GRADUATE CATALOG OF

EASTERN MICHIGAN UNIVERSITY

ANNOUNCEMENTS FOR

1964-1965

ACCREDITED BY

The North Central Association of Colleges and Secondary Schools

The National Council for Accreditation of Teacher Education

VOLUME LIV NUMBER 1

JUNE, 1964

Published four times a year by Eastern Michigan University and entered as second class matter at the Post Office at Ypsilanti, Michigan
UNIVERSITY CALENDAR

SUMMER SESSION 1964

June 22, Monday .......................................................... Registration
June 23, Tuesday .......................................................... Classes begin
July 4, Saturday .......................................................... Fourth of July recess
July 20, 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 SESSIONS 1964

August 3, Monday through August 14, Friday ....................................... Daily 9 to 4
August 3, Monday through August 28, Friday ....................................... Daily 9 to 4

FALL SEMESTER 1964

September 5, Saturday .................................................. Mail registrations accepted if postmarked on or before this date
September 15, Tuesday .................................................. Campus registration for all students who have not registered by mail
September 16, 17, 19, 21, 22, WThSaMTu ................................ Classes begin
November 25 (after 5 PM) 26, 27, 28 WThFSa ................................ Thanksgiving recess
December 19, Saturday noon ............................................ Holiday vacation begins
January 4, Monday .................................................. Classes resume
January 16-28 .......................................................... Final examinations
January 24, Sunday .................................................. Mid-year Commencement

SPRING SEMESTER 1965

January 30, Saturday .................................................. Mail registrations accepted if postmarked on or before this date
February 9, Tuesday .................................................. Campus registration for all students who have not registered by mail
February 10, 11, 13, 15, 16, WThSaMTu ................................ Classes begin
April 16, Friday .................................................. Spring vacation
April 26, Monday .................................................. Classes resume
May 29-June 10 .......................................................... Final examinations
May 30, Sunday .................................................. Memorial Day
June 12, Saturday .................................................. Commencement
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government of the University</td>
<td>4</td>
</tr>
<tr>
<td>Administrative Offices</td>
<td>4</td>
</tr>
<tr>
<td>General Information</td>
<td>5</td>
</tr>
<tr>
<td>Instructional Program</td>
<td>10</td>
</tr>
<tr>
<td>Course Offerings</td>
<td>16</td>
</tr>
<tr>
<td>Art</td>
<td>16</td>
</tr>
<tr>
<td>Biology</td>
<td>17</td>
</tr>
<tr>
<td>Business</td>
<td>20</td>
</tr>
<tr>
<td>Chemistry</td>
<td>22</td>
</tr>
<tr>
<td>Education</td>
<td>22</td>
</tr>
<tr>
<td>Library Science</td>
<td>28</td>
</tr>
<tr>
<td>English Language and Literature</td>
<td>28</td>
</tr>
<tr>
<td>Foreign Language and Literature</td>
<td>30</td>
</tr>
<tr>
<td>Geography</td>
<td>31</td>
</tr>
<tr>
<td>Health, Physical Education, Recreation, and Athletics</td>
<td>33</td>
</tr>
<tr>
<td>History and Social Sciences</td>
<td>34</td>
</tr>
<tr>
<td>Home Economics</td>
<td>38</td>
</tr>
<tr>
<td>Industrial Education and Applied Arts</td>
<td>41</td>
</tr>
<tr>
<td>Mathematics</td>
<td>44</td>
</tr>
<tr>
<td>Music</td>
<td>44</td>
</tr>
<tr>
<td>Physics and Astronomy</td>
<td>45</td>
</tr>
<tr>
<td>Psychology</td>
<td>46</td>
</tr>
<tr>
<td>Special Education and Occupational Therapy</td>
<td>47</td>
</tr>
<tr>
<td>Speech and Dramatic Arts</td>
<td>51</td>
</tr>
<tr>
<td>Graduate Faculty</td>
<td>52</td>
</tr>
</tbody>
</table>
EASTERN MICHIGAN UNIVERSITY
Ypsilanti, Michigan

Government of the University

The 1963 constitution of the State of Michigan places Eastern Michigan University under a separate board consisting of eight members appointed by the Governor. It is known as the Board of Regents of Eastern Michigan University. Financial support for the University comes from tax monies paid by the people of Michigan and receipt of student tuition and fees.

Board of Regents

Virginia Allan .............................................. Term expiring December 31, 1970
Charles Anspach ........................................... Term expiring December 31, 1966
O. William Habel ........................................... Term expiring December 31, 1966
Lawrence R. Husse ........................................ Term expiring December 31, 1964
J. Don Lawrence ............................................. Term expiring December 31, 1968
Edward J. McCormick, Chairman and Presiding Officer, Term expiring December 31, 1970
Dr. Martin P. O’Hara ...................................... Term expiring December 31, 1968
Mildred Beatty Smith ...................................... Term expiring December 31, 1964

Administrative Offices

President ..................................................... Eugene B. Elliott
Vice President for Instruction ......................... Bruce K. Nelson
Dean of the College of Arts and Sciences .......... Albert W. Brown
Dean of the College of Education ..................... *R. Stanley Gex
Acting Dean of the College of Education .............. Kenneth H. Cleeton
Director of Academic Advising .......................... Edgar L. Jones, Jr.
Vice President for Student Affairs ..................... William C. Lawrence
Dean of Admissions and Student Activities .......... Ralph F. Gilden
Dean of Students .......................................... Susan B. Hill
Registrar ................................................. Everett L. Marshall
Director of Guidance and Testing ...................... P. Kenneth Morse
Vice President for Business and Finance ............... Lewis E. Profit

Graduate School:
Dean .................................................................. James H. Glasgow
Administrative Assistant ................................. Laurence W. Wilson

Summer Session
Director ....................................................... Julius M. Robinson

Field Services:
Director ...................................................... Carl R. Anderson

Placement:
Director ....................................................... Richard J. Nisbet

*During 1964-65 Dean Gex is on assignment with the National Teacher Education Center in the Somali Republic.
General Information

History

Eastern Michigan University (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 University 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. On June 1, 1959, the college became Eastern Michigan University. A substantial proportion of the students who come to Eastern Michigan University come to get a good liberal education. It is the basic judgment of those concerned with the operation of the University that the education that produces good teachers also produces good citizens.

In 1953, the University first offered the degree of Master of Arts. The degree of Master of Science was approved in 1959, and the Specialist degree was approved in 1964.

Accreditation

Eastern Michigan University is an accredited member of the North Central Association of Colleges and Secondary Schools; and is accredited by the National Council for Accreditation of Teacher Education for the preparation of elementary teachers, secondary teachers, and service school personnel. The master's degree is the highest degree approved.

Location

Ypsilanti, in which Eastern Michigan University 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 and Metropolitan airports, on the outskirts of the city, provide air transportation to all parts of the world. Over three million people, sixty percent of Michigan's total population, live within fifty miles of Ypsilanti.
University Housing

The University offers housing in residence halls and in apartments. At present, there are seven residence halls for women, two for men, and 259 apartments. 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 $764.00 for the academic year. Apartment units rent for $75.00 per month for one-bedroom apartments and $85.00 per month for two-bedroom apartments. The University reserves the right to revise these rates when necessary. Applications and additional information may be obtained from the Director of Housing.

Recreation and Social Life

Detailed information concerning recreational and social life on the University campus may be found in the Undergraduate Catalog. Except for intercollegiate athletics, graduate students are eligible and urged to participate in all extracurricular activities.

Student Employment Possibilities on Campus

Students interested in earning money with which to pay in part their expenses will be given advice and detailed information upon application at the Placement Office. Students are urged not to come to the University 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 graduate class. This rule will be set aside only during the summer session when the first week of campus classes overlaps the last week of school of an inservice teacher. However, such a student must complete registration in advance, either by mail or during the registration period.

Graduate Tuition and Fee Schedule

The University reserves the right to revise the following rates when necessary.

<table>
<thead>
<tr>
<th>Michigan Resident Students</th>
<th>Non-Resident Students</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>REGULAR SEMESTER</strong></td>
<td></td>
</tr>
<tr>
<td>Semester Hours</td>
<td>Tuition and Fees</td>
</tr>
<tr>
<td>1-2</td>
<td>$45.00</td>
</tr>
<tr>
<td>3-4</td>
<td>67.50</td>
</tr>
<tr>
<td>5-6</td>
<td>90.00</td>
</tr>
<tr>
<td>7-8</td>
<td>112.50</td>
</tr>
<tr>
<td>9-10</td>
<td>135.00</td>
</tr>
<tr>
<td>11 or more</td>
<td>150.00</td>
</tr>
</tbody>
</table>
Tuition and Fees

SUMMER SESSION

<table>
<thead>
<tr>
<th>1-2</th>
<th>$45.00</th>
<th>$90.00</th>
</tr>
</thead>
<tbody>
<tr>
<td>3-4</td>
<td>67.50</td>
<td>135.00</td>
</tr>
<tr>
<td>5-6</td>
<td>90.00</td>
<td>180.00</td>
</tr>
<tr>
<td>7-8</td>
<td>112.50</td>
<td>225.00</td>
</tr>
</tbody>
</table>

Late Enrollment Fee

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

Fee for Program Changes Initiated by the Student

After registration a fee of $3.00 will be charged for (1) drop and add changes and (2) the addition of a course. Changes initiated by the Graduate Office, such as those resulting from closed or cancelled classes, do not carry the penalty.

Qualifications for Michigan Residence

Residence in Michigan, for the purpose of registration in Eastern Michigan University, shall be determined according to the definitions and regulations hereby printed.

1. The residence of a student who is a minor follows that of his parents or legal guardians, except that a minor student who comes to the institution from another State or country cannot be registered as a resident of this State on the basis of having a resident of this State as guardian except on permission of the board of the institution in each individual case.

2. A person who is at least 21 years of age at the time of registration in the institution and who has resided in this State 6 months next preceding the date of registration without being registered at a college or university during that period is deemed a resident of this State for the purpose of such registration.

3. The residence of a wife follows that of her husband, except that a woman student who is a resident under paragraphs 1 or 2 may continue to register as a resident of this State although subsequently marrying a nonresident student or other nonresident.

4. No person is deemed to have gained or lost a residence in this State while a student at any institution in this State, public or private, except by changes in status effected under paragraphs 1, 3, or 5.

5. A person in the service of the United States, and his wife or minor children, who have met the 6-month residence requirement in paragraph 2, may register as residents of this State.

6. An alien lawfully admitted for permanent residence in the United States and who has obtained his permanent visa, and his wife or minor children, who have met the other requirements herein for residence, may register as residents of this State.

7. A full-time member of the "teaching staff," and a member of the teaching staff whose appointments require at least three contract hours of teaching each week in regularly assigned formal classes, and
research staff members with equivalent responsibilities, and their de­
dpendents may register as residents of this State.

It shall be the duty of any student prior to registration, if there are any
questions as to his right to be registered as a student with a status of Michi-
gan residence, to raise such questions with the Vice President for Business
and Finance.

Refund of Tuition and Fees

Fall and Spring Semesters

A. Withdrawal from the University

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 — 60% 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, and forms requesting refunds will be initiated by the Graduate Office.

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, and forms requesting refunds will be initiated by the Graduate Office.

Summer Session

A. Withdrawal from the University

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 after the final official registration day — none.
In all cases the date of reporting withdrawal to the Graduate Office will be used, and forms requesting refunds will be initiated by the Graduate Office.

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. No refund will be granted for decrease in academic load after the 7th day.
In all cases the date of reporting withdrawal to the Graduate Office will be used, and forms requesting refunds will be initiated by the Graduate Office.

Mail Registration

It is possible to complete graduate registration by mail. During a period preceding each session, the Graduate Office will send registration materials upon request to qualified students. If returned within the time limit listed in the schedule, the student goes to the first meeting of classes without reporting to the official registration in Welch Hall. A primary advantage to the student is assurance of a place in the classes elected.
Instructional Program

PURPOSE

The graduate program at Eastern Michigan University 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 better teacher. Through its graduate program, the University aims at broadening the general background and knowledge of the student and at substantially increasing his professional skills. The offerings of the Graduate School are sufficiently flexible to permit a program of courses adapted to the individual needs of the student.

SPECIAL ADMISSION TO GRADUATE STUDY

Special admission to the Graduate School of Eastern Michigan University 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 up to 6 semester hours of graduate work, although 15 hours of work in special education may be transferred to any state-supported institution.

A student who is not working toward a degree may elect more than 6 hours only after supplying a transcript of undergraduate credits or sending to the Graduate School a statement that he does not seek a master's degree at the University. 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.

REGULAR ADMISSION TO GRADUATE STUDY

Admission to the Graduate School of Eastern Michigan University 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 University may carry a combined schedule of graduate and undergraduate courses.

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

Programs Leading to the Degree of Master of Arts in Education

Teaching in the Elementary Schools
Teaching Handicapped Children (Special Education)
Regular Admission to Graduate Study

Educational Administration
Guidance and Counseling
Teaching Language Arts and Literature
Teaching Social Studies
Teaching General Science
Community School Leadership (Flint)

These programs are designed for students who have had teaching experience or who hold a contract to teach. Applicants for admission to the programs listed above must present evidence that they hold a provisional or permanent certificate which is valid in Michigan schools.

Programs Leading to a Master's Degree in a Specialized Field

Art: Art Education
Art: Fine Arts
Biology
Business Administration
Business Education
Geography
History
Home Economics
Industrial Arts
Vocational Industrial Education
Literature
Physical Education
Social Studies

Admission to a program leading to a graduate major in a specialized field is the joint concern of the Dean of the Graduate School and of the department or departments concerned. Standards of admission are established by the department, and the Graduate School administers the policy.

The program of studies is prepared by a graduate adviser or an advisory committee in the applicant's department. A student must be in residence on the campus at Ypsilanti for a minimum of 15 hours.

A department may require a substantial paper of research quality. No more than 6 hours of credit may be granted for the research paper and no more than 2 hours of credit for the research paper may be elected in any one session without permission of the departmental adviser and the Dean of the Graduate School.

A department may require an oral examination or a written examination or both. After a student has completed 12 hours of graduate credit, his adviser or advisory committee shall review his progress and shall send to the Dean of the Graduate School and to the Graduate Council a recommendation concerning admission to candidacy for the master's degree.

Programs Leading to the Degree of Master of Arts in Education and to a Provisional Certificate

Teaching in the Elementary Schools
Teaching Handicapped Children (Special Education)
Teaching Language Arts and Literature
Teaching Social Studies
Teaching General Science

These programs leading to a master's degree are designed for students who hold a bachelor's degree from an accredited institution but who lack some or all of the requirements for a provisional certificate valid in Michigan schools. Applicants for admission to the programs listed above, there-
fore, must take the initiative in completing all requirements, both graduate and undergraduate, for a provisional certificate. The Registrar's Office of the University will supply information concerning certificate requirements.

Undergraduate credit completed in this program will apply on a provisional certificate but not on a master's degree; graduate credit required for the provisional certificate will apply on a master's degree but not on a permanent certificate.

ADDITIONAL GRADUATE PROGRAMS CONTEMPLATED

The Graduate Council is studying additional graduate programs leading to a master's degree and to the specialist degree. If you have a special goal for graduate specialization, please address a letter of inquiry to the Dean of the Graduate School.

PROGRAM OF WORK

Graduate Advisory Committees are charged with the task of preparing for each student a required and suggested program of courses leading to a master's degree. This is a "tailor­made" program and is dependent upon the student's undergraduate training and upon his professional goal.

CREDIT REQUIREMENTS

The minimum credit requirement for a master's degree 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 ten 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 non­teaching 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 full­time student. The maximum course load is twelve hours. For those students in the combined program of graduate and undergraduate courses,
a maximum of thirteen hours may be approved by the Dean of the Graduate School.

**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.

**Post-Summer Sessions, Field Trips, Tours, and Institutes**

The maximum credit which may be earned is one semester hour per week of attendance.

**ELECTION OF GRADUATE COURSES BY SENIORS**

A senior in good standing at Eastern Michigan University 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 and it may not be applied on a permanent certificate.

An in-service teacher who is within 15 hours of a bachelor's degree at Eastern Michigan University 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 several graduate assistantships each year. Several carry stipends of $1650 each per academic year; others carry stipends of $900 and $450 each. In some cases, the course load of a graduate assistant may be restricted to 8 or 10 hours of graduate credit. All assistantships require 10 or more hours of work per week; graduate assistants work under the direct supervision of a member of the faculty.
Graduate Catalog

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 teacher’s certificate or its equivalent, and breadth of training will be among the factors considered in the granting of assistantships.

STANDARDS AND POLICIES

The Academic Year

The academic year is divided into two semesters and several summer sessions, one of six weeks, two of two weeks, and one of four weeks. Students may enroll at the opening of any semester or session. The calendar is printed on one of the first pages of this catalog.

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 sixteen or seventeen weeks. Unless otherwise noted, all graduate courses carry two semester hours of credit.

Grades

The grades used in the Graduate School of the University are listed together with their grade point values.

<table>
<thead>
<tr>
<th>Grade</th>
<th>Grade points per semester hour</th>
</tr>
</thead>
<tbody>
<tr>
<td>A+</td>
<td>9</td>
</tr>
<tr>
<td>A</td>
<td>8</td>
</tr>
<tr>
<td>A−</td>
<td>7</td>
</tr>
<tr>
<td>B+</td>
<td>6</td>
</tr>
<tr>
<td>B</td>
<td>5</td>
</tr>
<tr>
<td>B−</td>
<td>4</td>
</tr>
<tr>
<td>C+</td>
<td>3</td>
</tr>
<tr>
<td>C</td>
<td>2</td>
</tr>
<tr>
<td>C−</td>
<td>1</td>
</tr>
<tr>
<td>E</td>
<td>Unsatisfactory (denotes failure) 0</td>
</tr>
<tr>
<td>I</td>
<td>Incomplete</td>
</tr>
<tr>
<td>W</td>
<td>Withdrawal</td>
</tr>
</tbody>
</table>

Approval for graduation and for candidacy require a grade-point average of 5.0 or B.

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.

A candidate for a certificate should check with the Registrar's Office to make certain that all requirements and application forms have been completed.

Financial Obligations

A student is eligible for registration or for graduation only after financial obligations with the University have been met. Reports of grades, transcripts 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 15 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.

Withdrawing from Classes

During the first eight weeks of a semester, a student may initiate 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 Dean of the Graduate School 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 a master's degree must be completed within six years from the time of first enrollment in graduate courses at this institution or elsewhere.

RESEARCH PAPER

Graduate students are encouraged to write a research paper. For many, 594 Research Techniques affords opportunities to acquire basic research skills; for others, 597, 8, 9, 697, 8, 9 Independent Studies may supply an approach to research.
Course Offerings

Courses in programs of the Graduate School are grouped into six general areas. 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)
Special Subjects (SS)

The Department of Art is the first to change from a general code (CU) to a departmental code (FA).

ART

FA 500 Masterpieces of Art. 2 sem hr
(Formerly CU 543 Masterpieces of Art)
Historical art forms with readings, slides, and discussion 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, SHARP

FA 501 Two-Dimensional Workshop I. 2 sem hr
Emphasis on composition: emotional, expressive, decorative, intellectual. Variety of media, color theory, and color problems. Not open to students who hold more than six hours of credit in Fine Arts. FAIRFIELD, VAN HAREN, PAPPAS

FA 502 Two-Dimensional Workshop II. 2 sem hr
Emphasis on composition: emotional, expressive, decorative, intellectual. Variety of media, color theory, and color problems. Prerequisite: FA 501 Two-Dimensional Workshop I. Not open to students who hold more than six hours of credit in Fine Arts. FAIRFIELD, VAN HAREN, PAPPAS

FA 503 Three-Dimensional Workshop. 2 sem hr
Organizational problems in relationships of texture, space, line, volume, mass. Not open to students who hold more than six hours of credit in Fine Arts. ANDERSON, BARRETT, PAPPAS

FA 597, FA 598, FA 599 Independent Studies. 2 sem hr each
An intensive study of a problem or group of problems under the direction of a University faculty member. STAFF

FA 610-617 Ceramics. 2 sem hr each
Advanced studio courses in ceramics. Based on background and need of the student. Open only to graduate majors in art. LOREE

FA 618 Exhibition in Ceramics. 2 sem hr
For a major receiving a degree in Fine Arts, the exhibition will include only the works of the students. For a major receiving a degree in Art Education, the exhibition may include some works of others. To be elected in the last semester before receiving the master's degree. STAFF
FA 620-627 Drawing. 2 sem hr each
Advanced studio courses in drawing. Based on background and need of the student. Open only to graduate majors in art. FAIRFIELD, PAPPAS

FA 628 Exhibition in Drawing. 2 sem hr
For a major receiving a degree in Fine Arts, the exhibition will include only the works of the student. For a major receiving a degree in Art Education, the exhibition may include some works of others. To be elected in the last semester before receiving the master's degree. STAFF

FA 630-637 Art History. 2 sem hr each
Advanced studio courses in art history. Based on background and need of the student. Open only to graduate majors in art. STAFF

FA 640-647 Jewelry. 2 sem hr each
Advanced studio courses in jewelry. Based on background and need of the student. Open only to graduate majors in art. VAN HAREN

FA 648 Exhibition in Jewelry. 2 sem hr
For a major receiving a degree in Fine Arts, the exhibition will include only the works of the student. For a major receiving a degree in Art Education, the exhibition may include some works of others. To be elected in the last semester before receiving the master's degree. STAFF

FA 650-657 Graphics. 2 sem hr each
Advanced studio courses in graphics. Based on background and need of student. Open only to graduate majors in art. FAIRFIELD, PAPPAS

FA 658 Exhibition in Graphics. 2 sem hr
For a major receiving a degree in Fine Arts, the exhibition will include only the works of the student. For a major receiving a degree in Art Education, the exhibition may include some works of others. To be elected in the last semester before receiving the master's degree. STAFF

FA 660-667 Watercolor. 2 sem hr each
Advanced studio courses in sculpture. Based on background and need of the student. Open only to graduate majors in art. ANDERSON, BARRETT, PAPPAS

FA 678 Exhibition in Sculpture. 2 sem hr
For a major receiving a degree in Fine Arts, the exhibition will include only the works of the student. For a major receiving a degree in Art Education, the exhibition may include some works of others. To be elected in the last semester before receiving the master's degree. STAFF

FA 680-687 Oil Painting. 2 sem hr each
Advanced studio courses in oil painting. Based on background and need of student. Open only to graduate majors in art. CALKINS, SHARP

FA 688 Exhibition in Oil Painting. 2 sem hr
For a major receiving a degree in Fine Arts, the exhibition will include only the works of the student. For a major receiving a degree in Art Education, the exhibition may include some works of others. To be elected in the last semester before receiving the master's degree. STAFF

BIOLOGY

SC 521 Biology of Man. 2 sem hr
Man as a living organism in the world of living organisms, emphasizing his place among, and relationships with, the other organisms of the world; the morphological, physiological, taxonomic, and ecological relationships of Man. Lectures and laboratory experiences. Not open to majors in biology. LUTZ
SC 528 Biogeography. 2 sem hr
Descriptive and historical plant and animal distribution and the basic principles governing the natural distribution in both space and time. D. BROWN

SC 540 Plant Products in Industry. 2 sem hr
The various ways in which plants and plant products are utilized in modern industry; plants as the source of technical raw materials; the dependence of man upon the plant kingdom. BELCHER

SC 541 Economic Zoology. 2 sem hr
The species, varieties, and breeds of animals that are used as beasts of burden; supply food, clothing, sport, and recreation; serve as pets; or are injurious to man or to his domestic animals and crops. Prerequisite: one course in zoology. D. BROWN

SC 542 Survey of the Plant Kingdom. 2 sem hr
A survey of the major types of plants from algae to seed plants; emphasis on development of structure. Not open to graduate majors in biology nor to students who hold credit in Botany 221. STAFF

SC 543 Survey of the Animal Kingdom. 2 sem hr
A survey of the major animal groups from protozoans to mammals. Structure and function; the bases for classification and the evolutionary relationships of the several groups. Not open to graduate majors in biology nor to students who hold credit in Zoology 222. LUTZ, BELTZ

SC 544 Virology. 2 sem hr
The nature and activity of the viral agents found in bacteria, plants, and animals. Prerequisite: 15 hours in biology; bacteriology and biochemistry highly desirable. BELCHER

SC 545 Animal Behavior. 2 sem hr
A study of the behavior of both vertebrates and invertebrates, through lecture, discussion, assigned readings, and completion of a research problem. Topics covered include instinct, learning, sociality, communication, and breeding behavior, with emphasis on the ontogenetic and adaptive significance of behavior patterns. Prerequisite: at least two courses in zoology. LUTZ

SC 546 Taxonomy of Tracheophyta. 3 sem hr
Theory and practice in identification and classification of vascular plants. Prerequisite: General Botany. Not open to students with credit in systematic botany. BELCHER

SC 569 Comparative Physiology. 4 sem hr
A study of systems used to maintain endogenous homeostasis in a phylogenetic series of animals. Prerequisite: Organic Chemistry, Animal Physiology. STAFF

LE 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. DaROO, E. GILES, SPERLING

LE 581 Methods in Teaching Biology. 2 sem hr
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, SINCLAIR

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. BELCHER, CASWELL, SPERLING
SC 585 Problems in Botany. 2 sem hr
Selected botany problems relating to the training and experience of individual students. BELCHER, GILES

SC 586 Principles of Heredity. 2 sem hr
The basic principles of heredity. Not open to students who hold credit in 301 Genetics. CASWELL, GILES, BELCHER, BELTZ

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 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 596 Seminar in Biology. 1 sem hr
Presentation of special reports on selected topics. Prerequisite: 20 hours of credit in biology, including botany and zoology. R. GILES, LUTZ

SC 597, SC 598, SC 599 Independent Studies. 2 sem hr each
An intensive study of a problem or group of problems under the direction of a University faculty member. STAFF

SC 671 Cryptogamic Botany. 4 sem hr
A lecture and laboratory course on the structure and life cycles of representative lower plants. Prerequisite: 15 hours of biology including general botany; plant anatomy and micro-technique desirable. BELCHER

SC 672 Phycology. 2 sem hr
A study of the structure, function, distribution, and classification of the major groups of algae. Special attention will be given to forms which may be found locally, and opportunities for field collections will be provided. There will also be some opportunity to learn techniques of culturing algae. INSTRUCTOR

SC 676, SC 677, SC 678, SC 679 Problems in Zoological Research. 1, 2, 3, or 4 sem hr
Individual work on selected problems in zoology. Open only to graduate majors in biology. CASWELL, LUTZ

SC 683 Cytogenetics. 4 sem hr
Developments leading to modern concepts of cell structure and behavior. Details of chromosome structure and behavior, physical and chemical bases. Laboratory work covers techniques of chromosome analysis and study of effects of different factors on mitosis and meiosis. Prerequisite: SC 586 Principles of Heredity or equivalent. GILES

SC 684 Plant Taxonomy. 2 sem hr
A somewhat detailed study of modern techniques and systems of classification of the higher plants. The student will be expected to apply one or more of the techniques discussed in a field problem. This field work must be written up in a style suitable for publication. Readings in taxonomic journals and reference works will be required. Prerequisite: at least one course in plant classification. GILES

SC 685 Endocrinology. 4 sem hr
A biological and non-clinical survey of the invertebrate and vertebrate endocrine systems; the histology and function of each of the major endocrine organs, their specific hormones and integrative mechanisms. Prerequisite: organic chemistry and animal physiology. JOHNSON.
SC 686, SC 687, SC 688, SC 689 Problems in Botanical Research. 1, 2, 3, or 4 sem hr
Individual work on selected problems in botany. Open only to graduate majors in biology. BELCHER, BROWN

SC 696 Seminar in Biology. 2 sem hr
Presentation of special reports on selected topics. Prerequisite: 20 hours of credit in biology, including botany and zoology. STAFF

BUSINESS

SS 518 Marketing Policies and Problems. 2 sem hr
Analysis of current marketing problems and their implications relative to internal control and external economic, social, and political environment. Prerequisite: minimum 6 hours credit in marketing or equivalent. STAFF

SS 509 Foundations of Business Education. 2 sem hr
Principles and developments in business education for school administrators and business teachers. The objectives and curricular patterns in business for different types of educational institutions; professional leadership and current research in the field. STAFF

CI 570 Problems in Contemporary Economics. 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 may make more intelligent choices as consumers, voters, etc. A discussion of current economic problems. Not open to students who hold credit in economics. J. ROBINSON

SS 571 Current Problems in Business Education. 2 sem hr
Current problems confronting business teachers in the secondary schools. Problems encountered in the following areas will be discussed: organization and administration of business education programs; curriculum and courses of study; physical facilities, equipment, and instructional materials; student personnel relationships; school-business relationships; evaluation of business education programs. Open to Business Education majors only. STAFF

SS 572 Administration of Business Education. 2 sem hr
Analyzes administrative and supervisory duties and responsibilities. Local, state, and federal programs, finance and budgeting, physical facilities, selection and placement of teaching staff, public relations and publicity, equipment selection and maintenance. ROTH

SS 573 Securities Analysis. 2 sem hr
Procedures and methods of security analysis including valuation, timing, and psychological factors which influence the individual security, the industry, and the securities market. Designed for individual investors and for future securities analysts and managers. Prerequisite: Business 305. STAFF

SS 574 Insurance. 2 sem hr
Types of insurance for the individual as a consumer and as a member of society; studies of other investments, including stocks, bonds, savings institutions, and real estate. Prerequisite: 306 Insurance or equivalent. STAFF

SS 576 Business in Society. 2 sem hr
Intellectual and cultural foundations of business. The ideas and concepts upon which our society is based; the relationship of these concepts to the meaning of today’s business. Prerequisite: Major in Business. ROTH
SS 577 Business Research. 2 sem hr
Emphasis on the nature of scientific research and the basic considerations in research methodology. Methods of economic analysis and the scientific method are clearly and concisely brought to bear on business problem solving. This course is designed to provide M.A. candidates with research experience prior to taking SS 586 and SS 594 and to the preparation of their comprehensive examination paper. Both oral and written reports are required. Prerequisite: Minimum of three semester hours of academic work in each of the following areas: accounting, statistics, economics, management, and marketing, or permission. BELTSOS

SS 583 Financial Administration Policies. 2 sem hr
The internal policies and problems of financial management encountered by businesses. Selected cases are used to develop administrative insight in the following areas: funds administration planning, capital structure planning, security distribution arrangements and timing, expansion financing, and solvency maintenance. Prerequisites: Business 307 and Economics 322, or equivalent.

SS 584 Administrative Controls. 2 sem hr
An interdisciplinary approach in the study of decision making situations requiring the use of accounting data. Reviews fundamental accounting statements. Considers situations requiring analysis of the effectiveness of accounting information. Representative problem areas include profit planning, cash flow, make or buy, capital investment and product pricing. Accounting majors electing the course will be expected to present a research topic, in addition to regular course requirements. Prerequisite: 12 hours of accounting or permission of instructor.

SS 585 Organization Theory and Systems. 2 sem hr
Analysis of the man-machine system of the business enterprise including system concepts, feasibility studies, designing, planning, authorizing, installing, operating, and modifying, including control techniques and future possibilities. Considered also is management decision-making concerning organizational concepts and staffing (to refrain or to hire). Prerequisite: 6 semester hours management.

SS 586 Quantitative Analysis. 2 sem hr
This is a course in business decision making. It aims to enhance the student's ability to tackle complex problems of the modern business enterprise through quantification and measurement. Among the topics examined are statistical decision making, linear programming, game theory, inventory control, replacement decisions and various techniques of statistical optimization. Prerequisite: SS 576 with one or more courses in mathematics at the college level. BELTSOS

SS 588 Managerial Economics. 2 sem hr
Application of analytical methods in internal and external business management problems. Methods and techniques that facilitate decision making and forward planning under conditions of uncertainty. Management, uncertainty, prediction, measurement. Selected decision making problems. Management and technique of problem analysis and evaluation. BELTSOS

SS 592 Business Conditions. 2 sem hr

SS 595 Workshop in Business Education I and II. 1 sem hr each
Designed to present modern methods, procedures, and materials for improving the effectiveness of the classroom teacher. Application will be made in the areas of shorthand, typewriting, bookkeeping and basic business. Open to seniors in business education and to graduate students in business education. ROBEK
Graduate Catalog

SS 596 Seminar in Business Education. 2 sem hr
A critical study and appraisal of concepts and problems of business education in secondary schools and community colleges. Discussion of current literature and research in the field supplemented by individual research in selected areas. Prerequisite: SS 569, SS 571, SS 572. STAFF

SS 597, SS 598, SS 599 Independent Studies. 2 sem hr each
An intensive study of a problem or group of problems under the direction of a University faculty member. STAFF

SS 660 International Marketing. 2 sem hr
Analyzes the principles underlying international marketing, its organization and operation. Technical, financial, and operational features of international marketing are emphasized. Trade promotion activities of governments and of private agencies are discussed. BELTSOS

SS 664 Theory of Accounting. 2 sem hr
A study of the historical evolution of accounting and the evaluation of the contributions made by accounting theorists, accounting societies, and governmental agencies to the development of a logical framework of accounting theory. The evaluation and application of these theories to selected accounting problems are emphasized. Prerequisite: 15 semester hours in accounting. STAFF

CHEMISTRY

SC 520 Introductory Chemistry. 2 sem hr
The relationship of chemistry to the earth sciences, physical sciences, and biological sciences; terms and definitions common to the several fields. Topics covered are: the periodic table, modern theories of atomic structure, chemical processes and reactions in relation to physical surroundings and in relation to life processes. Students will develop and present experiments which can be used in the teaching of general science. SPIKE, SCOTT

EDUCATION

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

LE 501 Adolescent Psychology. 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. DOERING, 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. BORUSCH, ELDER, HESTER, LANGMAN, CRAMPTON, DIENER

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. SILVER
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. MONAHAN, FOX, WORONOFF.

CO 509 International Agencies in Education. 2 sem hr
The course deals with the objectives, methods, and materials for teaching international understanding. It will include a discussion of UNESCO, AID, and other agencies involved in international education. It will also consider the development of educational systems in underdeveloped nations and the relationship of education to such forces as nationalism and colonialism. SLAY

LE 512 Audio-Visual Instruction. 2 sem hr
A survey course for teachers and administrators in which the nature and effective use of teaching materials are 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. PETERSON, OLMANNS

CO 515 Parent Education (See Home Economics)

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: LE 503 Reading Methods or equivalent. STAFF

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. ELDER, HESTER

LE 521 Educational Statistics. 2 sem hr
Major emphasis on comprehension and understanding of statistical procedures. Areas covered include: describing a distribution, measures of central tendency, measures of dispersion, and correlation. GREENE

LE 522 Problems in Audio-Visual Programs. 2 sem hr
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 Visual-Sensory Aids in Education or 344 Audio-Visual Methods in Teaching. STAFF

CO 521 Comparative Education I. 2 sem hr
A comparative analysis of selected educational systems in Europe including the U.S.S.R. Patterns, trends and problems of various phases of education such as foundation, administration, organization and curriculum are examined. (formerly CO 524 Contemporary Education) INSTRUCTOR

CO 522 Comparative Education II. 2 sem hr
A comparative analysis of the educational systems of emerging societies. Emphasis is placed upon the role of education in emerging societies as well as the influence of Western educational thought and practices in non-Western societies. (formerly CO 524 Contemporary Education) INSTRUCTOR

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. MICHAEL, R. ROBINSON, LEATHERMAN, SAMONTE, WELLS
CO 526 History of American Education. 2 sem hr
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. R. ROBINSON, MUCKENHIRN

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. GATES, GREENE, GILLESPIE

LE 531 Measurement and Evaluation. 2 sem hr
Introduction to materials and methods available for classroom use in the analysis of educational achievement and individual prognosis. Includes a study of the construction and use of standardized and teacher-made educational tests, rating scales, questionnaires and similar devices. WOLOWITZ, DOERING, TELFER, SHEARD, KETCHUM

LE 532 Elementary School Children and Social Studies. 2 sem hr
An examination of current issues and controversies in the teaching of social studies in the elementary school. The course will be taught at a more advanced level than either Ed 348 or its graduate equivalent LE 571 but will not require either course as a prerequisite. FISHER

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 in Educational Administration. BLUME, BROWER, FREUND

LE 540 Curriculum Foundations. 2 sem hr
Curriculum content and patterns of schools in the United States. Historical and theoretical authority for the curriculum; criteria for the choice of content. Not open to students who hold credit in 326 School and Society, 315 Curriculum, or equivalent. MONAHAN

LE 541 Curriculum—Elementary School. 2 sem hr
Fundamentals of curriculum development; selected types, several basic determinants, some approaches to organization, and the concept of change. In curriculum building, emphasis is placed on the role of the teacher and on the problem-census approach to defining problems. BLUME, FISHER, MONAHAN

LE 542 Curriculum—Secondary School. 2 sem hr
The development and present status of the secondary curriculum; principles of curriculum revision and some factors involved in curriculum changes. Students are encouraged to concentrate on curriculum problems present in their school system. G. FIELDER, SLAY, HIGGINS

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

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 or LE 549 Guidance in Elementary Schools. BIRLESON, KLOOSTERMAN, BOGARIN
LE 545 Counseling Process. 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: LE 544 Guidance or LE 549 Guidance in Elementary Schools. KLOOSTERMAN, FILLMAN

CO 546 The Dropout Problem. 2 sem hr
An intensive review of the research and the professional literature regarding this national problem; practical procedures based upon common school and community resources for improving holding power. G. FIELDER AND STAFF

LE 546 Educational and Occupational Information. 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 supplement the experiences of the members of the class. Oral and written reports on the latest research in the area of information services. Prerequisite: LE 544 Guidance or LE 549 Guidance in Elementary Schools. STAFF

LE 547 Standardized Group Testing. 2 sem hr
The principles of measurement and their applications in the use of standardized group tests in guidance and evaluation. Prerequisite: LE 521. FILLMAN, KLOOSTERMAN, BURMAN, SILVER

LE 548 Group Guidance. 2 sem hr
Understandings, skills, techniques, and materials for group methods in the guidance program; applications to representative groups together with examples of programs and resources. Organization, administration, and research in group guidance programs. Prerequisite: LE 544 Guidance or LE 549 Guidance in Elementary Schools. G. FIELDER, HAEITERMAN, SILVER

LE 549 Guidance in Elementary Schools. 2 sem hr
Fundamental principles, basic materials, cooperating personnel, and techniques of classroom guidance in elementary schools. Not open to students who have credit in 405 Guidance Function or LE 544 Guidance. BIRLESON, STANLEY

CO 553 Principles of School Finance. 2 sem hr
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. ARDIS

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. VANAKEN

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, ZELLERS, STELTER

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

CO 558 School Personnel Administration. 2 sem hr
The basic principles of staff relationships and policies necessary for effective service and high-level morale. MICHAEL
CO 561 The Junior High School. 2 sem hr
History and philosophy of the junior high school: curriculum, providing for individual
differences, modern classroom procedures, use of materials and aids of instruction, the
activity program and guidance. PORRETTA

LE 562 Cultural Determinants of Learning. 2 sem hr
The educational theories and practices in literate and pre-literate societies as illustrative
of various theories of cultural dynamics and change which relate to citizens who will
be living in the twenty-first century; the relationship between culturally held values
and the learning process. LEATHERMAN

CO 562 Educational Leadership I. 2 sem hr
Foundations in educational administration; contributions of contemporary research for
an understanding of the process of leadership; current theories and concepts of educa­
tional administration. MICHAEL, DALY

CO 563 Educational Leadership II. 2 sem hr
Foundations in educational administration; of development and growth of administration
in American public education; sources in American culture from which school adminis­
tration has borrowed its practices; the philosophical basis of assumptions and beliefs
which underlie contemporary theories and concepts of educational administration.
MICHAEL, DALY

LE 563 Teaching Language Arts. 2 sem hr
Desirable pupil habits and attitudes in using language, handwriting, and spelling;
techniques, procedures, and materials for effective teaching of these subjects. Not
open to students who have credit in 463 Teaching the Language Arts in the Elementary
School. DIENER, SMITH

CO 564 The Principalship. 2 sem hr
Study of organizational administrative theories and practices as they apply specifically
in the work of elementary, junior and senior high school principals. Prerequisites: CO
562 and CO 563 Educational Leadership. BROWER, HAELTERMAN, MEGIVERON

LE 566 Improving the Instructional Program. 2 sem hr
Identification, validation, and use of criteria for appraising and improving programs of
public school instruction. Open to elementary and secondary teachers, principals,
supervisors, curriculum coordinators, and other school workers. SUHD

LE 571 Teaching of Social Studies. 2 sem hr
An understanding of the nature of the subjects included in social studies; problems
related to the presentation of materials, planning of units, and types of class activities.
Not open to students who have credit in 281 or 348 Teaching Social Studies. R.
ERICKSON, MACDONALD, SILL

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. Prerequisite: a permanent certificate. WELLS

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 CO 540 Community Organization.
BROWER, G. FIELDER, MICHAEL

CO 594 Adult Education. 2 sem hr
Organization and administration of adult education programs for communities.
CLEETON, SHEARD
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. INSTRUCTOR

CO 595 Workshop in Curriculum Building. 2 sem hr
An intensive evaluation of curriculum problems for administrators. Prerequisite: 10 hours of credit in administration. C. FIELDER, GOLDSMITH, KRAMER, WEISER

LE 595 Workshop in Curriculum Building. 2 sem hr
An intensive evaluation of curriculum problems for classroom teachers. GESLER

CO 596 Seminar in Educational Administration. 2 sem hr
An intensive study of selected problems in administration. Prerequisite: 10 hrs of credit in administration. MICHAEL, STREET, DALY

CO 596 Seminar in Intergroup Education. 2 sem hr
Understandings, attitudes, and skills concerning problems of race, religion, nationality, and socio-economic levels for school personnel. Special emphasis on effective techniques for handling problems of an intergroup nature; intensive work on curricular projects, development of materials and resources, and group activities. FISHER, WORONOFF

LE 597, LE 598, LE 599 Independent Studies. 2 sem hr each
An intensive study of a problem or group of problems under the direction of a University faculty member. STAFF

CO 597, CO 598, CO 599 Independent Studies. 2 sem hr each
An intensive study of a problem or group of problems under the direction of a University faculty member. STAFF

CO 640 Educator in His Community. 2 sem hr
The role of teachers and administrators in the community; emphasizes the educator’s understanding of his community and the community’s understanding the school and its work. BROWER

LE 640 Individual Appraisal in Guidance. 2 sem hr
Methods of appraising the intellectual, academic, social and emotional status of pupils for the purpose of assisting them with their present and future adjustment. Emphasis is placed on the study of actual cases. Prerequisite: LE 545 Counseling Process and LE 547 Standardized Group Testing. STANLEY, BURMAN

LE 643 Practicum in Guidance. 2 sem hr
Supervised experience in all aspects of a school guidance program. Special emphasis is placed on counseling and other direct contact with students. The student will work in a guidance program under the direct supervision of the local cooperating counselor and will meet on campus in a weekly seminar. The equivalent of one school day per week is required for two credits. Note: Application to take the class should be made one semester preceding registration. Forms are available through the Education Department, 325 Pierce. Only students whose names appear on the class list supplied by the Director of the Guidance and Counseling Program will be allowed to register for this class. Prerequisites or corequisites: LE 546 Educational and Occupational Information and LE 640 Individual Appraisal in Guidance. KLOOSTERMAN, STANLEY, BURMAN

LE 645 Organization and Administration of Guidance Services. 2 sem hr
A study of the means by which the philosophy and principles of guidance are implemented in practice. Deals with the roles and the administration of the various special guidance services in the total educational program. Guidance functions of various school staff members will be considered. Prerequisite: LE 643 Practicum in Guidance or equivalent experience. STANLEY, KLOOSTERMAN
CO 651 Public Relations. 2 sem hr
The following topics will be explored: need for an organized public relations program; the role of the classroom teacher; role of the administrator; media and means used; and the roles of pupils, parents, patrons, and community groups, such as civic clubs, professional organizations. Prerequisite: a teacher's certificate. CLEETON

CO 653 Administration—Elementary School. 4 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. CLEETON, MICHAEL, SALCAU, H. WELLS

CO 654 Administration—Secondary School. 4 sem hr
Educational leadership in the secondary 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. HAELTERMAN

CO 658 Administration and Supervision of School Personnel. 4 sem hr
Principles underlying personnel relationships. Selection and retention of staff, development of salary policies, and assignment of responsibilities. Prerequisite: 10 hrs of credit in administration. CLEETON, MICHAEL

CO 659 Pupil Personnel Administration. 2 sem hr
Principles underlying school-pupil relationships. Prerequisite: 10 hrs of credit in administration. STREET, WEISER

LE 696 Seminar in Elementary School Curriculum. 2 sem hr
An intensive evaluation of curriculum materials and problems in elementary schools. Prerequisite: LE 541 Curriculum: Elementary School and 20 hours of graduate credit. FISHER

Library Science

LE 525 Resource Materials for the Elementary School. 2 sem hr
Criteria and sources for selection and purchase of books, pamphlets, periodicals, and free materials for nursery school through the sixth grade. M. ROBINSON, WILSON

ENGLISH LANGUAGE AND LITERATURE

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 such authors as Homer, Sophocles, Shakespeare, Wordsworth and Ibsen. DUME, JORDAN, SCHREIBER, ZALE

CU 533 Basic Studies for Teachers of Language Arts. 2 sem hr
Seeks 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. PILLSBURY, POTTER

LE 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. M. G. CARR, M. MILLER
CU 535 Linguistics and the Teaching of Grammar. 2 sem hr
The aim of this course is to give prospective teachers of grammar in college, high school, or elementary school a knowledge of contemporary theoretical developments in linguistics and of current texts which apply linguistic theories to the teaching of English grammar in the classroom. PILLSBURY

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

CU 560 The Religious Tradition in European Literature. 2 sem hr
Analysis of great European literature of the past and the present concerned with man's search for meaning. Examples are chosen from the Bible, drama, fiction, and poetry. Works of such authors as St. Augustine, Marlowe, Bunyan, Tolstoy, Shaw, Auden, and Graham Greene are studied. 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. Prerequisite: 15 hours of credit in literature. VIRTUE

CU 562 Problem of Evil in American Literature. 2 sem hr
Analysis of selected essays, poems, short stories and novels in which three great American writers, Emerson, Hawthorne, and Melville, have delineated and speculated upon the nature, loci, causes, and effects of evil in the cosmos, in society, and in the individual soul. MADDOX

CU 563 Modern Problems as Portrayed in Modern Literature. 2 sem hr
The portrayal in modern literature of such problems as the relation between the individual and the State, the Family, and the Crowd; the relation between Western and other civilizations. The effects of the industrial system and the search for values. Writers whose works might provide material include: Huxley, Mann, Shaw, Forster, Joyce, Lawrence, Wells, Faulkner, Eliot, Auden, Miller, and Dos Passos. BENSEN

CU 564 Studies in Shakespeare. 2 sem hr
Studies in the historical, biographical, textual, and critical scholarship relevant to two or three of Shakespeare's plays. Investigations, reports, papers. Prerequisite: one course in Shakespeare and 15 hours of credit in literature. VIRTUE

CU 565 British Authors of the Seventeenth Century: Donne, Browne. 2 sem hr
The principal works of two or three English authors from the period 1600-1660, e.g., John Donne and Sir Thomas Browne. Prerequisite: 15 hours of credit in literature. ACKERMAN

CU 566 British Authors of the Sixteenth Century: Elyot, Sidney, Spenser. 2 sem hr
To examine in depth the artistic aims, techniques, and achievements of three British authors. Prerequisite: 15 hours of credit in literature. GOHN

CU 567 Elizabethan Drama. 2 sem hr
The plays of Marlowe, Jonson, and Webster, considered primarily for their intrinsic literary and dramatic merit and secondarily for the light they throw on Shakespeare's milieu. A greater understanding of the term "Elizabethan drama." Prerequisite: 15 hours of credit in literature. GOHN

CU 568 American Authors: Dickinson, Robinson, Frost. 2 sem hr
Study of the lyric and narrative poetry of three New England poets. Emphasis is placed on explication of poems, but biography and the poets' reflection of their times are also considered. Prerequisite: 15 hours of credit in literature. FOSTER

CU 570 Milton. 2 sem hr
Because one of the most interesting aspects of the study of Milton is his intellectual development, the material will be read in chronological order as far as practicable. Poems and selected items from the prose. Prerequisite: 15 hours of literature. GOHN
CU 571 Whitman and Contrasting American Poets. 2 sem hr
Form and content in Whitman's poetry as related to the literary, social, and political backgrounds of his time. Comparisons with the theory and practice of Bryant, Poe, Whittier, and Longfellow. Prerequisite: 15 hours of credit in literature. MADDOX

CU 572 Wordsworth. 2 sem hr
An intensive study of the poetry and critical essays of Wordsworth. Prerequisite: 15 hours of credit in literature. JORDAN

CU 573 Major British Authors of the Nineteenth Century. 2 sem hr
An intensive study of the poetry of Byron and Keats. Prerequisite: 15 hours of credit in literature. JORDAN

CU 574 Biography as Literature. 2 sem hr
The documentary biography, the portrait biography, and the narrative-pictorial biography; biography as fact, as psychological interpretation, and as art. DUME

CU 575 Chaucer. 2 sem hr
Intensive reading of Chaucer's major works and supplementary reading in Chaucerean criticism. POTTER

CU 597, CU 598, CU 599 Independent Studies. 2 sem hr
An intensive study of a problem or group of problems under the direction of a University faculty member. Not to be elected until a student has been accepted as a candidate for the master's degree in literature. STAFF

CU 666 Literary Criticism. 2 sem hr
A study of various approaches to literary criticism with application to specific works. Prerequisite: 15 hours of credit in literature. EMLEY

FOREIGN LANGUAGE AND LITERATURE

CU 512 Teaching Modern Languages—Elementary School. 2 sem hr
An examination of the reasons for teaching foreign languages 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. INSTRUCTOR

CU 513 The Latin Contribution to English Vocabulary. 2 sem hr
A methodical study of the common Latin roots and endings which have entered English. Word ability to use them in speech and writing. GIBSON

CU 514 The Greek Contribution to English Vocabulary. 2 sem hr
A methodical study of the common Greek roots and endings which have entered English, with special attention to scientific vocabulary. GAUERKE

CU 515 The French Contribution to English Vocabulary. 2 sem hr
A study of the entrance of French vocabulary items into the English language since the Norman Conquest. Covers not only the meaning of the items, but the correct pronunciation and the ability to use them in speech and writing. OWENS

CU 516, CU 517 Reading French for Graduate Students. 2 sem hr each
The structure, basic vocabulary, the common idioms of French, to serve as a background for the graduate student who seeks a reading proficiency; open to students whose previous language experience has been dimmed by time, as well as to the beginner. The course is taught at the adult level, and covers more than the customary first semester undergraduate courses. OWENS, GIBSON
CU 526, CU 527 Reading German for Graduate Students. 2 sem hr
The structure and basic vocabulary required by a graduate student who seeks a reading proficiency; open to students whose previous language experience has been dimmed by time, as well as to the beginner. GAUERKE

CU 597, CU 598, CU 599 Independent Studies. 2 sem hr each
An intensive study of a problem or group of problems under the direction of a University faculty member. STAFF

GEOGRAPHY

SC 507 Resources and Nations. 2 sem hr
A practical concept of the earth's surface with emphasis upon the interrelations of physical and cultural factors which result in modern world patterns. Not open to students who hold credit in an equivalent course. SILL, MCDONALD

SC 514 Earth Science I. 2 sem hr
A course designed to give students a basic familiarity with rocks and minerals, and the significance of these in the development of landforms. Lectures, laboratories, and field trips will be used as teaching methods. SINCLAIR

SC 528 Biogeography. 2 sem hr
Descriptive and historical plant and animal distribution and the basic principles governing the natural distribution in both space and time. D. BROWN

CI 541 South American Lands. 2 sem hr
A regional geography study of the countries and colonies on the South American continent; resources, people, and national cultures. Prerequisite: one course in geography. SINCLAIR, MANCELL

CI 542 Middle America and the Caribbean World. 2 sem hr
A regional study of Mexico, Central America, Colombia, Venezuela, and islands of the Caribbean Sea. Conditions leading to the present political upheavals in the area and an effort made to chart future trends. Prerequisite: one course in geography. SINCLAIR

CI 544 Problems in Urban Geography. 2 sem hr
Causes and background of the contemporary urban explosion and the major geographical, economic, governmental, and social implications; analyzing land use changes, patterns, and trends. The work of metropolitan study groups and of planning commissions at the federal, state, and local level; field trips and a chartered plane flight over the Detroit-Toledo urban complex will be scheduled. LOUNSBURY

CI 545 Problems in Political Geography. 2 sem hr
Individual and group research in selected aspects of spatial and physical dimensions, economic resources, population, culture, technological levels, circulation, and political structure of one or two selected, contemporary nation-states. Prerequisite: 15 hours of geography or related subjects. BUCKHOLTS

CI 552 Social Studies of Michigan. 2 sem hr
The geographic, economic, political and sociological backgrounds of important historical events in Michigan. The Indians, French, and British in Michigan; the territorial period; early statehood; the rise of mining, lumbering, manufacturing, and commercial agriculture; the utilization of natural resources for recreation. Prerequisites: one geography course and one American history course. ZOBEL, HOOVER

CI 553 Geography of the Great Lakes. 2 sem hr
A geographic and economic survey of water and land uses, primarily within the area of the Great Lakes drainage basin. The role of the St. Lawrence Seaway will also be considered. Documents and statistical source material will be used to acquire knowledge about one of North America's most vital and dynamic areas. STAFF
SC 555 Local Field Studies in Southeastern Michigan. 4 sem hr
The local environment, either as a part of classroom activities or as utilized in outdoor education programs. On-campus sessions, field trips, and opportunities to relate accomplishments to classroom work. A report is required. STAFF

CI 556 Non-Mediterranean Europe. 2 sem hr
The characteristics and functions of selected European lowland, upland, and highland economies north of the Mediterranean lands. The future of economic integration in Europe. Prerequisite: 10 hours of credit in geography. MARTIN

CI 557 Geography of East Asia. 2 sem hr
Selected problems of the rimland nations of Asia from India and Pakistan to Japan. Background materials on resources, population, and economic development; and interpretation of contemporary affairs of the nations within this major geographical area. Prerequisite: one course in geography. STAFF

SC 557 Field and Project Geography. 6 sem hr
Use of field instruments and methodologies in physical, agricultural, urban, industrial, and settlement geography. GALLAGHER

CI 558 Geography of the Moslem World. 2 sem hr
A regional study of the areas of Africa and Asia practicing the religion of Islam. An assessment of the resource bases, current issues, and possible future trends in those countries which have grown in importance since 1940. Prerequisite: one course in geography. STAFF

CI 559 Geography of Soviet Lands. 2 sem hr
A comprehensive view of the resource bases of the Soviet Union and their regional differentiations. Prerequisite: 10 hours of credit in geography. BUCKHOLTS

SC 561 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. Prerequisite: one course in geography or geology. BURGY

SC 562 Weather. 2 sem hr
Isolation, temperature, pressure, winds, moisture, precipitation, air masses and their activities, fronts, cyclones, hurricanes, tornadoes, and jet streams; observation and application of weather elements. GALLAGHER, LOUNSBURY

SC 563 Climate. 2 sem hr
Solar and physical climates. Koppen Classification of Climates; trends, statistics, and timely topics of climate. A laboratory course. Prerequisite: 122 Weather or SC 562 Weather. STAFF

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. STAFF

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 568 Geography Field Trips.
Representative geographic regions in the area visited; significant geographic and geologic characteristics of each region. Students will have an opportunity to visit typical mining, forestry, agricultural, industrial, and cultural enterprises of the regions. A written report is required. STAFF
Health, Physical Education, Recreation and Athletics

CI 569 The American Midwest. 2 sem hr
A regional treatment. The natural setting, the distribution of the people, the important occupations, and the present and future problems in each of the several regions. Prerequisite: one course in geography. BURGY, SILL

LE 571 Teaching of Social Studies.
SILL (See Education Department.)

CI 574 Africa Today. 2 sem hr
The political, economic, and cultural problems of Africa against the background of a divided world. Such regional geography as is vital to an understanding of the foregoing will be systematically treated. Prerequisite: 10 hours of credit in geography. MARTIN

CI 597, CI 598, CI 599 Independent Studies. 2 sem hr each
An intensive study of a problem or group of problems under the direction of a University faculty member. STAFF

SC 597, SC 598, SC 599 Independent Studies. 2 sem hr each
An intensive study of a problem or group of problems under the direction of a University faculty member. STAFF

SC 660 Area Analysis. 2 sem hr
Advanced geography field research. A philosophy of field geography; selected problems concerned with industry, recreation, agriculture, and commerce. Prerequisite: 15 hours of credit in geography. GALLAGHER

SC 662 Applied Weather. 2 sem hr
An amplification of weather principles covered in SC 562 through observations, field work, and laboratory exercises. Synoptic charts and their many uses; details of major weather phenomena; the Weather Bureau in action; use of articles published by the American Meteorological Society. Prerequisite: SC 562 Weather. STAFF

SC 663 Analytical Climatology. 2 sem hr
An advanced course in climatology which treats in detail the causes and effects of climates in specific areas of the world. Analysis of various climatic classification systems, regional climatology, and applied climatology are stressed. Prerequisite: Geography 152 or 252 or 562 or equivalent. STAFF

CI 697, CI 698, CI 699 Independent Studies. 2 sem hr each
An intensive study of a problem or group of problems under the direction of a University faculty member. STAFF

SC 697, SC 698, SC 699 Independent Studies. 2 sem hr each
An intensive study of a problem or group of problems under the direction of a University faculty member. STAFF

HEALTH, PHYSICAL EDUCATION, RECREATION AND ATHLETICS

SS 510 Trends in Community Recreation. 2 sem hr
A comprehensive study of recreation as applied to the cultural aspects of a community. HARRIS

SS 530 School Health Trends. 2 sem hr
This course will include: (1) Review of current research related to health instruction and health services to identify national trends; (2) The study of literature as related to curriculum development with special emphasis upon the contributions of other subject areas to health education; and (3) Consideration of school-community approaches to school health problems. BORUSCH, STEIG

LE 531 Measurement and Evaluation. 2 sem hr
SHEARD (See Education Department.)
SS 555 Organization and Development of Physical Education Curriculum for Elementary Schools. 2 sem hr
A course for the physical educator and the elementary classroom teacher. Underlying principles and purposes of organization and development of the elementary physical education program; philosophy of curriculum development, curriculum content trends, teaching methods, program planning, and evaluation. BORUSCH

SS 556 Curriculum Development and Supervision of Secondary School Physical Education. 2 sem hr
This course deals with the principles of developing a physical education curriculum in the secondary schools and discusses the problems involved in the supervision of such a program. SHEARD

SS 558 Administrative Problems in Physical Education. 2 sem hr
The case study approach to the understanding of problems in physical education and athletics. This course deals with planning, organizing, developing, staffing, coordinating, and budgeting these programs. BOWEN

SS 561 Supervision in Physical Education. 2 sem hr
Problems, relationships, and procedures in the supervision of physical education programs. BOWEN, WILLOUGHBY

SS 562 Facility Planning and Development. 2 sem hr
Terminology, standards for planning, construction, use, and maintenance of facilities in health, physical education, recreation, and athletics. SHEARD

SS 589 Expanding Role of the Physical Educator. 2 sem hr
The relationship of the physical educator to guidance personnel and to students. STAFF

SS 590 Problems in Community Health. 2 sem hr
Problems of health involving community action. STAFF

SS 594 Research Techniques. 2 sem hr
(See Education Department)

SS 656 Advanced Tests and Measurements. 2 sem hr
The application and interpretation of advanced tests in the fields of health, physical education, and recreation. SHEARD, WILLOUGHBY

SS 657 Interpretation of Physical Education. 2 sem hr
To trace the development of concepts of physical education and to understand the implication these concepts have on the society in which we live. BORUSCH

SS 697, SS 698, SS 699 Independent Studies. 2 sem hr each
An intensive study of a problem under the direction of a University faculty member. STAFF

HISTORY AND SOCIAL SCIENCES

CI 505 Problems in Public Administration. 2 sem hr (Political Science)
A survey of selected problems in public administration on the local, state, and federal levels, with attention given to the growing importance of intergovernmental administrative relationships. Wherever possible, emphasis will be directed to special areas of public administration and services as indicated by the professional fields or interests of the student. SOLOMON

CI 506 American Parties and Politics. 2 sem hr (Political Science)
An exploration of the devices, dilemmas, and delights of party politics as played in the United States. Not open to students who have received credit for 258 (358) Political Parties and Pressure Groups. STAFF
CI 511 Ancient History I. 2 sem hr (History)
Greek City-State Civilization; the political, economic, social, cultural, and religious life of the Greeks in the period between the Persian Wars and the successors of Alexander the Great (479-323 B.C.) with special attention to fifth-century Athens. The legacy of Greece to the modern world. ZICKGRAF

CI 512 Ancient History II. 2 sem hr (History)
Roman Imperial Civilization; the political, economic, social, cultural, and religious life of the Romans from the accession of Augustus to the death of Constantine (31 B.C.-337 A.D.). ZICKGRAF

CI 514 The Reformation Era. 2 sem hr (History)
Causes of the Reformation; Europe on the eve of the Reformation; the Reformation in Germany; spread of Protestantism; spread of Calvinism; the Catholic Reformation; religious conflicts and consequences; secularization of European States; and the legacy of the Reformation. DEVRIES

CI 515 Problems in Medieval History I. 2 sem hr (History)
The intellectual and institutional history of the Middle Ages; the philosophy of the Middle Ages; the Carolingian Renaissance, the Ottonian Renaissance, and the Twelfth Century Renaissance; the history of education from Antiquity through the Middle Ages; and the rise of the universities. WITTKE

CI 516 Problems in Medieval History II. 2 sem hr (History)
The intellectual and institutional history of the High and Late Middle Ages: education, philosophy, and medieval institutions in a growing secular society. WITTKE

CI 517 Historical Background of Modern Britain. 2 sem hr (History)
The history of Great Britain from 1815 to the present with primary emphasis on institutional development. Political, economic, social, and imperial problems will be examined, and Great Britain's role in today's world will be assessed. McLARTY

CI 518 Modern Germany. 2 sem hr (History)
Liberalism and Nationalism following the Napoleonic era; the achievement of unity in the imperial structure, the impact of World War I; the problems of the Weimar Republic, the rise of the Nazi dictatorship, World War II. WITTKE

CI 519 Modern France. 2 sem hr (History)
Developments in the French nation from the Revolution of 1789 to the present. BLACKENBURG

CI 520 Man in Society. 2 sem hr (Sociology)
Basic concepts, theory and analysis of social structures, social process and social disorganization. Not open to students who have a minor or major in sociology. M. BROWN, ROSSAN

CI 521 Contemporary Communities. 2 sem hr (Sociology)
Selected research on the community, including stratification, power structure, the school, the church, social change, methods, and theories of community analysis. Prerequisite: CI 520 Man in Society or equivalent. PINKERTON

CI 524 The Family. 2 sem hr (Sociology)
Family structures and processes in American society. The functions of the family in socialization, status placement; and social mobility. Prerequisite: CI 520 Man in Society or equivalent. CHAMIS, FAUMAN

CI 525 Social Psychology. 2 sem hr (Sociology)
The order and regularity underlying processes of human interaction; motives and attitudes, social norms and roles, the socialization process, personality, and group membership. The effect of group membership upon individual behavior is stressed. Not open to students who hold credit in Social Psychology 250. R. SMITH
CO 527 Religion and Public School Education. 2 sem hr (History)
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.

CI 530 Economics: Principles and Public Issues. 2 sem hr (Economics)
The basic analytic tools of economic theory and their use in considering policy for current major problems, such as: allocation of productive resources, distribution of the national income, relationships between government and business, agricultural policy, labor unions, inflation, fiscal policy, economic growth and development, and international economic policy. Not open to students who hold credit in economics. SIMMONS, SNYDER.

CI 535 Culture of Western Europe I. 2 sem hr (History)
Historical and cultural development in the 17th and 18th centuries; formation of the modern state system, the Age of Enlightenment, and the Era of Revolution. DeVRIES.

CI 536 Culture of Western Europe II. 2 sem hr (History)
Historical and cultural development in the 19th and 20th centuries; the impact of the Industrial and Scientific Revolutions; the life and thought of the people. DeVRIES.

CI 540 Public Opinion. 2 sem hr (Political Science)
The role of public opinion in a democracy. Opinion methodology; the techniques of measuring public opinion. McWILLIAMS.

CI 543 Political Behavior. 2 sem hr (Political Science)
Empirical and theoretical knowledge concerning certain aspects of the actions and interactions of men in the political process; political participation, political affiliation and party identification, political leadership, political communication, political institutions, and voting behavior. Prerequisite: one course in political science. STAFF.

CI 548 History Travel-Study Tours. (History)
Representative areas with significant historical background. European History Travel Seminar. 6 sem hr WITTKE.

CI 565 Problems and Trends in Recent American History. 2 sem hr (History)
Significant aspects of our more pressing minority, industrial, agrarian, and governmental problems are treated. Contributes 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 (History)
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 (History)
An intellectual history, tracing the sources, mutations, and evolution of democratic concepts in the United States. ISBELL.

CI 572 Nationalism. 2 sem hr (History)
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. DeVRIES.

CI 573 America in the Atlantic Community. 2 sem hr (History)
America and Europe since 1492. The impact America has made upon Europe and Europe upon America; the development of social, cultural, and intellectual cross-Atlantic currents. DISBROW.
CI 575 Techniques of Social Research. 2 sem hr (Sociology)
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. STAFF

CI 576 Intercultural Relations. 2 sem hr (Sociology)
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. FAUMAN

CI 578 Government and Business. 2 sem hr (Economics)
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 580 American Governmental Executives—National. 2 sem hr (Political Science)
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 581 Contemporary Problems in American Government. 2 sem hr (Political Science)
An analysis of administrative, legislative, and judicial aspects of selected current developments on the national, state, and local scene. Topics may include such questions as executive-legislative relationships; judicial review; the making of foreign policy; national defense; public welfare; the electoral process and the role of the citizen in American government. SOLOMON

CI 582 Constitutional History of the United States. 2 sem hr (History)
The formulation and development of the Constitution by usage, interpretation, and amendment. Emphasis on the twin basic constitutional objectives: preservation of individual liberty and creation of an adequate national government. Present day constitutional problems associated with the 5th Amendment and 14th Amendment (segregation) will be examined. ISBELL

CI 583 Civil War and Reconstruction. 2 sem hr (History)
The period between the Compromise of 1850 and the restoration of home rule in the South in 1877. GOFF

CI 584 The United States: 1877-1917. 2 sem hr (History)
The history of the United States for the four decades preceding 1917. DISBROW

CI 585 Emergence of Canada. 2 sem hr (History)
The Canadian people and their culture; the government (English-Canadian relationship), the resources, the development of industry, United States-Canadian relations, and the emergence of Canada as a contemporary world power. WARREN

CI 586 United States in World Politics. 2 sem hr (History)
American foreign policy in the twentieth century; the nation’s transition to great-power status and its adjustment to the demands of that role. DRUMMOND

CI 587 State and Local Government. 2 sem hr (Political Science)
Forms and functions of state and local government. Not open to students who hold credit in State and Local Government 202. ENGELSMAN

CI 589 Social and Cultural Aspects of Personality. 2 sem hr (Sociology)
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. FAUMAN
Graduate Catalog

CI 595 Workshop in Economics. 2 sem hr (Economics)
Selected principles of economics presented by visiting consultants. Class discussions on phases of contemporary economics. SNYDER and STAFF

CI 597, CI 598, CI 599 Independent Studies. 2 sem hr each
An intensive study of a problem or group of problems under the direction of a University faculty member. STAFF

CI 687 Historical Method. 2 sem hr (History)
The relationship of history to the humanities and social sciences; the use of the library, standard bibliographical aids, and collected source materials. The skills and experience necessary to evaluate historical writing critically and to conduct historical research in a mature and professional manner. Prerequisite: 15 hours graduate credit in history. DISBROW and STAFF

CI 688 Historiography. 2 sem hr (History)
A critical study of the writings, philosophy, and influence of major historians. Prerequisite: 15 hours of graduate credit in history. HEFLEY and STAFF

CI 696 Seminar in History. 3 sem hr (History)
Research in problems of significance in history; areas of concentration will vary. The preparation of a paper demonstrating the ability of the student to apply the canons of historical scholarship will constitute a substantial part of the course. Prerequisite: 15 hours graduate credit in history plus 687 Historical Method. McLARTY and STAFF

CI 697, CI 698, CI 699 Independent Studies. 2 sem hr each
An intensive study of a problem or group of problems under the direction of a University faculty member. STAFF

HOME ECONOMICS

SS 505 Demonstration Techniques. 2 sem hr
Development of effective techniques and standards for use of demonstration methods for home economists in teaching, business and television. Critical evaluation of individual and team demonstrations in laboratory experience. STAFF

SS 507 Recent Developments in Textiles. 2 sem hr
A study of the nature of textile raw materials; economic, chemical, and physical problems in their manufacture and use; measurement and significance of physical characteristics of yarns and fabrics. STAFF

SS 508 Experimental Foods. 2 sem hr
Designed to introduce student to experimental methods and to develop the scientific approaches to food problems. Laboratory and lecture. Prerequisites: two courses in foods in addition to inorganic and organic chemistry. STAFF

SS 512 Family Economics and Home Management. 2 sem hr
Study of the economic welfare of American families with emphasis on the contemporary consumer problems. Critical analysis of consumer aids, and buying-selling practices. STAFF

SS 513 Consumer Problems in Clothing and Textiles. 2 sem hr
Investigation of the sociological, psychological, legal and technical factors involved in the selection and use of textiles and clothing. STAFF

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. CHAMIS, A. FIELDER, LLOYD
SS 516 History of Furniture. 2 sem hr
History of furniture from ancient times to the present. Outstanding designers. A study of exteriors in relation to interiors and art of the periods. Field trips. Prerequisite: Home Furnishing. STAFF

SS 532 Curriculum Development in Homemaking Education. 2 sem hr
Contributions of home economics at elementary and secondary levels; techniques employed in curriculum planning and reconstruction. STAFF

SS 533 Social and Economic Problems in Housing. 2 sem hr
Personal and public concerns for adequate family housing with an evaluation on economics, art and social aspects. Local, state and federal legislation on housing and trends in social action. STAFF

SS 534 Fashion in Merchandising. 2 sem hr
Fashion trends, cycles, psychology. Fashion markets. Outstanding designers. Professional techniques, methods relating to the field. Field trips. Prerequisite: Costume Design. STAFF

SS 535 Clothing Design and Construction. 2 sem hr
Application of principles of design through actual patterns, making and draping of fabrics. Emphasis on interpretation of design with reference to different fabrics and figures; developed with consultants from pattern companies. STAFF

SS 540 Preparation for the Later Years. 2 sem hr
Individual, family and community planning for the years ahead; developing potentialities; maintaining health; providing reasonable security; building interpersonal relationships. Issues and trends. STAFF

SS 541 Recent Developments in Foods and Nutrition. 2 sem hr
A study of the latest findings in research and technology in food production, processing and distribution. Lectures, field trips and demonstrations. STAFF

SS 543 Supervision in Homemaking Education. 2 sem hr
Responsibilities, services, and professional techniques for supervisors of homemaking teachers at local, state and national levels; inservice and preservice programs. STAFF

SS 544 Recent Developments in Home Equipment. 2 sem hr
A study of current models of various household appliances, with emphasis on mechanical principles involved in construction. Use and methods of testing. STAFF

SS 546 Family Development. 2 sem hr
Experience in tracing family growth through predictable stages of development. Prerequisite: one course in family life. A. FIELDER

SS 550 Tailoring. 2 sem hr
Problems in making tailored garments, current developments in textiles and related fields. GRAVES

SS 551 Laws Affecting the Family. 2 sem hr
 Laws related to the family are surveyed and evaluated in terms of their historical development, application to various stages of the family life cycle, and as they affect the individual as he fulfills family roles. Family law is interpreted from the viewpoints of family members and professional persons who work with families. Legal assistance available to families is considered. STAFF

SS 552 Methods and Materials in Family Life Education. 2 sem hr
Development and definition of philosophy and objectives in family life education. Application of various teaching-learning procedures to family life education in schools, churches and communities. Study of sources for teaching materials, professional consultations, resource persons in family life education, and evaluation of sample materials. Direct class experience with various procedures and materials is provided. STAFF
SS 553 History of Costume. 2 sem hr
The study of costume (through the ages) from ancient times to present day, with regard to major characteristics, social and economic influences, recurring styles. Influence on and application to present. STAFF

SS 554 Fashion Design. 2 sem hr
Designing and illustrating present day apparel; and understanding and appreciation of structural designs. Professional training in rendering techniques and presentation. Pre-requisites: Integrated Arts, Costume Design, or adequate training in these areas. STAFF

SS 559 Consumer Problems in Home Furnishings. 2 sem hr
A study of characteristics, cost, construction, and range of quality of furniture, china, silver, glassware, wall coverings, rugs and carpets, flooring, woods and fabrics. Field trips. Purchasing problems are analyzed. STAFF

SS 563 Space, Equipment, and Furnishings for Homemaking Departments. 2 sem hr
Investigation of problems in remodeling old and planning new departments, equipping and furnishing them. Trends in space use in departments with correlated application of experiences in classroom. STAFF

SS 564 Problems in Interior Decoration. 2 sem hr
Advanced work in the planning of an entire home with regard to social and economic considerations, family living patterns, lighting, landscaping. Study of new findings. Field trips. Prerequisites: Integrated Arts, Housing, and Furnishing the Home. STAFF

SS 565 Expanded Community Programs in Home Economics. 2 sem hr
(Adult Education—Junior College—Out-of-School Youth)
Organization of community programs through analysis of problems affecting community and family life. Development of objectives, teaching procedures and materials for specific needs of adults and out-of-school youth. For teachers, extension specialists and supervisors of continuing education courses. STAFF

SS 566 Foods in Cultures of the World. 2 sem hr
A survey of the food customs in various social and economic groups in America as well as other nations. Exploration in areas of food handling, preservation, preparation and service. Directed to professional needs of home economists concerned with social problems, mass media and food service. STAFF

SS 578 Child Guidance in the Family. 2 sem hr
Exploration of family relationships with responsibilities to children at various developmental stages. Analysis, evaluation, practical application of various philosophies of child development and child rearing as they relate to family living. Prerequisite: Adequate preparation in human development. STAFF

SS 587 Special Problems in Meal Management. 2 sem hr
Management problems dealing with cost in time, money, and energy for family meals; special occasions such as organization of community affairs; simple catering and special marketing problems. STAFF

SS 595 Workshop in Home and Family Life Education in the Junior High School. 2 sem hr
A study of the developmental needs of pre-adolescents, changes in family and society as a basis for developing junior high school programs in homemaking and family life education. Survey of methods and materials. Unique for effective personal and family-centered teaching at this level. STAFF

SS 623 Evaluation in Homemaking Education. 2 sem hr
Experience in measuring progress toward important goals in homemaking education. Critical consideration of available tests and evaluation materials. Application of principles through the construction and refinement of various evaluation instruments. Elementary statistical techniques useful to home economics. STAFF
SS 640 Management of Homes for Physically Handicapped. 2 sem hr
An analysis and application of the principles of home management for the disabled homemaker or for the homemaker who has the care of a handicapped person in the home. This course is directed to the home economist who deals in adult education, social service, equipment and mass media. Prerequisite: one course in Home Management. STAFF

SS 641 Leisure and the Family. 2 sem hr
Consideration of impact of various aspects of modern life on availability and perception of leisure time. Survey of variations in family time and resources for creative use of leisure, structures and informal leisure time activities, appropriate at various stages of the family life cycle, materials, related to leisure time uses, sources of vacation information, consideration of the family with special needs, e.g., with an exceptional child, convalescent, post-retirement member, special financial problems. STAFF

SS 696 Seminar in Advanced Home Management. 2 sem hr
Critical investigation of recent literature relating to home management, with specific concerns for current trends in family practices at various social economic levels. Recognition of changes in values, goals, and problems throughout the family life cycle, and the implication for needed research and study. Prerequisite: 2 courses in home management. STAFF

SS 696 Seminar in Family Health. 2 sem hr
Recent developments in nutrition, preventive medicine, and home care of the sick, study of newer aspects of community, state, national and world health organizations and their implications for improved family health. STAFF

SS 696 Seminar in Family Life and Child Development. 2 sem hr
Survey of social science research as they apply to study of family and children. Review of recent research. Exploration of current issues. Application of information and theory to work of teachers and other professional persons. Prerequisite: Adequate preparation in human and family development. STAFF

SS 697, SS 698 Independent Study in Home Economics. 2 sem hr each
An intensive study of a problem or group of problems under the direction of students' advisory committee. STAFF

INDUSTRIAL EDUCATION AND APPLIED ARTS

SS 511 Power. 2 sem hr
Concentrated study in selected areas of the origin, transmission, and utilization of power. BOHN

SS 515 Teaching Aids in Secondary School Studies. 2 sem hr
Selection, design, and construction of 3-dimensional teaching aids. Materials and procedures for making models, mock-ups, educational displays, dioramas, and specialized learning equipment for social studies, science, mathematics, language arts, and other subject areas. Principles and use of educational exhibits in junior and senior high school. Not open to majors in industrial education except with permission of adviser. CHAMBERLAIN

SS 519 Electricity-Electronics. 2 sem hr
(Replaces SS 525)
For industrial education, science, and other teachers who want to enrich their programs with a knowledge of electricity and electronics. Undergraduate algebra and trigonometry required. Not open to students who have completed E. E. 200 or E. E. 214 or equivalent courses. STAFF

SS 520 Selection and Organization of Subject Matter in Industrial Arts. 2 sem hr
Provides 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. STAFF
Graduate Catalog

42

SS 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. RISK

SS 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. Not open to majors in industrial arts. BENDEN, WESCOTT, JENNINGS

SS 523 General Crafts II. 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. Not open to majors in industrial arts. WESCOTT

SS 524 Problems in Technical Drawing. 2 sem hr
Selected drawing problems related to the training and experience of individual students. RISK

SS 526 Techniques in Plastics. 2 sem hr
Application of the different craft phases of plastics is stressed. Opportunity is provided for shop and laboratory experience. LABOUNTY

SS 527 Graphic Arts. 2 sem hr
General graphic arts including: letterpress, planographic, gravure, and silk-screen printing; linoleum-block carving, and rubber-stamp making. Emphasis on manipulative skills in the classroom. Not open to students who have completed 104 or 206 Printing or equivalent courses. BENDEN

SS 539 Problems in Industrial Arts for Elementary Schools. 2 sem hr
Individualized instruction based on the needs of the teacher in an elementary school. Not open to majors in industrial arts except with permission of instructor. CHAMBERLAIN

SS 550 Planning and Design in Industrial Arts. 2 sem hr
Selecting, planning, and designing activities for each of several areas of industrial arts. STAFF

SS 552 Problems in Metalwork. 2 sem hr
Selected problems in metalwork areas; problems are related to the training and experience of individual students. LABOUNTY

SS 597, SS 598, SS 599 Independent Studies. 2 sem hr each
An intensive study of a problem or group of problems under the direction of a University faculty member. STAFF

SS 619 Problems in Electricity-Electronics. 2 sem hr
(Replaces SS 625)
Problems are related to the training and experience of individual students. Prerequisite: E. E. 200 and E. E. 214 or SS 525. STAFF

SS 627 Problems in Graphic Arts. 2 sem hr
An opportunity for industrial education majors to investigate new techniques in the various areas of graphic arts. Open to industrial education majors with at least one previous undergraduate printing course. STAFF

SS 628 Problems in Architectural Drawing. 2 sem hr
Selected problems related to architectural drawing. Prerequisite: 4 hours in drawing. RISK
SS 629 Modern Concepts of Industrial Education. 2 sem hr
An analysis and interpretation of current concepts and trends in industrial education; historical contributions to contemporary practices. Open to majors in industrial arts. CHAMBERLAIN

SS 630 The Development of Industrial Education. 2 sem hr
Origin and development of industrial education; the relationship of history and philosophy to contemporary practice. Prerequisite: 15 hours of graduate credit in industrial arts. CHAMBERLAIN

SS 631 Evaluation of Industrial Education. 2 sem hr
Principles and methods of evaluation in industrial education. Experience in development and construction of effective evaluative devices. Prerequisite: 15 hours of graduate credit in industrial arts. LABOUNTY

SS 632 Standard and Current Research in Industrial Education. 2 sem hr
Methods and techniques used in industrial education investigations. Review of standard and current research. Open to majors in industrial education. CHAMBERLAIN

SS 633 Principles and Practices in Vocational Education. 2 sem hr
Vocational education as an integral phase of the program of education in the United States. Principles, organization, and current practices. Open to majors in industrial education and to majors in guidance and in administration. STAFF

SS 634 Industrial Arts Materials. 2 sem hr
Basic materials used in industry by the craftsman. Characteristics, sources, and industrial applications of metals, plastics, woods, clays, leathers, adhesives, abrasive, and finishes. Open to majors in industrial education. STAFF

SS 635 School Shop Planning. 2 sem hr
Study of spaces and equipment of school shops, drawing rooms, and related facilities for industrial arts and vocational trades and industries. Analysis involves safety, efficiency, design, location, selection, installation, care, standards, specifications. Open to majors in industrial education. OSBORN

SS 636 Course and Curriculum Planning in Industrial Education. 2 sem hr
The principles and techniques involved in course and curriculum construction in industrial education. Survey and evaluation of courses of study. Open to majors in industrial education. LABOUNTY

SS 637 Cooperative Programs in Industrial Education. 2 sem hr
The nature and purposes of cooperative vocational programs in the secondary school. Organization and procedures of occupational groups, such as apprenticeship training, trades and industries, distributive education, and diversified occupations. Open only to majors in industrial education. STAFF

SS 638 Administration and Supervision of Industrial Education. 2 sem hr
Problems and techniques relating to administration and supervision of industrial arts education, vocational-industrial education, and vocational technical education at the various operational levels. Open only to majors in industrial education and to majors in administration. STAFF

SS 639 Vocational-Technical Programs in Community Colleges. 2 sem hr
Scope and functions of vocational-technical programs in community colleges. Historical development and trends. Open only to majors in industrial education and to majors in administration. STAFF

SS 696 Seminar in Industrial Education. 2 sem hr
An intensive study of selected problems in industrial education. Open only to majors in industrial education. CHAMBERLAIN

SS 697, SS 698, SS 699 Independent Study. 2 sem hr each
An intensive study of a problem or group of problems under the direction of a University faculty member. STAFF
MATHEMATICS

SC 510 Introduction to the New Mathematics. 4 sem hr
This course will deal with the structure of the real number system and its subsystems. It will include a study of the whole numbers, rational numbers in modern context. This will also include work with logic and sets. It is designed for people currently teaching in grade levels 1-8. GOOSEY

SC 511 Introduction to Mathematical Systems. 4 sem hr
This course deals with a development of logic, sets, abstract mathematical systems. It is designed for people currently teaching in grade levels 9-12. GOOSEY

SC 524 Fundamentals of Modern Mathematics. 2 sem hr
Includes all subject matter required for teaching mathematics in the elementary grades K-6. Some new topics in mathematics for the elementary schools. GOTTs

SC 526 Selected Topics in Modern Mathematics—Junior High School. 2 sem hr
The mathematics program in junior high school; its organization; and methods of teaching. Effective ways of presenting materials; using visual aids; and planning class activities. Prerequisite: teaching experience in mathematics or 15 semester hours of credit in college mathematics. GOTTs

SC 527 Elements of Set Theory. 2 sem hr
Sets and subsets, set operations, sets of numbers, relations, cardinal numbers, ordinal numbers, ordered sets and other topics. Prerequisite: a minor in mathematics. STAFF

SC 529 New Topics in Modern Mathematics Programs. 2 sem hr
The exploration of new topics in modern mathematics programs; the materials of various study groups; and presentation of practical problems in teaching mathematics in grades K-8. Prerequisite: teaching experience or 349, 351, or 464. GOTTs

SC 539 Selected Topics in Modern Mathematics—Senior High School. 2 sem hr
Topics covered in new mathematics programs in high schools. Some topics will be based on the mathematics background of the class membership. Prerequisite: a minor in mathematics. NORTHEY

SC 547 Geometry for High School Teachers. 2 sem hr
Fundamental concepts of Euclidean and non-Euclidean geometries including topology, developed from a postulational point of view. Prerequisite: a minor in mathematics.

SC 548 The Theory of Integers. 2 sem hr
Elementary properties, divisibility, congruences, powers and other topics. Prerequisite: an undergraduate major in mathematics. STAFF

LE 564 Arithmetic Methods. 2 sem hr
Current problems in teaching arithmetic. Evaluating pupil achievement; new topics. Prerequisite: 349 or 351 Teaching of Arithmetic, or teaching experience. KILPATRICK, GOTTs, WELPER

MUSIC

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

LE 535 Teaching of Music. 2 sem hr
An intensive examination of the elementary vocal music curriculum giving strict attention to: care of the child voice, artistic song interpretation, music reading, part singing, creating experiences, integration, rural school music problems, and other related subjects. Not open to students who hold a teaching certificate in music. MORGAN, BARR
CU 540 America's Music. 2 sem hr
The diversified styles of music made and continuously used by the people of the United States in terms of our historical and cultural traditions. No prerequisites. JAMES

CU 596 Seminars in Specialized Fields.

CU 596 Seminar in Choral and Vocal Art. 1 sem hr
The Seminar is designed for directors of church, civic, operatic, high school, college and university choral groups, and for adult vocalists. HERFORD, KAPLAN

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

CU 597, CU 598, CU 599 Independent Studies. 2 sem hr each
An intensive study of a problem or group of problems under the direction of a University faculty member. STAFF

LE 636 Administration and Supervision of the School Music Education Program. 2 sem hr
Trends and practices in the teaching of vocal and instrumental music in elementary and secondary schools. Individual research in an area involving the responsibility of the student. Open to majors or minors in music. JOSEPH, OSADCHUK

CU 640 Music Composition. 2 sem hr
The creative process in music through analysis of traditional and new music; recent techniques developed by twentieth century composers. Original compositions illustrating various techniques and media will be required. Open to music majors only. JAMES

CU 641 Choral and Instrumental Conducting. 2 sem hr
Intensive study, discussion, and practice designed to coordinate the mind with physical movements. Study also will be made of rhythmic pulsation, attack, release, tone quality, vowel formation, blend and balance, articulation, intonation, bowings, score reading and analysis, terminology, and other areas as related to organization and performance. JOSEPH

PHYSICS AND ASTRONOMY

SC 550 New Approaches to Teaching Physics I. 2 sem hr
Designed to increase the subject matter competency of those teaching or preparing to teach high school physics. A direct look at the content, organization, problems and philosophy of the latest high school physics text materials. Background theory in support of the content of these materials is developed at the intermediate university physics level. Currently treats the first two parts of the Physical Study Committee's text. Prerequisite: one year of college physics and one course in calculus. THOMAS

SC 551 New Approaches to Teaching Physics II. 2 sem hr
Designed to increase the subject matter competency of those teaching or preparing to teach high school physics. A direct look at the content, organization, problems and philosophy of the latest high school physics text materials is developed at the intermediate university physics level. Currently treats the last two parts of the Physical Science Study Committee's text. Prerequisite: SC 550 STAFF

SC 580 Atomic and Nuclear Physics I. 2 sem hr
A lecture-laboratory course in atomic physics. Electron physics, radiation, atomic structure, x-rays, the quantum properties of waves and particles, relativity, the Bohr atom and atomic spectra, wave mechanics, and the Schroedinger equation. Prerequisite: one year of college physics. PARSONS
SC 581 Atomic and Nuclear Physics II. 2 sem hr
A lecture-laboratory course in recent nuclear physics. Nuclear structure, radioactive decay, detection and measurement of nuclear radiation, fission, fusion, cosmic rays, production of radioisotopes in neutron howitzer. Prerequisite: one year of college physics. PARSONS

SC 582 Teaching of Physical Science. 2 sem hr
Scientific attitudes for use with elementary pupils; the scientific method; a selected group of physical principles; and simple experiments which may be used in the elementary school. GESSERT, LEIB

SC 583 Astronomy I. 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 can be used in the elementary classroom. Consists 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 is also 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 constitute the laboratory work of the course. Not open to students who have credit in 203 Introduction to Astronomy. PARSONS, THOMAS

SC 590 Astronomy II. 2 sem hr
A non-mathematical descriptive course in astronomy designed to increase the teachers’ acquaintance with the general field of astronomy and the work of the astronomer. Many of the topics covered can be used in the elementary and junior high classroom. Emphasis is placed on the study of the stellar system. A review of the solar system, particularly as regards the motions of the earth is included. Naked eye and telescopic observations constitute the laboratory phase of the course. Prerequisites: SC 583 Astronomy I or 303 Astronomy or equivalent. STAFF

SC 593 Basic Concepts of Classical and Modern Physics. 2 sem hr
Fundamental concepts in classical and modern physics; mechanics, kinetic theory, wave motion, electricity, optics, atomic and nuclear energy. Designed for teachers of general science in seventh, eighth, ninth grades, and for teachers of elementary science. GESSERT, WILCOX

PSYCHOLOGY

SC 502 Psychology of Adjustment. 2 sem hr
Systematic presentation of issues, concepts, principles, and theories in the study of human adjustment. Prerequisite: 201 Psychology. STAFF

SC 504 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. R. ANDERSON

SC 530 Statistics in Psychology. 2 sem hr
The tools of descriptive statistics applied to psychological and educational research. GORFEIN, LINDLEY

SC 533 Human Learning. 2 sem hr
Conditioning and learning in the acquisition and modification of individual responses. Emphasis on theories and principles having application to personality theory, psychotherapy, and education. Prerequisite: 10 hours of credit in psychology. CLIFFORD, STAFF

SC 560 Abnormal Psychology. 2 sem hr
Behavior pathologies of children and adults, including symptom origins, and methods of treatment. Not open to students who hold credit in Psychology 360. Prerequisite: two courses in psychology. McLOUGHLIN, VICK
SC 565 Dynamics of Human Behavior. 2 sem hr
An integrated approach to the determinants of behavior and personality with emphasis on the physiological, psychological, and cultural bases. Prerequisite: one course in psychology. R. ANDERSON, McLOUGHLIN

SC 570 Theories of Personality. 2 sem hr
Analysis of contemporary approaches to the study of personality, e.g., Freud, Sullivan, Rogers, Murray, and Murphy. Prerequisite: 10 hours of credit in psychology. R. ANDERSON

SC 575 Psychology of Individual Differences. 2 sem hr
The objective and quantitative investigation of human variability in behavior phenomena and the factors influencing these differences. Prerequisite: one course in psychology. R. ANDERSON, FERRIS

SC 585 Theory of Psychological Testing. 2 sem hr
Assumptions, rationale, and statistical foundations of psychological tests used in differential diagnosis. Prerequisite: 10 hours of psychology, including statistics. R. ANDERSON.

SC 595 Workshop in Scientific Approach to Problem Solving. 2 sem hr
The scientific approach to the solving of problems. The application of psychological principles. Prerequisite: one course in psychology. R. ANDERSON, GORFEIN

SPECIAL EDUCATION AND OCCUPATIONAL THERAPY

LE 506 Education of Exceptional Children. 2 sem hr
Problems and methods involved in the adjustment and training of exceptional children in the school, e.g., 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 251 Education of Exceptional Children. GREGERSON, MYERS, WAWRZASZEK

LE 507 Contemporary Problems in Mental Retardation. 2 sem hr
A critical evaluation of the contemporary issues and problems relating to the mentally retarded. Included in the course are discussions of institutionalization, sterilization, euthanasia, the parent movement, federal legislation, demonstration project, and current research. COTTWALD

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: LE 506 Education of Exceptional Children. STAFF

LE 513 The Slow-Learner in the Classroom. 2 sem hr
Adjusting the curriculum for slow-learning children; problems of identification, methods and materials, curriculum modifications, and remedial techniques. (This course is not an equivalent or a substitute for LE 558-559.) KINGSTON

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: LE 506 Education of Exceptional Children. FOTIU, WEIKERT

LE 515 Social Psychology of the Handicapped. 2 sem hr
Principles of social psychology which influence handicapped individuals and their environment; society as it affects handicapped individuals; and individuals as they affect society. Prerequisite: LE 506 Education of Exceptional Children. DUKAY
CO 519 Administration and Supervision of Special Education. 2 sem hr
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: LE 506 Education of Exceptional Children plus 6 hrs in special education. MYERS, MADER

LE 519 Emotionally Disturbed Children. 2 sem hr
Dynamics of individual behavior; theories of emotional behavior in children illustrated by case materials and excerpts from psychotherapy. Prerequisite: LE 506 Education of Exceptional Children, and Abnormal Psychology. MOTTO, RABINOVITCH, WRIGHT

LE 520 Problems in Teaching Emotionally Disturbed Children. 2 sem hr
To acquaint students with modifications in content, method, classroom procedures and organization, and teacher attitudes necessary in working with children whose behavior is seriously deviant. Prerequisite: LE 519 Emotionally Disturbed Children. MORRIS

CO 520 Family-School Relationships in Special Education. 2 sem hr
Discovering and analyzing the home problems which have educational implications for the child. FRENCH, LEWIS, VAN DYKE

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

LE 536 Methods of Teaching Physically Handicapped Children. 2 sem hr
Education and psychological needs of crippled children; teaching techniques to meet these needs, and problems that arise in group adjustment. Observation and laboratory are required. WALLACE, GREGERSON

LE 537 Pathology of the Physically Handicapped. 2 sem hr
Orthopedic disabilities, cardiac and other handicapping conditions of children; a brief survey of the structure and function of the human body as it relates to these disabilities. Laboratory period and case studies are required. Prerequisite: LE 506 Education of Exceptional Children. WRIGHT

LE 538 Therapeutic Care of the Physically Handicapped Child. 2 sem hr
Medical and surgical aspects of the orthopedic and other handicapping conditions of children; therapies and services used in their rehabilitation. Opportunity for observation of children is available. Prerequisite: LE 506 Education of Exceptional Children. WRIGHT and STAFF

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 is given to the disorders of articulation. Not open to students who have credit in Special Education 241. ALBRITTON, PALMER

LE 552 Methods of Teaching the Acoustically Handicapped I. 2 sem hr
Curriculum development and classroom management of the acoustically handicapped. Methods of teaching pre-school, primary, intermediate, and secondary levels; language development, reading, composition, arithmetic, and other school subjects; and special devices for language presentation. Must be taken concurrently with LE 553 Methods of Teaching Acoustically Handicapped II. STAFF

LE 553 Methods of Teaching the Acoustically Handicapped II. 2 sem hr
Continuation of LE 552 Methods of Teaching the Acoustically Handicapped I. STAFF
LE 554 Auditory Training and Speech Reading for the Acoustically Handicapped.  
2 sem hr  
A study of the avenues of the receptive language available to the acoustically handicapped child; the training of residual hearing and the development of speech reading. Includes the use and care of group and individual hearing aids. Must be taken concurrently with LE 552 and LE 553 Methods of Teaching the Acoustically Handicapped I and II. STAFF

LE 557 Mental Deficiency. 2 sem hr  
The nature and causes of mental deficiency; characteristics and social control of mental defectives. Opportunities are provided for observation and clinical studies. Not open to students who have credit in 350 Mental Deficiency. ANDREWS, GOTTwald, GATES

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. Prerequisite: LE 506 Education of Exception Children. TREADO, ROGER, ROGERS

LE 559 Education of the Mentally Handicapped II. 2 sem hr  
A study of the problems in educating the mentally handicapped in the intermediate program, and the techniques and methods used in preparing and utilizing a curriculum adapted to the child's needs and abilities. Graduate level. TREADO

LE 561 Education of Gifted Children. 2 sem hr  
The identification of gifted students; the use of test results, psychological services, and cumulative records. Curricula stressing enrichment and acceleration and the use of community resources are considered. Of special value to classroom teachers. ROEPER

LE 567 Education of the Brain-Injured Child. 2 sem hr  
The purpose of this course is to present the philosophy and knowledge pertinent for planning and effecting educational programs for brain-injured children who have disturbances in perception, thinking and emotional behavior. Pathology of the central nervous system is introduced briefly. However, emphasis is placed upon teaching techniques, classroom management, case studies, research and teacher-child and parent relationships. ROGERS

LE 568 Secondary Education of the Mentally Handicapped. 2 sem hr  
A program of functional education for mentally handicapped children in the junior-senior high school age group; vocational, occupational, and terminal education. Prerequisite: LE 506 Education of Exceptional Children. MILLER

LE 574 Psychology of Speech and Hearing. 2 sem hr  
The development of receptive and expressive language abilities within the framework of child development. The impact of disabilities in communication on the total behavior of the child will also be discussed. STAFF

LE 577 Speech Pathology. 2 sem hr  
Incidence of speech disorders; phonetic analysis and other tests; articulatory defects and voice problems; stuttering, aphasia, cleft palate, and cerebral palsy. FULTON

LE 578 Applied Phonetics. 2 sem hr  
The use of I. P. A. symbols for transcription of normal and deviant speech; phonetic changes in English pronunciation; and spoken speech as a dynamic process. Accuracy of transcription as a skill needed in working with those who have deviant speech. FULTON
LE 579 Diagnostic Practicum. 2 sem hr
Supervised clinical experience in diagnosing speech problems. Included directed observation and practice in: obtaining a case history; testing articulation; diagnosing retarded speech, stuttering, and voice; tests for cleft palate, cerebral palsy, and aphasia. ALBRITTON

LE 593 Habilitation of the Trainable Mentally Retarded Child. 4 sem hr
The emphasis in this course will be placed on the habilitation and education of the trainable retarded child. Discussions and lectures will cover areas related to philosophy and objectives, classroom management and procedures, program coordination and evaluation, parent counseling, professional personnel, legislation, housing, transportation, sheltered workshops and other ancillary services. STAFF

LE 595 Pre-School Culturally Deprived Mentally Handicapped Child. 2 sem hr
Characteristics of pre-school mentally handicapped children. Review of ongoing educational programs on the pre-school level. Importance of cognitive development, educational techniques, study of programs in Boston, New York, Illinois. Visits to Ypsilanti pre-school project and the Great Cities Project in Detroit. Study of problems related to deprived areas. Trips to deprived areas in Detroit and Flint. WAWRZASZEK, STAFF

LE 596 Advanced Seminar-Education of Children with Impaired Hearing. 4 sem hr
For teachers of deaf or hard of hearing, speech correctionists, counselors and teachers; an auditory approach to diagnosis, therapy, and educational management of the child with impaired hearing from infancy through high school. Effects of hearing impairments and rehabilitation procedures for speech reading, language, and speech. Practicum with children of varying ages. FRENCH

LE 597, LE 598, LE 599 Independent Studies. 2 sem hr each
An intensive study of a problem or group of problems under the direction of a University faculty member. STAFF

LE 670 Clinical Methods in Speech Correction I. 2 sem hr
Deals with the diagnosis and treatment of the more prevalent types of speech disorders. Special emphasis will be given to functional articulatory problems, stuttering, language impairment and functional voice disorders. Must be taken concurrently with Clinical Practice I. Clinical Methods I and II given on alternate summers. Prerequisites: Speech Pathology, Phonetics. STAFF

LE 671 Clinical Practice in Speech Correction I. 2 sem hr
Includes supervised clinical experience with children and adults in individual and group settings. Functional articulation and voice disorders and rhythm problems are given special emphasis. Opportunity is provided for directed observation of complex cases. Must be taken concurrently with Clinical Methods I (includes about 30 clock hours of clinical practice). STAFF

LE 675 Clinical Methods in Speech Correction II. 2 sem hr
A consideration of the methods of treatment of speech disorders associated with organic impairment. Special emphasis will be given to the problems of children with cerebral palsy, cleft palate, hearing losses and mental handicaps. Must be taken concurrently with Clinical Practice II. Prerequisites: Speech Pathology, Phonetics. STAFF

LE 676 Clinical Practice in Speech Correction II. 2 sem hr
Includes clinical experience with speech disorders associated with organic impairment. Special emphasis will be given to the problems of children with cerebral palsy, cleft palate, hearing losses, and mental handicaps. Must be taken concurrently with Clinical Methods II. (Includes about 30 clock hours of clinical practice.) STAFF

LE 696 Seminar in Special Education. 2 sem hr
An intensive study of selected problems in special education. Open only to majors in special education. MYERS
SPEECH AND DRAMATIC ARTS

LE 523 TV Techniques for Classroom Teachers I. 2 sem hr
Skills and techniques needed by classroom teachers for the effective presentation of educational materials through the medium of television. Theory and practice. WEBER, STAFF

LE 524 TV in Education. 2 sem hr
Extent and nature of experimentation in instruction by television; current philosophy and attitudes toward teaching by television. Each student will do some demonstration teaching by closed-circuit television. WEBER

LE 526 TV Techniques for Classroom Teachers II. 2 sem hr
A continuation and intensification of the theoretical and practical experiences in instructional television provided in course LE 523. Laboratory hours to be arranged. Prerequisite: LE 523. STAFF

CU 530 Creative Dramatics. 2 sem hr
The theory of creative dramatics. Opportunities are provided for actual practice in the various techniques and activities involved in introducing creative dramatics to children at various age levels. MICHALAK

CU 542 Play Production—Junior-Senior High School. 2 sem hr
Principles and techniques of play production with emphasis on problems encountered in secondary schools. Dramatic structure, play selection, directing, screen design and construction, stage lighting, make-up, costuming, properties, and business management; improvement of effectiveness in both curricular and extracurricular theatre. BIRD, GOUSSEFF

CU 550 Children’s Theatre. 2 sem hr
Methods of selecting, designing, and directing plays for children; problems encountered in elementary school productions. MICHALAK

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. SATTLER

CU 590 Communications for Leaders. 2 sem hr
Principles and techniques in effective communication; the use of communication skills in interviews, discussions, staff meetings, abstracting printed materials, bulletins, written and spoken reports. MURRAY, SATTLER

LE 595 Workshop in Airborne Television. 2 sem hr
Information and procedures for use of airborne television in the classroom. STAFF
GRADUATE COUNCIL


FACULTY

Ackerman, Catherine A. (1947) ______________________________ Professor of English
A.B., Eastern Michigan University; A.M., Ph.D., University of Michigan

Albritton, Thelma (1961) ______ Assistant Professor of Special Education
A.B., Greensboro College; M.Ed., University of Oregon

Anderson, Carl R. (1947) ______________________________ Director of Field Services;
Assistant Professor of History
A.B., Northern Michigan College; A.M., Michigan; Michigan

Anderson, Marvin C. (1963) ______________________________ Instructor in Art
B.F.A., Wayne State University; M.F.A. Cranbrook Academy of Art

Anderson, Robert L. (1957) ______________________________ Professor of Psychology
A.B., Northern Michigan College; A.M., Columbia University; Ph.D., New York University

Baltzer, Susanna (1954) ________________ Assistant Professor, Supervising Teacher,
Special Education
B.S., Eastern Michigan University; A.M., Illinois

Barnes, James M. (1955) ______ Head, Department of Physics and Astronomy
B.S., Eastern Michigan University; M.S., Ph.D., Michigan State University

Barrett, Harry S. (1960) ________________ Assistant Professor of Art
B.S. in Des., M.S. in Des., M.F.A., University of Michigan

Belcher, Robert O. (1946) ________________ Head, Department of Biology
A.B., Berea College; Purdue; M.S., Ph.D., University of Michigan; University of London

Beltsos, Nicholas J. (1962) ________________ Assistant Professor of Business
B.S., Marquette University; M.A., Michigan State University; Wayne State University

Beltz, Alex D. (1963) ______________________ Instructor in Biology
B.A., Walla Walla; B.A. in Education, Western Washington College;
M.A., Walla Walla; University of Oregon, Michigan State University
Graduate Faculty

Benden, Robert A. (1953) Assistant Professor of Industrial Education
B.S., Eastern Michigan University; University of Michigan; A.M., Eastern Michigan University

Bensen, Alice R. (1947) Professor of English
A.B., M.A., Washington University; The Sorbonne; Ph.D., University of Chicago

Birleson, Clifford (1951) Associate Professor of Education
A.B., Western Michigan University; A.M., University of Michigan; Michigan

Blackenburg, Howard (1938) Professor of History
A.B., Walla Walla; A.M., Washington; Ph.D., University of Wisconsin

Blume, Robert A. (1960) Assistant Professor of Education
B.S., Ohio State University; M.A., University of Michigan; Michigan

Borusch, Barbara J. (1950) Professor of Physical Education
B.S., Eastern Michigan University; A.M., Ph.D., University of Michigan

Bowen, Keith (1963) Head, Department of Health, Physical Education, Recreation and Athletics
A.B., Iowa State Teachers College; M.Ed., University of Colorado; P.E.D., Indiana University

Brower, George (1954) Professor of Education
B.S., Western Michigan University; A.M., University of Michigan; Ph.D., Cornell

Brown, Albert W. (1958) Dean of the College of Arts and Sciences, Professor of Geography
A.B., Syracuse University; D.S.S., Syracuse University

Brown, Donald F.M. (1956) Associate Professor of Biology
A.B., M.S., Ph.D., University of Michigan

Buckholts, Paul O. (1961) Associate Professor of Geography
B.S., M.A., Oklahoma University; Ph.D., Harvard

Calkins, Kingsley M. (1950) Head, Department of Art
B.S., Eastern Michigan University; A.M., University of Michigan; Michigan; Detroit Society of Arts and Crafts

Carr, Marion G. (1953) Assistant Professor of English
A.B., Western Reserve University; A.M., Syracuse University; Syracuse University; University of Illinois

Caswell, Herbert H., Jr. (1955) Professor of Biology
B.S., Harvard; A.M., UCLA; Ph.D., Cornell; Williams College

Chamberlain, Duane G. (1931) Professor of Industrial Education
B.S., Eastern Michigan University; A.M., Ph.D., University of Michigan

Cleeton, Kenneth H. (1957) Head, Department of Education
B.S., A.M., University of Missouri; Ed.D., University of Colorado
Collins, W. Oscar, Jr. (1957) Associate Professor of Business  
B.S., Southwest Missouri State College; M.Ed., University of Missouri;  
Ed.D., Indiana  

Crampton, Gertrude (1961) Assistant Professor of Education  
A.B., University of Michigan; M.A., Eastern Michigan University;  
Eastern Michigan University  

Cranmer, Robert W. (1954) Assistant Professor, Principal, Elementary  
School, Lincoln Consolidated School  
B.S., in Ed., M.A. in Ed., Ohio State University; Wayne State University  

Daly, Frank (1962) Lecturer in Education  
B.S., M.A., Wayne State University; Wayne State University  

Dart, Jane McAllister (1942) Assistant Professor of Art  
Pratt Institute; B.F.A., A.M., Ohio State University; Arkansas, Ohio  
State University, Michigan State University, Detroit Arts and Crafts  

Desper, Martha L. (1960) Assistant Professor, Fifth Grade,  
Lincoln Consolidated School  
B.A., Wayne State University; A.M., University of Michigan  

DeVries, Harry (1946) Professor of History  
A.B., Hope College; A.M., Ph.D., University of Michigan  

Disbrow, Donald W. (1956) Professor of History  
A.B., Haverford College; Ph.D., University of Rochester  

Drummond, Donald F. (1958) Head, Department of History and  
Social Sciences  
A.B., Western Michigan University; A.M., Ph.D., University of Michigan  

Dume, Thomas L. (1957) Associate Professor of English  
A.B., University of Michigan; A.M., Columbia; Ph.D., Temple University  

Elder, Richard D. (1960) Assistant Professor of Education  
B.S., Ed.M., Temple University; University of Michigan  

Emley, Edward (1958) Associate Professor of English  
B.S., New Jersey State Teachers College; A.M., Ph.D., New York  
University  

Engelsman, Anthony (1925) Professor of Political Science  
A.B., Hope College; A.M., University of Michigan; Michigan  

Fairfield, Richard T. (1963) Instructor in Art  
B.F.A., Spalding Institute; University of Illinois, Bradley University;  
M.F.A., University of Illinois  

Fauman, S. Joseph (1958) Professor of Sociology  
A.B., A.M., Ph.D., University of Michigan
Fielder, Anita L. (1954) ———— Head, Department of Home Economics
B.Ed., Eastern Illinois State Teachers College; M.S., University of Illinois; University of California (Berkeley), University of Illinois

Fielder, Gordon W. (1954) ———— Associate Professor of Education
B.S., Kansas; M.S., M.Ed., Ed.D., Illinois

Fisher, Robert J. (1955) ———— Professor of Education
A.B., A.M., Ed.D., Stanford University

Flory, Stanley (1958) ———— Assistant Professor of Sociology
A.B., Eastern Michigan University; M.S.W., University of Michigan

Foster, Milton P. (1947) ———— Professor of English
A.B., Waynesburg College; A.M., Pittsburgh; Ph.D., University of Michigan

French, Sophie L. (1948) ———— Assistant Professor, Supervising Teacher of Special Education
A.B., Bryn Mawr; A.M., Columbia; University of Michigan

Friedman, Monroe P. (1964) ———— Assistant Professor of Psychology
B.S., Brooklyn College; Ph.D., University of Tennessee

Fulton, C. Wayne (1956) ———— Associate Professor, Audiologist, Horace H. Rackham School of Special Education
A.B., Grinnell College; A.M., Ph.D., Western Reserve University

Gallagher, James W. (1958) ———— Associate Professor of Geography
B.S., M.S., Illinois State University (Normal); Ph.D., University of Illinois

Gates, Mary F. (1942) ———— Professor of Education
A.B., Lawrence College; M.S., Chicago; Ph.D., University of Wisconsin

Gauerke, Herbert J. (1949) ———— Professor of German
A.B., Capital University; A.M., Illinois; Ph.D., Marquette

Gesler, Ralph A. (1952) ———— Assistant Professor of Education
Assistant Director of Field Services
B.S., Western Michigan University; A.M., University of Michigan; Michigan

Gessert, Walter (1961) ———— Associate Professor of Physics
B.S., Eastern Michigan University; M.S., Wayne State University; Ph.D., Michigan State University

Gex, R. Stanley (1954) ———— Dean of the College of Education, Professor of Education
B.S., State Teachers College, Maryville, Missouri; M.A., Ed.D., University of Missouri
(Lv. of abs. 1963-65)

Gibson, Eugene M. (1956) ———— Associate Professor of Foreign Languages
A.B., A.M., University of Oklahoma; Ph.D., University of California
Gier, Dorothy (1964)  
Lecturer in Education  
A.B., Michigan State University; M.A., Ed.S., University of Michigan; University of Michigan

Giles, Elizabeth (1963)  
Lecturer in Biology  
B.S., Central Michigan University; M.S., Michigan State University; Michigan State University

Giles, Richard A. (1947)  
Professor of Biology  
B.S., Massachusetts State College; M.S., Ph.D., Michigan State University; Cornell

Glasgow, James H. (1939)  
Dean of the Graduate School  
Professor of Geography  
B.Ed., Illinois State University (Normal); A.M., Clark; Ph.D., Chicago

Gohn, Ernest Salisbury (1958)  
Professor of English  
A.B., Ph.D., Johns Hopkins University

Goosey, Bob Lee (1959)  
Assistant Professor of Mathematics  
B.S., Montana State College; M.A., Pennsylvania State University

Gorfein, David S. (1962)  
Assistant Professor of Psychology  
B.A., City College of New York; M.A., Ph.D., Columbia University

Gotts, M. Margaret (1938)  
Assistant Professor of Mathematics  
A.B., Eastern Michigan University; A.M., University of Michigan

Gottwald, Henry (1964)  
Associate Professor in Special Education  
B.S., Eastern Michigan University; M.A., University of Michigan; Ed.D., Wayne State University

Graves, Dorothy M. (1961)  
Assistant Professor of Home Economics  
B.S., Illinois Institute of Technology; M.Ed., Colorado State University; University of Chicago

Green, Edward (1963)  
Professor of Sociology  
A.B., A.M., Ph.D., University of Pennsylvania

Greene, Bert (1963)  
Associate Professor of Education  
B.S., Eastern Michigan University; M.A., Ph.D., University of Michigan

Gregerson, Harvey H. (1959)  
Assistant Professor, Supervising Teacher of Special Education  
B.S., Eastern Michigan University; M.A. in Ed., University of Michigan

Harris, Augusta M. (1928)  
Professor of Physical Education, and Chairman, Women's Division  
B.S., Eastern Michigan University; M.S., University of Michigan; Michigan

Hefley, J. Theodore (1956)  
Associate Professor of History  
B.S., A.M., Oklahoma; Ph.D., Minnesota

Hester, Kathleen B. (1945)  
Professor of Education  
B.S., Carnegie Institute of Technology; A.M., Ph.D., Pittsburgh
Isbell, Egbert R. (1937)                       Professor of History
A.B., University of Michigan; Frankfurt (Germany); A.M., LL.B.,
Ph.D., Michigan

James, Dorothy (1927)                        Professor of Music
Graduate, Chicago Musical College; B.M., M.M., American Conserva-
tory of Music; Eastman; Roosevelt University; University of Michigan

Jennings, Gerald L. (1963) Assistant Professor of Industrial Education
B.S., M.A. in Ed., Ball State Teachers College; Michigan State Uni-
versity

Johnson, Bert M. (1951)                      Professor of Biology
B.S., A.M., Ph.D., University of Michigan

Jordan, Hoover H. (1939) Head, Department of English Language
and Literature
A.B., Yale; A.M., Ph.D., Cornell

Joseph, Warren (1963)                        Head, Department of Music
B.S., M.S., State University of New York (Potsdam); Ph.D., Boston
University; Columbia; Harvard

Kilpatrick, Murel (1950) Assistant Professor, Supervising
Teacher of Mathematics, Lincoln School
B.S., Eastern Michigan University; Wayne State University; A.M.,
University of Michigan

Kloosterman, Winton A. (1962) Associate Professor of Education
B.A., Beloit College; M.A., Teachers College, Columbia University;
Ed.D., Wayne State University

Kramer, Karl (1963) Assistant Professor in Education
B.S., M.A., New York University; Michigan State University

LaBounty, Raymond A. (1945) Head, Department of Industrial
Education and Applied Arts
B.S., Eastern Michigan University; A.M., Ed.S., University of Michi-
gan; Western Michigan University

Langman, Muriel Potter (1950) Professor of Education
A.B., Barnard College; A.M., Ph.D., Columbia

LaPerriere, Charles (1956) Assistant Professor, Psychologist,
Lincoln School
B.S., M.A., University of Michigan

Leatherman, Roger (1963) Associate Professor of Education
B.A., M.A., Ohio State University; Ph.D., University of Michigan

Leib, Floyd I. (1925) Assistant Professor of Physics
A.B., Eastern Michigan University; A.M., University of Michigan;
Michigan

Lindley, Richard (1964) Head, Department of Psychology
B.A., Ph.D., University of California, Berkeley
Graduate Catalog

58

Lloyd, Madeline M. (1963) Assistant Professor of Home Economics B.A., Montclair State College; M.A., Ed.D., Teachers College, Columbia

Loree, John P. (1962) Instructor in Art B.S., Fordham University; M.F.A., Alfred University

Lounsberry, John F. (1961) Head, Department of Geography Coordinator for Special Instructional Programs B.S., M.S., University of Illinois; Ph.D., Northwestern

Lutz, John E. (1957) Associate Professor of Biology B.S., Yale University; A.M., University of Michigan

MacDonald, Alister (1948) Assistant Professor, Supervising Teacher of Social Studies, Roosevelt School B.S., A.M., Minnesota; Chicago

McLarty, R. Neil (1958) Associate Professor of History A.B., Eastern Michigan University; A.M., Ph.D., University of Michigan; University of London

McLoughlin, Quin (1962) Assistant Professor of Psychology B.A., M.A., Columbia College; Ph.D., University of Michigan

McWilliams, Robert O. (1956) Professor of Political Science A.B., University of Michigan; M.P.A., Wayne; Ph.D., Michigan

Maddox, Notley S. (1947) Professor of English B.S., A.M., Ph.D., Ohio State University

Marshall, Everett L. (1939) Registrar; Professor of Education B.Ed., Northern Illinois University; A.M., Ph.D., Iowa

Martin, Geoffrey J. (1959) Assistant Professor of Geography B.Sc., London School of Economics; P.G.C.E., University of London; A.M., University of Florida; University of London

Megiveron, Gene E. (1962) Assistant Professor, High School Principal, Lincoln Consolidated School A.B., A.M., Eastern Michigan University; Wayne State University

Metler, John (1964) Assistant Professor of Education B.A., University of Western Ontario; B.D., Emanuel College, Victoria University; M.A., Union Theological Seminary, Columbia University; Ed.D., Union Theological Seminary, Teachers College, Columbia University

Michael, Calvin (1961) Professor of Education B.A., Albion College; M.A., Ph.D., University of Michigan

Michalak, Virginia G. (1962) Assistant Professor of Speech and Dramatic Arts A.B., Vassar College; A.M., Wayne State University

Miller, Marjorie M. (1946) Associate Professor of English A.B., Nebraska State Teachers College (Peru); Nebraska; A.M., University of Michigan; Michigan
Monahan, Thomas O. (1953)  Associate Professor of Education  
B.S., Willimantic (Connecticut) State Teachers College; A.M., Connecticut; Columbia

Motto, Joseph J. (1961)  Associate Professor of Special Education  
B.S., Central Michigan University; M.A., University of Detroit; Ph.D., University of Michigan

Muckenhirn, Erma (1963)  Assistant Professor of Education  
B.A., M.A., University of Michigan

Myers, Allen (1958)  Head, Department of Special Education and Occupational Therapy; Director, Horace H. Rackham School of Special Education  
B.M., M.M., North Texas State College; A.M., Ph.D., University of Iowa

Northey, James H. (1957)  Assistant Professor of Mathematics  
B.S., Northern Michigan College; M.S., University of Michigan; Michigan

Ogden, Russell L. (1956)  Assistant Professor of Business  
B.S., Eastern Illinois State College; M.A., Colorado State College of Education

Oltmanns, Richard G. (1956)  Assistant Professor, Director of Audio-Visual Center  
B.S., Eastern Michigan University; M.S., Indiana University

Osadchuk, Mitchell M. (1956)  Associate Professor of Music  
A.B., Lake Forest; M.M., Northwestern; George Washington; Michigan; Eastman

Osborn, Carroll A. (1955)  Associate Professor of Industrial Education  
A.B., Ohio Wesleyan; B.S. in Ed., A.M., Ohio State; Wayne State University; University of Michigan

Owens, J. Henry (1940)  Head, Department of Foreign Languages  
A.B., Franklin College; A.M., Ph.D., Minnesota

Palmer, David E. (1952)  Associate Professor of Speech Education, Speech Clinician  
A.B., A.M., Michigan; Michigan

Pappas, John N. (1962)  Assistant Professor of Art  
B.F.A., M.A., Wayne State University

Parsons, Karl A. (1950)  Associate Professor of Physics and Nuclear Physics Coordinator  
A.B., Indiana Central College; Northwestern; Minnesota; Chicago; M.S., Iowa; University of Michigan

Pate, Robert S. (1946)  Head, Department of Mathematics  
A.B., Nebraska State Teachers College (Peru); A.M., Nebraska; Ph.D., Illinois
Graduate Catalog

Peterson, Ralph G. (1946) Associate Professor of Education
B.S., Northern Michigan College; Michigan State University; A.M., University of Michigan; Michigan

Pillsbury, Paul W. (1961) Assistant Professor of English
A.B., Dartmouth College; A.M., Ph.D., Michigan

Porretta, Louis (1960) Assistant Professor of Education
A.B., Eastern Michigan University; M.Ed., Wayne State University; Wayne State University

Potter, Edward E. (1950) Professor of English
A.B., St. Ambrose College; A.M., Notre Dame; Ph.D., University of Michigan

Pyle, Hershal O. (1945) Associate Professor of Music
B.M., St. Louis Institute of Music; M.M., M.A., Michigan; Michigan

Rankin, Joanne (1963) Assistant Professor, Supervising Teacher in Mathematics, Roosevelt School
B.A., Bryan College (Dayton, Tennessee), Wayne State University, Eastern Michigan University; University of Michigan; M.A., Eastern Michigan University; Michigan

Riley, Maurice W. (1947) Professor of Music; Supervising Teacher of Music, Roosevelt School
A.B., A.M., Colorado State College of Education (Greeley); M.Mus., Ph.D., Michigan

Risk, Beverly (1957) Assistant Professor, Supervising Teacher, Elementary Grades, Lincoln Consolidated School
A.B., A.M., Michigan; Merrill-Palmer

Risk, Norman W. (1949) Associate Professor of Industrial Education
B.S., Eastern Michigan University; A.M., University of Michigan; Tri-State Engineering College; Michigan

Robek, Mary F. (1958) Assistant Professor of Business
B.Ed., Whitewater State College; A.M., Northwestern University; M.B.A., University of Michigan; Michigan

Robinson, Julius M. (1947) Director of Summer Session, Professor of Business
B.S., Southwest Missouri State College; A.M., Northwestern University; Ed.D., New York University

Robinson, Margaret M. (1937) Associate Professor of Library Science
A.B., Eastern Michigan University; A.M., University of Michigan; Wayne State University; M.A.L.S., Michigan

Robinson, Robert S. (1959) Assistant Professor of Education
A.B., M.A., University of Michigan; Wayne State University; University of Edinburgh; Michigan
(Lv. of abs. 1963-65)
Rogers, Agnes L. (1955)  
Assistant Professor, Elementary Special Education Teacher  
A.B., Tennessee; New York School of Social Work; A.M., George Peabody College

Roosnick, Pearl A. (1962)  
Assistant Professor of Special Education  
B.S., Western Michigan University; A.M., Michigan

Roth, Earl A. (1954)  
Dean, College of Business  
B.S., A.M., Ohio State University; Missouri; Ed.D., Indiana

Russell, Wilma I. (1958)  
Associate Professor of Education  
B.S. in Ed., Southwest Missouri State College; A.M., New York University; Ph.D., Michigan

Samonte, Quirico (1963)  
Assistant Professor of Education  
B.A., M.A., University of Philippines; M.A., Ph.D., University of Michigan

Sattler, John W. (1947)  
Head, Department of Speech and Dramatic Arts  
A.B., Yankton College; A.M., University of Michigan; Columbia University; Ph.D., Northwestern University

Schreiber, O. Ivan (1950)  
Associate Professor of English  
A.B., Wittenberg College; A.M., Ohio State; Ohio State

Scott, Ronald M. (1959)  
Associate Professor of Chemistry  
B.S., Wayne State University; Ph.D., University of Illinois

Sharp, David (1962)  
Instructor in Art  
B.A., Arizona State University; M.F.A., State University of Iowa

Sheard, John E. (1963)  
Associate Professor of Physical Education  
B.S., Miami University; M.S., Miami University; Re. Dir., Indiana University; P.E.D., Indiana University

Sill, Margaret E. (1921)  
Professor of Geography  
A.B., Eastern Michigan University; A.M., Columbia; Clark; University of Michigan

Silver, Albert (1963)  
Associate Professor in Education  
B.S., City College of New York; M.A., Ph.D., Michigan State University

Simmons, Harold E. (1990)  
Assistant Professor of Economics  
A.B., Western Michigan University; M.A., Michigan State University; Michigan State

Simpson, John W. (1948)  
Associate Professor of Economics  
A.B., A.M., Ohio State University; Chicago; Ph.D., Ohio State

Sinclair, Frank L. (1955)  
Assistant Professor, Supervising Teacher, of Science, Lincoln Consolidated School  
B.S., Eastern Michigan University; M.S., Michigan State University; Michigan State University; Wayne State University
Sinclair, Joseph T. (1957) _______________ Associate Professor of Geography
A.B., University of Michigan; A.M., Columbia University; Ph.D., Michigan

Slay, Ronald J. (1948) _______________ Professor of Education
A.B., Duke University; A.M., Ed.D., Columbia

Smith, Ralph V. (1959) _______________ Associate Professor of Sociology
A.B., Eastern Michigan University; A.M., University of Michigan; Michigan

Snyder, Carl D. (1957) _______________ Assistant Professor of Economics
B.S., Heidelberg College; A.M., Miami University; D.S.S., Syracuse University

Snyder, Richard L. (1961) _______________ Assistant Professor, Supervising Teacher,
High School, Lincoln Consolidated School
B.S., University of Dubuque; M.S., Iowa State University

Solomon, Samuel R. (1962) _______________ Associate Professor of Political Science
A.B., M.A., Ph.D., Syracuse University

Sperling, William D. (1960) _______________ Assistant Professor, Supervising Teacher,
Elementary Science Coordinator, Elementary Grades, Lincoln Consolidated School
B.S., Eastern Michigan University; A.M., Michigan

Spike, Clark G. (1958) _______________ Head, Department of Chemistry
B.S., Eastern Michigan University; Wayne State University; M.S., Ph.D., University of Michigan

Stanley, Ken W. (1961) _______________ Assistant Professor of Education
B.A., Northern Michigan College; M.A., Michigan State University; University of Michigan

Steig, Peggy Ann (1956) _______________ Assistant Professor of Physical Education
B.S., Miami University; A.M., Ohio State University; Ohio State University

Street, Scott W. (1961) _______________ Professor; Principal of Roosevelt School
B.S., Bowling Green State University; M.A., Ed.D., Wayne State University

Studt, Earl K. (1936) _______________ Assistant Professor of Education; Associate Director of Field Services; Director of Alumni Relations
A.B., Eastern Michigan University; M.S., University of Michigan; Michigan

Suhd, Melvin (1962) _______________ Assistant Professor, Supervising Teacher, Roosevelt School
A.B. in Ed., M.A. in Ed., Wayne State University

Swack, Myron J. (1961) _______________ Assistant Professor of Special Education
B.S., Ohio State University; A.M., Eastern Michigan University; Michigan
Graduate Faculty

Thomas, Clinton E. (1959) Assistant Professor of Physics
B.S., M.S., University of Michigan; Michigan

Tothill, Herbert (1960) Assistant Professor of Education
B.S., University of Rochester; M.A., University of Hawaii; Syracuse University

Treado, Bernard M. (1953) Assistant Professor, Supervising Teacher of Special Education
A.B., Northern Michigan College; A.M., University of Michigan

Van Haren, John E. (1962) Assistant Professor of Art
B.S., M.S., University of Wisconsin; Wisconsin

Vick, Odin C. (1963) Assistant Professor of Psychology
B.A., M.A., Montana State University; Ph.D., Pennsylvania State University

Virtue, John B. (1946) Professor of English
A.B., A.M., Nebraska; Chicago; Wisconsin; Ph.D., Yale

Wallace, Merry Maude (1945) Assistant Professor, Supervising Teacher of Special Education
B.S., Wisconsin; Eastern Michigan University; A.M., University of Michigan; Michigan

Warren, Elizabeth (1938) Professor of History
A.B., Carleton College; A.M., Ph.D., Northwestern University

Waugh, Edgar W. (1927) Professor of Political Science
A.B., A.M., Mississippi; Columbia; George Washington University; University of Michigan

Wawrzaszek, Frank (1957) Associate Professor of Special Education
B.S., University of State of New York; Teachers College (Cortland); Ed.M., Boston University; Michigan

Weber, LaVerne W. (1961) Assistant Professor of Speech and Dramatic Arts, Television Coordinator
A.B., A.M., University of Michigan

Wells, Phillip G. (1959) Associate Professor of Education
B.S., Hampton Institute; M.S. in Ed., Ed.D., University of Pennsylvania

Welper, Francis E. (1959) Assistant Professor, Supervising Teacher of Mathematics, Roosevelt School
B.S., M.A., Eastern Michigan University; Michigan State University, Wayne State University

Wescott, John T. (1951) Assistant Professor of Industrial Education
B.S., Eastern Michigan University; A.M., Wayne University; Michigan

Wilcox, William F. (1925) Associate Professor of Physics
A.B., A.M., Michigan; Michigan
Willoughby, Robert J. (1956) — Associate Professor of Physical Education, and Chairman, Men's Division
B.S., A.M., University of Michigan; University of Michigan

Wilson, Mary B. (1956) — Assistant Professor, Elementary Librarian, Lincoln School
A.B., A.M., University of Michigan

Wittke, Reinhard (1956) — Associate Professor of History
A.B., A.M., University of Michigan; University of Munich; Ph.D., Michigan

Woronoff, Israel (1956) — Professor of Education
A.B., A.M., University of Michigan

Wright, Sara E. (1945) — Assistant Professor of Special Education
B.S., Syracuse; A.M., New York University; Walter Reed General Hospital; Minnesota

Zale, Eric M. (1956) — Associate Professor of English
A.B., A.M., Ph.D., Michigan

Zickgraf, Palmer L. (1948) — Associate Professor of History
A.B., A.M., Indiana University; Ph.D., Illinois

Zobel, Herbert L. (1957) — Assistant Professor of Geography
B.S., in Ed., M.S. in Ed., Illinois State University (Normal), M.A., Northwestern University; Michigan; University of Chicago

VISITING LECTURERS

Andrews, George, M.A., Director of Adjunctive Therapies, Plymouth State Home and Training School

Ardis, Evart, M.A., Director, Bureau of Appointments and Occupational Information and Lecturer in Education, University of Michigan, Ann Arbor, Michigan

Bohn, James W., M.S., Ypsilanti High School

Brown, Duane, M.A., Principal, Clark Community School, Flint

Burgy, J. Herbert, Ph.D., State Teachers College, Salem, Massachusetts

Carroll, William, Ph.D., Flint Community Junior College

Chamis, George, Ph.D., Consultant of Pupil Welfare Services, Flint Public Schools, Flint, Michigan

Dukay, Alex P., M.D., Assistant Medical Superintendent, Ypsilanti State Hospital, Ypsilanti, Michigan

Foster, Charles, M.A., Special Education, Ypsilanti High School, Ypsilanti, Michigan

Fotiu, Peter, Ph.D., Chief Psychologist, Livonia Public Schools

Goode, William E., M.A., Community School Director, Whittier Community Junior High School, Flint
Jacobs, Bruce, M.A., Community School Director, Lincoln Community School, Alpena

Kingston, Raymond, M.S., Principal of George School, Ypsilanti, Michigan

Larsen, Ralph, Ed.S., Principal, Doyle Community School, Flint

Lewis, Bertha, M.A., Coordinator of Special Services, Garden City Public Schools, Garden City, Michigan

Mader, John B., M.A., Director of Special Education, Washtenaw County

Miller, Lawrence, M.E., Teacher Coordinator, Dearborn Public Schools, Dearborn, Michigan

Morris, Elizabeth, M.A., Principal, Hawthorn Center, Northville, Michigan

Rabinovitch, Ralph, Ph.D., Director, Hawthorn Center, Northville, Michigan

Randall, James, M.A., Flint Community Junior College

Roeper, George, M.A., Director of City and Country Schools, Bloomfield Hills

Rue, Robert, M.A., Director of Community Education, Olivet College

Salcau, John, M.A., Principal of Erickson School, Ypsilanti, Michigan

Stelter, Carl, M.A., Principal, Selby Community Schools, Flint

Totten, W. Fred, Ph.D., Director of the Graduate Training Program in Community Education, Flint, Michigan

VanAken, Elbert W., Ed.D., Assistant Director, Bureau of Appointments and Occupational Information, University of Michigan, Ann Arbor, Michigan

Van Dyke, Merle, M.A., Education Director, Out-Patient Clinic, CPH, Ann Arbor

Wanchek, Joseph, B.S., O.T.R., Director, Orthotic Shop, Rehabilitation Institute, Detroit

Weikert, David, M.A., Coordinator of Special Services, Ypsilanti Public Schools, Ypsilanti, Michigan

Wells, David, Ph.D., Mathematical Education Specialist for Oakland County Public School

Youmans, Don, M.A., Community School Director, Central Community High School, Flint

Zellers, Richard, M.A., Community School Director, Flint, Michigan

Cover design of Graduate Catalog and Undergraduate Catalog
by Dorothy Lamming