer session organizations and will study arranging music materials, rehearsal and performance techniques, methods in the development of pleasing tone quality, proper balance and expressive phrasing. RILEY AND STAFF

CU 597, CU 598, CU 599 Field Study Problems. 2 sem hr each
An intensive study of a problem or group of problems which is usually generally related to the school system in which the graduate student is employed. Each problem will be under the direction of a college faculty member with the cooperation, where possible, of the supervisory staff of the school system involved.

SCIENCE

SC 561 Problems in Geography: Physical Landscapes. 2 sem hr
An understanding of selected landscapes; the agents and processes at work in the formation of surface features, such as: weathering, wind, water, ice, waves, vulcanism, and diastrophism. Pre-requisite: One course in Geography or Geology. DOOLEY

SC 562 Problems in Geography: Weather and Climate. 2 sem hr
Temperature, insolation, pressure, winds, moisture, precipitation, air masses, air mass analysis, fronts, cyclones, hurricanes, tornadoes, jet streams, and weather controls; the Koppen classification of climate and the application of climatic data to several occupations. DeLONG

SC 580 Science in the Elementary School. 2 sem hr
A survey of subject matter and grade placement utilizing current science readers and courses of study; the construction and use of science materials to fit the immediate needs of individual class members, together with a study of supply and equipment needs for elementary science. CURTIS

SC 581 Methods in Teaching Biology. 2 sem hr
The scope of this course incorporates salient techniques and methodology in presenting modern interpretations of biological principles, text analysis, curriculum revision, course content, planning and equipping a modern high school biology laboratory, and the ways in which biology may best serve the individual and the community. Not open to students who have credit in 403 Methods and Materials for Teaching Biology. B. JOHNSON

SC 583 Astronomy. 2 sem hr
A non-mathematical descriptive course in astronomy designed to acquaint the teacher with the general field of astronomy. Many of the topics considered in the course can be used in the elementary classroom. The work will consist of a study of the sun and its family of planets as well as the stars and nebulae in the universe beyond the solar system. Emphasis also will be placed on getting acquainted with the night sky. Naked-eye observations of the constellations and telescopic observations of the moon, planets, double stars, and clusters constitutes the laboratory work of the course. Not open to students who have credit in 203 Introduction to Astronomy. H. SMITH, PARSONS
SC 584 Problems in Conservation. 2 sem hr
A survey of the natural resources of Michigan; its land, water, minerals, forests, grasslands, wildlife, and human powers. Some of the current problems in conservation peculiar to Michigan on the basis of its history, its present resource utilization, and its future possibilities. CURTIS

SC 586 Genetics. 2 sem hr
The basic principles of inheritance. GILES

SC 587 Anthropology. 2 sem hr
The origin, development, differentiation and evolution of primates; the concept of culture against the background of man's biological inheritance. An appreciation of cultural differences. B. JOHNSON

SC 588 New Developments in the Field of Physics. 2 sem hr
New developments in the field of physics will be presented for the purpose of broadening the background of the physical science teacher. Topics such as recent developments in particle physics, ultrasonics, transistors, instrument design, and others will be discussed. PARSONS

SC 589 Problems in Functional Biology. 2 sem hr
The reduction of complex life functions to a few basic principles; development of an ability to approach physiological problems with confidence; laboratory demonstrations as an effective learning device. BELCHER

SC 590 Science Curriculum Construction for the Elementary School. 2 sem hr
Current courses of study in elementary science are critically examined and evaluated. Procedures and methods used to initiate and implement course of study construction or revision are analyzed, such appraisal being based in part on actual case histories. Prerequisite: 401, 402 Elementary Science, or 580 Science in the Elementary School. CURTIS

SC 597, SC 598, SC 599 Field Study Problems. 2 sem hr each
An intensive study of a problem or group of problems which is usually generally related to the school system in which the graduate student is employed. Each problem will be under the direction of a college faculty member with the cooperation, where possible, of the supervisory staff of the school system involved.

CONTEMPORARY CIVILIZATION

CI 560 Islands of the Pacific. 2 sem hr
A regional treatment. The natural setting, the distribution of the people, the important occupations, and the problems of future development in selected island groups of the Pacific, including Australia. GLASGOW

CI 563 Geographic Factors in American Public Issues. 2 sem hr
In America, problems and issues seem numerous; many are the result of rapid growth on frontiers, some have risen from the unwise use of resources, and others have come from a disregard or lack of knowledge of the geography of similar regions elsewhere in the world. The development of background material on certain aspects of agriculture, industry, and transportation; the evaluation of factors which have made the United States a world power. GLASGOW, DOOLEY

CI 564 Historical Geography of Michigan. 2 sem hr
The geographic background of selected historical events and periods in Michigan. The Indians, French, and British in Michigan; the territorial period; early statehood; the rise of mining, lumbering, manufacturing, and commercial agriculture; and the utilization of natural resources for recreation. GLASGOW
CI 565 Problems and Trends in Recent American History. 2 sem hr
Significant aspects of our more pressing minority, industrial, agrarian and governmental problems are treated. This course should contribute to a better understanding of the individual's role and responsibility in the contemporary, national and global scene. WARREN

CI 566 Contemporary World Problems. 2 sem hr
Among the problems considered are the global problems of colonialism, the exchange of raw and processed materials and their relation to foreign policy, the implications of the present conflict between communism and democracy and the possibility for present and future peaceful coexistence. WARREN

CI 567 American Democratic Thought. 2 sem hr
An intellectual history, tracing the sources, mutations, and evolution of democratic concepts in the United States. Not open to students who have credit in 221 Democracy in the Western World. ISBELL

CI 568 Geography Field Trip: New England. 4 sem hr
Representative geographic regions in the several states visited; significant geographic and geologic characteristics of each region. Students will have an opportunity to visit typical mining, forestry, agricultural, and industrial enterprises of the regions. There will be outside reading and pre-trip and post-trip classes and conferences. A written report is required. Limited to 23 students. MOULTON

CI 568 Geography Field Trip: Northwestern United States. 4 sem hr
Representative geographic regions in the several states visited; significant geographic and geologic characteristics of each region. Students will have an opportunity to visit typical mining, forestry, agricultural, and industrial enterprises of the regions. There will be outside reading and pre-trip and post-trip classes and conferences. A written report is required. Limited to 23 students. MOULTON

CI 569 The American Midwest. 2 sem hr
A regional treatment. The natural setting, the distribution of the people, the important occupations, and the problems of future development in each of several regions. SILL, GLASGOW

CI 570 Contemporary Economic Problems. 2 sem hr
A study of some of the basic business and economic problems in a free enterprise system. Specific information is provided regarding the way our economy operates so that individuals might make more intelligent choices as consumers, voters, etc. This course should stimulate an interest in the discussion of current economic problems. ROBINSON

CI 571 Current Problems in Business Education. 2 sem hr
Current problems confronting business teachers in high schools. Curriculum, equipment for modern business departments, standards of achievement, work-experience programs, discipline, and keeping in step with business will be treated. ROTH

CI 572 Nationalism. 2 sem hr
An examination of ideas, feelings, and attitudes in the several definitions of nationalism; the rise of nations and nationalities in the several historical periods. The increasing functions of the state. DeVRIESE

CI 575 Techniques of Social Research. 2 sem hr
A review of the methods currently employed in sociological research, with particular emphasis upon the sample survey technique. Laboratory experience with some phase of an ongoing research project is provided. R. SMITH

CI 576 Intercultural Relations. 2 sem hr
This course has two purposes: to analyze the sources of tension and conflict among the major cultural, religious, and racial groups in American society; and to examine the various methods of bettering human relations. INSTRUCTOR
CI 577 Urban Development. 2 sem hr
An analysis of the forms and the development of the urban community. Demographic structure, organization of urban functions, spatial and temporal patterns, rural-urban relationships, and the current metropolitan trend in the United States. Problems of urban planning and of urbanism as a way of life. SPIELMAN

CI 578 Government and Business. 2 sem hr
The political and economic functions of government; business corporations and financial mergers; direct control of business; control versus government ownership of utilities; governmental controls of agriculture and natural resources; and the responsibility of government in maintaining employment. Prerequisite: One course in Economics and one course in Political Science. SIMPSON

CI 579 Civil Liberties. 2 sem hr
A examination of the principal materials on political and civil rights in the United States, including philosophic, journalistic, and political works as well as leading court cases. INSTRUCTOR

CI 580 The American Presidency. 2 sem hr
A study of the American Presidency: creation of the office; its historical evolution; its national and world significance; problems related to the powers, responsibilities and limits of the office, election to the office and succession to the office. WAUGH

CI 597, CI 598, CI 599 Field Study Problems. 2 sem hr each
An intensive study of a problem or group of problems which is usually generally related to the school system in which the graduate student is employed. Each problem will be under the direction of a college faculty member with the cooperation, where possible, of the supervisory staff of the school system involved.