

E A S T E R N

Michigan
University



Starkweather
Hall



1993

1995



Graduate
CATALOG

**EASTERN MICHIGAN UNIVERSITY
BULLETIN
1993-1995**

THE GRADUATE CATALOG

ACCREDITED BY:

The North Central Association of Colleges and Secondary Schools
Dr. Patricia Thrash, Director
159 North Dearborn
Chicago, IL 60601
(312) 263-0456

For information on accreditation and to review copies of accreditation documents, contact Donald H. Bennion, Associate Vice President for Academic Affairs, 106 Welch Hall, Eastern Michigan University, Ypsilanti, MI 48197.

The contents of this Catalog are subject to revision at any time. The University reserves the right to change fees, courses, policies, programs, services, and personnel as required.

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cover by Ellen Schoenfeld

A MESSAGE FROM THE DEAN

In 1955, Eastern Michigan University will celebrate its 146th Anniversary. Over the years, EMU has established a tradition and reputation as a fine institution of higher education with its five outstanding academic colleges: Arts and Sciences, Business, Education, Health and Human Services and Technology. Since its founding in 1849, Eastern has graduated more than one million students and its alumni have utilized their expertise to improve the lives of countless individuals in Michigan, the nation, and many foreign countries.

At one time, preparing teachers was its major focus. However, Eastern Michigan is now multi focused institution. Some persons might be surprised to discover that the University has greatly broadened its original educational mission to encompass a broad spectrum of undergraduate and graduate disciplines and research endeavors. In the fall of 1991, Eastern began its first doctoral program in Educational Leadership. This *Graduate Catalog* outlines this program and over 80 others at the graduate level.

As one of the largest American Association of State Colleges and Universities (ASSCU) institutions, Eastern Michigan University has sought to achieve a full range of degree programs. The goal of offering doctoral education was established in 1986. However, in 1990 doctoral studies were established through state and national approval and accreditation processes. In the spring of 1991, Eastern Michigan was new institutional status as a doctoral (research) institution through its accreditation agency, the North

Central Association of Colleges and Secondary Schools. Eastern now joins the ranks of other comprehensive universities in Michigan and the nation which offer doctoral programs in elected area of study.

Eastern Michigan University faculty take pride in the fact that learning takes precedence over everything else. They make every effort to involve students oriented research, scholarship, and creative works. The essence of the focus on learning then, is that students and faculty members alike grow through teaching and learning interactions.

As one of over 6000 graduate students pursuing degrees in graduate study at Eastern Michigan University, you enhance our university through your contributions to learning, scholarship, research, and creative works. Those of us in The Graduate School appreciate your contributions and will try to assist you in any way we can to help you achieve your educational goals. We are interested in you and in knowing how well we are serving you. Your comments and suggestions are always welcome.

Ronald E. Goldenberg, Dean
The Graduate School
Starkweather Hall University Calendar

THE INSTRUCTIONAL YEAR

The instructional year is divided into two semesters of 15 weeks each, and spring and summer sessions that offer both six and seven and one-half week courses. In addition, workshops of one to three weeks duration are offered. Students who have satisfied admission requirements may enroll at the beginning of any semester or session.

1993-94 ACADEMIC CALENDAR

SUMMER SESSION, 1993

June 27, Sunday Move-in day
 June 28, Monday Classes begin
 July 5, Monday Independence Day (no classes)
 Aug. 5 & 6, Thursday & Friday Six-week final examinations
 Aug. 17 & 18, Tuesday
 & Wednesday Seven and one-half week final examinations
 Aug. 20, Friday Summer session closes

FALL SEMESTER, 1993

Aug. 28, Saturday Freshman residence hall move-in day
 Aug. 28, 29, 30, Saturday, Sunday, Monday Freshman Orientation
 Aug. 29, 30, 31 Sunday, Monday,
 Tuesday Upperclass residence hall move-in days
 Sept. 1, Wednesday Classes begin
 Sept. 6, Monday Labor Day (no classes)
 Nov. 24, Wednesday No classes after 5 p.m.
 Nov. 25-28, Thursday through Sunday Thanksgiving recess
 Nov. 29, Monday Classes resume
 Dec. 14-18, Tuesday through Saturday Final examinations
 Dec. 18, Saturday Fall session closes
 Dec. 19, Sunday (afternoon) Fall Commencement

WINTER SEMESTER, 1994

Jan. 4, Tuesday Move-in day and Winter Orientation
 Jan. 5, Wednesday Classes begin
 Feb. 20-27, Sunday through Sunday Winter recess
 Feb. 28, Monday Classes resume
 April 1-3, Friday through Sunday Spring recess
 April 4, Monday Classes resume
 April 21-26, Thursday through Tuesday Final examinations
 April 24, Sunday (afternoon) Winter Commencement
 April 26, Tuesday Winter session closes

SPRING SESSION, 1994

May 3, Tuesday Move-in day
 May 4, Wednesday Classes begin
 May 30, Monday Memorial Day (no classes)
 June 13 & 14, Monday & Tuesday Six-week final examinations
 June 23 & 24, Thursday
 & Friday Seven and one-half week final examinations
 June 24, Friday Spring session closes

SUMMER SESSION, 1994

June 26, Sunday Move-in day
 June 27, Monday Classes begin
 July 4, Monday Independence Day (no classes)
 Aug. 4 & 5, Thursday & Friday Six-week final examinations
 Aug. 16 & 17, Tuesday
 & Wednesday Seven and one-half week final examinations
 Aug. 19, Friday Summer session closes

1994-95 ACADEMIC CALENDAR

FALL SEMESTER, 1994

Sept. 3, Saturday Freshman residence hall move-in day
 Sept. 3, 4, 5, Saturday, Sunday, Monday Freshman Orientation
 Sept. 4, 5, Sunday, Monday Upperclass residence hall move-in days
 Sept. 7, Wednesday Classes begin
 Nov. 23, Wednesday No classes after 5 p.m.
 Nov. 24-27, Thursday through Sunday Thanksgiving recess
 Nov. 28, Monday Classes resume
 Dec. 13-17, Tuesday through Saturday Final examinations
 Dec. 17, Saturday Fall session closes
 Dec. 18, Sunday Fall Commencement

WINTER SEMESTER, 1995

Jan. 8, Sunday Move-in day and Winter Orientation
 Jan. 9, Monday Classes begin
 Feb. 20-26, Monday through Sunday Winter recess
 Feb. 27, Monday Classes resume
 April 14-16, Friday through Sunday Spring recess
 April 17, Monday Classes resume
 April 23, Sunday Winter Commencement
 April 25-29, Tuesday through Saturday Final examinations
 April 29, Saturday Winter session closes

SPRING SESSION, 1995

May 2, Tuesday Move-in day
 May 3, Wednesday Classes begin
 May 29, Monday Memorial Day (no classes)
 June 12 & 13, Monday & Tuesday Six-week final examinations
 June 22 & 23, Thursday
 & Friday Seven and one-half week final examinations
 June 23, Friday Spring session closes

SUMMER SESSION, 1995

June 25, Sunday Move-in day
 June 26, Monday Classes begin
 July 4, Tuesday Independence Day (no classes)
 Aug. 3 & 4, Thursday & Friday Six-week final examinations
 Aug. 15 & 16, Tuesday
 & Wednesday Seven and one-half week final examinations
 Aug. 18, Friday Summer session closes

IMPORTANT MISCELLANEOUS INFORMATION

Policies and Requirements

There are many Graduate School and University policies and/or requirements that students must fulfill, follow, and/or adhere to during their academic careers. Listed below are some of the more commonly encountered regulations and statutes. For additional and more complete information please read "The Graduate School Policies and Information" on pg. 2.

1. The graduate admission process requires that applicants submit official transcripts from each college or university attended. A transcript is official only when it is sent directly by the academic institution in a sealed envelope and is embossed with the official university seal.
2. Each semester, a final date for accepting completed applications for degree admission is established.

Fall admission	March 15
Winter admission	September 15
Spring/Summer admission	February 15

 Because of the complexity involved in the processing of international student applications, earlier admission dates have been established for this population. Please contact the Foreign Admissions Office, (313) 487-3061, for these deadlines.
3. The Graduate School must receive all documents including required test score results by the established dates given above for students seeking degree admission.
4. Students seeking degree admission to the College of Business must take the Graduate Management Test (GMAT).

Commencing with fall semester of 1993, all students seeking graduate degree admission to the College of Education must submit test score results from the Graduate Record Examination (GRE). Please be advised that beginning with fall semester 1993, all students seeking graduate degree admission to an academic department in the Colleges of Arts and Sciences, Health and Human Services, and the College of Technology, may be required to submit test scores for the GRE as part of the admission process. As indicated previously, test scores must be received by the Graduate School by the established deadline dates.
5. If your admission objective is to obtain a teaching certificate, you must submit a statement of purpose and a letter of recommendation with your application. Preferably, the letter of recommendation should come from someone familiar with your work with children. In addition, your undergraduate grade point average must be 2.5 or above and you must successfully pass the Michigan Teacher Competency Test before full admission to the professional education program can be secured.
6. Students admitted to a degree or graduate certificate program must contact their advisers to establish a program of study no later than the first enrollment period following degree admission. Written degree programs must officially be on file at the Graduate School and are also required to receive financial aid.
7. Students have seven years to complete the requirements for the doctoral degree; six years to complete the specialist degree, if the student holds a master's degree; or eight years if the student holds only a bachelor's degree; and six years to complete the master's degree. Graduate credit more than six years or eight years old, depending upon the degree, cannot be counted toward meeting graduation requirements without validation.
8. Transfer credit recommended for inclusion on a degree program by the degree granting department must be clearly indicated on the program of study; be approved by the Graduate School, and meet the following criteria:
 - a. Coursework must be from an accredited institution and applicable to the degree program.
 - b. Coursework must be at the graduate level.
 - c. A grade of "B" or better must have been awarded.
 - d. Coursework must be available in terms of the six or eight year time limitation for completion of degree requirements.
- e. An official transcript from the institution indicating all of the above, must be submitted and on file at the Graduate School.
- f. Not more than 12 hours of transfer credit can be applied to a program of study. Some academic departments have established lower maximums allowable as transfer credit.
9. Graduate students are not eligible to take courses (graduate or undergraduate) on a pass/fail basis. Graduate students may take certain designated graduate courses for credit/no credit. These courses are noted in the Graduate School catalog.
10. If you intend to enroll in an approved 400-level undergraduate course for graduate credit, you must come to the Graduate School for written permission before enrolling in the course. Otherwise, you will receive undergraduate credit.
11. Graduate students may update a maximum of 15 credit hours of out-of-date credit. A grade of "B" must have been earned in these courses and the courses must be used to satisfy requirements of the degree. There are other stipulations regarding validation of out-of-date credit. Courses older than 15 years cannot be validated.
12. Graduate students are eligible to repeat graduate-level courses only when they earned a grade of less than a "B". Graduate courses may not be repeated more than once.
13. Graduate students are not awarded "D" grades. A "D" grade will automatically convert to an "E" grade.
14. Student teaching may never be taken for graduate credit. Undergraduate independent study courses may not be taken for graduate credit.
15. Graduate students who hold non-degree admission status and wish to transfer to a degree program must officially request such a transfer at the Graduate School. Students must meet all degree requirements of the academic department, as well as deadline dates and test score requirements of the Graduate School.
16. Official transfer request forms are available from the Graduate School and must be completed for each of the following conditions:
 - a. Transferring to a new degree program.
 - b. Transferring to a new major or concentration within an academic department.
 - c. Completion of non-degree status 1 requirements and requesting degree admission.
17. After gaining admission to a degree program, students must complete a minimum of 10 semester hours of graduate credit.
18. Students who have not enrolled at Eastern Michigan University for one or more consecutive semesters or sessions should inquire from the Graduate School as to their registration eligibility at least two weeks prior to the first registration date.
19. For information about the drop/add schedule, please consult the current "Directory of Classes". Students should be aware of the last day to drop a course and receive an automatic "W" (withdrawal) on their transcript.
20. Graduate students must begin to plan for their graduation the semester preceding their intended graduation date. An official Graduate School Application for Graduation must be submitted prior to the established deadline. Applications for graduation will not be accepted after the established date. Forms are available in the Graduate School and in the Directory of Classes Bulletin.

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UNIVERSITY GOVERNMENT

Eastern Michigan University is an autonomous university governed by an eight-member Board of Regents appointed by the governor and subject to the approval of the state Senate. Financial support for the University comes from tax money paid by the people of Michigan and receipt of student tuition and fees.

Members of the Board of Regents, whose terms expire at the end of the calendar year listed, are Frederick L. Blackmon (2000), Bloomfield Hills; James Clifton ('96), Ypsilanti; Robert A. DeMattia ('94), Northville, chair; Anthony A. Derezinski ('96), Ann Arbor; Philip A. Incarnati ('94), Linden; Mara M. Letica ('98), Bloomfield Hills; Carl Pursell (2000), Plymouth; and Gayle P. Thomas ('98), Dearborn, vice-chair.

CIVIL RIGHTS POLICY

Eastern Michigan University shall not discriminate against any person because of race, color, religion, creed, sex, national origin, or ancestry. Further, the University shall work for the elimination of improper discrimination in the areas listed above (1) in organizations recognized by the University, and (2) from non-University sources where students and employees of the University are involved.

Statement of Equal Opportunities and Affirmative Action Policies

Eastern Michigan University admits students of either sex, any race, color, and national or ethnic origin to all the rights, privileges, programs, and activities accorded to students at this University. The University does not discriminate against students on the basis of sex, race, color, or national and/or ethnic origin in the administration of its educational policies, admissions policies, scholarships and loan programs, athletic and other University-administered programs. Further, it is the policy and practice of Eastern Michigan University to take affirmative action in all personnel matters.

Title IX of the Education Amendments of 1972

It is the policy of Eastern Michigan University to comply with Title IX of the Education Amendments of 1972 and its regulation, which prohibits discrimination on the basis of sex. Anyone who believes that in some respect Eastern Michigan University is not in compliance with Title IX and its regulations should contact the Executive Director of Human Resources at (313) 487-1052, 311 King Hall.

Rehabilitation Act of 1973

In its programs, activities, and employment, Eastern Michigan University does not discriminate on the basis of handicap. Anyone who believes that in some respect Eastern Michigan University is not in compliance with the Rehabilitation Act and its regulations should contact the Executive Director of Human Resources at (313) 487-1052, 311 King Hall. Handicapped individuals who are otherwise qualified for admission are invited to apply. Students encountering difficulty with access to full participation in University activities should contact the Dean of Students in 218 Goodison Hall.

Family Educational Rights and Privacy Act

In compliance with the Family Education Rights and Privacy Act, Eastern Michigan University assures that any person who is or has been in attendance as a student at EMU has access to his/her educational records. Furthermore, such individual's rights to privacy are assured by limiting the transferability of records without the student's consent.

The following are matters of public record and may be included in publications or disclosed upon request without consent

the student's name, address, telephone listing, date and place of birth, major field of study, participation in recognized activities and sports, weight and height of members of athletic teams, dates of attendance, degree and awards received, and the most recent previous educational agency or institution attended by the student. Registration documents or student organizations that contain the names and addresses of the officers and the statement of purpose of the organization also are considered public information. These documents are available in the Campus Life Office, McKenny Union.

EMU reserves the right to make directory information public unless a student's written objection (specifying the category of information not to be made public without prior consent) is filed at the Office of the Dean of Students within 14 days after each term begins.

Individuals who believe that the University is not in compliance are invited to contact the executive director of human resources at (313) 487-1052.

UNIVERSITY PROFILE

Eastern Michigan University is a multipurpose university whose roots date back to 1849, when the State Legislature designated it as Michigan's first institution to educate teachers to serve the public schools. At that time the Detroit school system was only 10 years old and the transition from one-room schoolhouses had just begun.

Graduate education was inaugurated in 1938 when programs were conducted in cooperation with the University of Michigan. In 1953, Eastern gained approval to offer its own graduate programs.

For its first 100 years, Michigan State Normal School, as EMU was conceived, certified thousands of teachers and developed the broad-based academic curricula that prepared it for its evolution to university status in 1959. Within the new university, three colleges emerged: the College of Education, the College of Arts and Sciences, and the Graduate School. The University has expanded three more times: in 1964 with a College of Business, in 1975 with a College of Health and Human Services, and in 1980 with a College of Technology.

New colleges precipitated the need for additional acreage. The University campus spread from its original 275 acres on the south side of the Huron River to encompass an additional 182 acres west of the campus primarily for student residences and athletic facilities. Buildings have multiplied; among the newest are the Olds Student Recreation Center, opened in the fall of 1982 to provide needed recreational and intramural activities for the growing student body, the Sponberg Theatre addition to the Quirk Building, dedicated in January 1986, and the Coatings Research Building, opened in fall 1987. Eastern Michigan University's campus now extends into downtown Ypsilanti, where its new Gary M. Owen College of Business Building is located.

Student enrollment continued to increase through the 1980s. The rapid college matriculation experienced in the late 1960s peaked in 1975 at 19,965, stabilized at 18,500 plus in 1979 and then began its upward climb again, totaling 25,024 in the fall of 1990, 19,700 students enrolling as undergraduates and 5,324 as graduate students.

Today's student body includes both full-time and part-time students, indicative of the national trend of mature adults returning to complete college educations and to prepare for new careers in a changing society. Women comprise almost 60 percent of EMU's student body. Many students work part time and others are assisted by EMU's Office of Financial Aid in work-study programs to meet the escalating costs of a college education.

Included in the geographic distribution of EMU graduate students in 1990 were 91.2 percent from the state of Michigan, 4.7 percent from out-of-state, and 4.1 percent who listed citizenship from countries other than the United States. Approximately 60

percent of the students from other states were from Ohio, largely because of a reciprocity tuition plan.

Program development has consistently adapted to the needs of entering and returning students as the world greets the new era of high technology. College faculty as well as college students are becoming computer literate. More opportunities are being offered to those seeking practical experience through business-industry internships and cooperative education experiences. Courses are provided in approximately 70 fields of study to the graduate student body.

EMU's perspective also has grown larger, not only in on-campus program developments but also in regular or special courses offered in 14 counties through its Division of Continuing Education and in cooperative agreements with nearby community colleges. The Office of Academic Programs Abroad plans spring/summer travel-study credit programs abroad and student-faculty exchanges with the University of Warwick, the Bulmershe College of Higher Education, and Nonington College, all in England.

Eastern Michigan University today is known worldwide for its educational contributions. Its 76,700 graduates are scattered among many countries as well as coast-to-coast in the United States, both strengthening and supporting the foundation that is the multipurpose university in Ypsilanti, Michigan.

EASTERN MICHIGAN UNIVERSITY campuses and buildings are detailed at the back of the catalog, along with a map of the campus.

COLLEGES AND DEPARTMENTS

College of Arts and Sciences: African American Studies; Art; Biology; Chemistry—accredited by American Chemical Society; Communication and Theatre Arts; Computer Science; Economics; English Language and Literature; Foreign Languages and Bilingual Studies; Geography and Geology; History and Philosophy; Mathematics; Music—accredited by National Association of Schools of Music; Physics and Astronomy; Political Science (Public Administration Program—accredited by the National Association of Schools of Public Affairs and Administration); Psychology; Sociology, Anthropology and Criminology; Women's Studies.

College of Business: accredited by the American Assembly of Collegiate Schools of Business; Accounting; Finance and Computer Information Systems; Management; Marketing.

College of Education: accredited by the National Council for Accreditation of Teacher Education; Health, Physical Education, Recreation and Dance; Leadership and Counseling—accredited by the Council for Accreditation of Counseling and Related Educational Programs; Special Education—accredited by the American Speech and Hearing Association for its Speech Pathology Program for Teachers of the Speech and Language Impaired and by the Council on Education of the Deaf for the Hearing Impaired Program; Teacher Education.

College of Health and Human Services: Associated Health Professions; Human, Environmental and Consumer Resources; Nursing Education; Social Work.

College of Technology: Business and Industrial Education; Industrial Technology; Interdisciplinary Technology; Military Science.

ADMINISTRATIVE OFFICERS

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Vice President for University Marketing and Student Affairs	Laurence N. Smith
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University Attorney	Kenneth A. McKanders

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Associate Director	Michelle Barnes

College of Arts and Sciences

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Associate Dean	Barbara Richardson
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Administrative Associate II	Velma G. Clarke

Departments

African American Studies, Head	Ronald C Woods
Art, Head	John E. VanHaren
Biology, Head	Douglas Y. Shapiro
Chemistry, Head	Judith Levy
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Computer Science, Head	George E. Haynam
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Foreign Languages and Bilingual Studies, Head	Steven D. Kirby
Bilingual Bicultural Program, Director	Phyllis A. Clemens Noda
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History and Philosophy, Head	Margot Duley
Mathematics, Head	Don R. Lick
Music, Head	James B. Hause
Physics and Astronomy, Head	Dan Trochet
Political Science, Head	Joanna Scott
Psychology, Head	Kenneth Rusiniak
Sociology, Anthropology, and Criminology, Head	Gregg Barak

College of Business

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Associate Dean, Interim Susan Moeller

Departments

Accounting, Head Mohsen Sharifi
Finance and Computer Information
Systems, Head Asrat Tessema
Management, Acting Head Nick Blanchard
Marketing, Head Robert Dodge

College of Education

Dean Jerry H. Robbins
Associate Dean Donna Schmitt
Associate Dean Robbie A. Johnson

Departments

Health, Physical Education, Recreation, and
Dance, Head Patric L. Cavanaugh
Leadership and Counseling, Head Martha Tack
Special Education, Head Kathleen S. Quinn
Teacher Education, Head James D. Riley
Center for Community Education, Director Jaclynn Tracey

College of Health and Human Services

Dean Elizabeth C. King

Departments

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Health Administration, Acting Director Richard L. Douglass
Clinical Laboratory Sciences, Director Jeanne M. Clerc
Occupational Therapy, Director Ruth Hansen
Human, Environmental, and Consumer
Resources, Head Elizabeth J. Rhodes
Nursing Education, Head Regina Williams
Social Work, Head Donald M. Lopnow

College of Technology

Dean Thomas K. Harden

Departments

Business and Industrial Education, Head Ann M. Remp
Industrial Technology, Head Everett N. Israel
Interdisciplinary Technology, Head Paul D. Kuwik
Military Science, Head David R. Klubeck

Office of the Registrar

Registrar Ann Kettles
Associate Registrar Paul L. Zabawa
Coordinator of Registration Sherry Winterson

Continuing Education

Dean Paul T. McKelvey
Associate Dean Arthur N. McCafferty
Director, Academic Programs Abroad George J. Klein
Director, Independent Study Michael McPhillips
Director, Upward Bound Hildred J. Lewis
Associate Director Laura Foster
Coordinator, Weekend University Arthur Hoover

Learning Resources and Technologies

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Associate Dean, Learning Technologies Jennie M. Howard
Learning Resources, Head Sandra G. Yee

World College

Director Raymond E. Schaub
Associate Director Geoffrey M. Voght

National Institute for Consumer Education

Director Rosella Bannister

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Human Resources

Executive Director Theodore Heidloff
Director, Employment and Affirmative Action ... Tamara Fackler
Director, Compensation and Benefit
Programs Craig Reidsma
Benefit Programs Director Jeanette Hassan
Director, Employee Relations Kevin Smart

University Computing

Director S. Alan McCord
Manager, Applications Development and
Support Gary J. Carlson
Manager, Applications Development and Support Lynn Dixon
Manager, Technical Services Sam Creciun
Manager, User Support Services Wayne L. Starr

University Development

Associate Director Beverly Farley
Assistant Director (Acting) Sue McKenzie
Development Officers Bruce Patterson
Steve Ragan

Alumni/Development Records and
Research, Coordinator Linda Radke

Alumni Relations

Director George Beaudette

Center for Corporate Learning (Center for Organizational Risk Reduction)

Director Walter DiMontova

Center for Entrepreneurship

Director Patricia Weber

Center for Government Learning (Institute for Community and Regional Development-ICARD)

Director Charles Monsma

Corporate Education Center

Director Marcia D. Harrison-Harris

Huron Golf Club

Director Thomas Pendlebury

Intercollegiate Athletics

Director Eugene Smith
Associate Director Carole Huston
Assistant Director-Business Bruce Zylstra
Sports Information Director James L. Streeter

Internal Audit

Director Peter Witker

Public Information and Publications

Director (Acting), Public Information Susan Bairley
Acting Director, University Publications Karen M. Pitton

State, Federal and Community Relations

Director Doris A. Komblevitz

WEMU Radio

Director Arthur J. Timko
News and Public Affairs Manager Clark Smith
Marketing and Development Manager Mary Motherwell
Music Program Manager Linda Yohn

BUSINESS AND FINANCE DIVISION

Controller Susan Merrick
 Assistant Controller John Beaghan
 Assistant Controller Dan Cooper
 Director, Physical Plant William Smart
 Principal Plant Engineer Glen Bolling
 Project Manager Daniel Klenczar
 Manager, Facilities Maintenance Ray Sowers
 Director, Public Safety John C. Garland
 Associate Director, Public Safety Cindy Hall
 Director, Risk Management, Procurement
 and Stores Mary C. Brooks
 Director, Purchasing Gary Reffitt
 Service Operations Manager Albert A. Robinson
 Resident Director, Kresge Environmental
 Education Center, Lapeer, Mich. Ben Czinski

**UNIVERSITY MARKETING AND STUDENT AFFAIRS
DIVISION**

Associate Vice President Courtney O. McAnuff
 Assistant Vice President Jim Vick

Admissions and Financial Aid*Admissions*

Director Dolan Evanovich
 Assistant Director, Internal Operations MaryAnn Schichtman
 Assistant Director, Outreach Operations Alberto Perales

Equity Programs

Director Lynette Findley
 Coordinator Patrick Pieh

Financial Aid

Director Judy B. Tatum
 Associate Director Bernice Lindke
 Assistant Director, Operations Elaine Kinloch

Campus Life

Director Glenna Frank Miller
 Program Coordinators William Barnett, Shelley Wilson

Career Services Center

Director J. Michael Erwin
 Associate Director (Interim) Karen Simpkins
 Career Planning Manager Joanne Burns
 Career Development Associates Gloria August
 Jocelyn Clark
 Theo Hamilton

Corporate Relations Manager Barbara Jones
 Employee Relations Associate Kenneth L. Meyer
 Assistant Manager of Operations James Locke

Dean of Students

Dean Bette C. White
 Associate Dean Gregory A. Peoples
 Director, Foreign Student Affairs Paul Dean Webb
 Veterans Affairs Officer Robert Teehan

Health Services

Director Ellen Gold
 Associate Director Linda Vengroff

Health Care

Clinical Administrator Diane Sobell
 Staff Physicians James M. Reaume
 Brian Stanley

Counseling

Associate Director Rosalyn Barclay
University Children's Institute
 Director Lindy Buch

Coordinator of Services Lorraine Paffenroth
 Coordinator of Programs Kathy Trent

Housing, Dining, Union, Conferences*Housing*

Director Rebecca J. Figura
 Assistant Director, Facilities Neal Belitsky
 Manager, University Apartments Michael Constant

Dining Services

Director Michael Crabb
 Purchasing Ann Klaes
 Senior Manager Larry Gates

McKenny Union

Manager Ceil Paulsen
 Assistant Manager, Operations Jeff Dunbar
 Assistant Manager, Sales/Scheduling P.J. Moffett
Auxiliary Enterprises
 Director Sandra Williams

Recreation/Intramurals

Director Robert England
 Associate Director Michael O'Connor
 Assistant Directors Lou Gianina
 Kristi Jacobs
 Jack Moffett

Student Media

Director Christine Colcer

University Marketing

Director Cynthia Lawson
 Associate Director Dennis Lefond
 Manager, Video Production John Rice

TUITION AND FEES

FEES SUBJECT TO REVISION

All University fees and assessments are subject to change by action of the Board of Regents.

APPLICATION FEE

A one-time, non-refundable admission fee of \$25 is charged to each student who makes application for admission to the Graduate School. This fee became effective fall 1990.

GRADUATION FEE

A graduation fee of \$35 is charged to each student who makes application for graduation. The fee is non-refundable and is assessed only once for each degree; doctorate, specialist's, and master's. A fee of \$20 is charged to each student who makes application for a non-teaching certificate (e.g., a graduate certificate in gerontology).

TUITION SCHEDULE

Tuition will be assessed for all credit hours for which the student is registered. Off campus tuition rates are the same as on-campus tuition rates. Regardless of student class level, undergraduate tuition will be assessed for all 100- through 400-level courses. Graduate tuition will be assessed for all 500-, 600-, 700-, 800-, and 900-level courses.

Tuition rates per credit hour effective fall 1992 are:

Michigan and Ohio Residents

Undergraduate Courses	
(100-200 level)	\$76.50
(300-400 level)	\$81.50
Graduate Courses	
(500-900 level)	\$110.00

Non-Resident

Undergraduate Courses	
(100-200 level)	\$196.00
(300-400 level)	\$206.00
Graduate Courses	
(500-900 level)	\$258.00

Michigan residency questions should be raised by the student with the Student Accounting Office, prior to registration. The Student Accounting Office is located in 203 Pierce Hall.

OFFICIAL REGISTRATION DAY

The official registration day each semester for each student for purposes of payment of the registration fee and assessment of tuition is the day the student completes the initial registration for the semester or session.

REGISTRATION FEE

A registration fee of \$40 for each of the fall and winter semesters, and of \$30 for each of the spring and summer sessions, is charged to each student.

This fee is assessed and collected at the time the student registers for the semester or session and is non-refundable.

QUALIFICATIONS FOR MICHIGAN RESIDENCE

Eligibility

In order to be eligible for the resident tuition rate at Eastern Michigan University, it must be demonstrated that a student is already a resident of the state of Michigan or that he/she is coming

to the University from outside of the state for reasons primarily other than to attend the University. In order to determine the residence of a student, the following policies will be utilized.

I. Minors

The residence of a student who is not yet 18 years of age follows that of the student's parents or legal guardian. If that student's parents or legal guardian would qualify in accordance with the criteria listed in *VI. Criteria for Determining Intent*, that student shall be considered a Michigan resident for tuition purposes.

II. Non-Dependent Students

A student 18 years of age or older shall be eligible for classification as a Michigan resident for tuition purposes if he/she qualified in accordance with the criteria listed in *VI. Criteria for Determining Intent*.

III. Spouse of Eligible Person

The residence of a student who otherwise would be classified as a non-resident for tuition purposes will follow that of the student's spouse, if the spouse is eligible for classification as a Michigan resident for tuition purposes (applicable only to U.S. citizens or to aliens admitted for permanent residence in the United States who have obtained a permanent or diplomatic visa).

IV. Aliens

An alien (non-citizen) shall be eligible for classification as a Michigan resident for tuition purposes only if the student is lawfully admitted for permanent residence in the United States, has received a permanent or diplomatic visa, and qualifies in accordance with the criteria listed in *VI. Criteria for Determining Intent*.

V. Migrants

Migrant status is one factor considered when determining if a student is domiciled in Michigan for tuition purposes. Michigan migrants are defined as individuals who have made their livelihood in seasonal work in the state of Michigan, and have traveled interstate for this purpose. Migrant students shall be considered Michigan residents for tuition purposes if they or their parents or legal guardians were employed in Michigan for a least two months during each of three of the preceding five years. Verification of employment as migrant workers should be secured from the Michigan Farm Labor and Rural Manpower Services Office. Other appropriate evidence also may be used by migrant workers to establish their status.

VI. Criteria for Determining Intent

Students from outside the state and for whom the above policies are not applicable shall be considered non-resident students unless it can be determined that their primary purpose in coming to Michigan is to establish residence in the state, rather than to attend a university. For the purpose of determining intent in such cases, the following criteria shall, standing alone, necessarily be controlling. It shall be the responsibility of the administration to apply the criteria in a fair and consistent manner and in the spirit of the intent of this policy.

- High school or previous college attendance in Michigan.
- Reliance upon Michigan sources for financial support.
- Residence in Michigan of family, guardian, or other relatives or persons legally responsible for the student.
- Former residence in Michigan and maintenance of significant connections therein while absent.
- Continuous presence in Michigan during periods when not enrolled as a student.
- Long-term military commitments in Michigan.
- Acceptance of an offer of permanent employment in Michigan and source, length, and continuity of employment.

- h. Traditional considerations made in determining legal residence; i.e., voter registration, ownership of real estate, source of driver's and vehicle licenses, taxpayer status, self-supporting or dependency on others whether residents of Michigan or elsewhere.

VII. Determination of Residence

A student's residence status shall be determined at the time of his/her initial admission to the University. This status may be reviewed at each subsequent registration. If a student's circumstances should change to the extent that he/she would no longer be considered a Michigan resident for tuition purposes, as herein described, that student shall be reclassified as a non-resident for tuition purposes six months thereafter.

Note: It shall be the responsibility of all students, prior to registration, to raise questions in the Student Accounting Office regarding their right to be registered as Michigan resident students. The administration is authorized to establish procedures and delegate authority for determining the domicile of students for tuition purposes and to make exceptions within the spirit of this policy.

TUITION RECIPROCITY AGREEMENT WITH OHIO

Ohio residents may now attend Eastern Michigan University at Michigan resident tuition rates, and Michigan residents of Monroe County can attend the University of Toledo at Ohio resident tuition rates.

The tuition reciprocity agreement was entered into by the Michigan State Board of Education and the Ohio Board of Regents. The agreement was effective with the fall semester 1978.

AUDITING FEES

Tuition and registration rates for auditing classes are the same as for credit.

WORKSHOP SESSIONS

Several two- and three-week workshop sessions are offered during the spring and summer sessions. Tuition and registration fees apply to workshop sessions at the same rates as for regular class sessions. However, a student enrolled in other course work during a session will not be assessed an additional registration fee for enrolling in a workshop during the same session.

1. An adjustment of 100 percent of the tuition assessment will be made to those students who withdraw prior to the close of business (5:00 p.m.) on the first day of the session.
2. No other adjustment or refund will be granted.

FINANCIAL OBLIGATIONS

Having fulfilled all other requirements, a student is eligible for registration or graduation only if all financial obligations to the University have been met at the time of graduation or at the close of the semester or session. Credits or other statements of record will be withheld and the student will be ineligible for further registration (fall advance registration excepted) at EMU and until all obligations have been fulfilled.

PAYMENT OF TUITION

The exact due date for tuition and other University fees is printed on the invoice from Student Accounting and is published in the class schedule bulletin for each semester. To ensure a correct billing address, it is the responsibility of the student to inform the University of any address changes by completing a change of address form in the Registration Office.

Registration for the fall semester begins in March and continues until the first day of classes. Payment of previously incurred University obligations may be required prior to registration. Stu-

dents will be required to pay all previously incurred University obligations and 50 percent of tuition and room and board and 100 percent of all required fees by the registration verification date or their registration will be automatically canceled, their registration fees will be forfeited, and those classes will be made available to other students. If a student wishes to drop all classes, written verification must be given to the Registration Office, rather than relying on the automatic cancellation process. Students whose registrations have been canceled by this process may re-register upon payment of another registration fee of \$40, all past-due accounts, 50 percent of tuition and room and board, and 100 percent of required fees.

For those students who prefer to make installment payments, the University provides an optional installment payment plan for fall and winter semesters only. The installment payment plan requires payment of 50 percent of tuition, room and board, and 100 percent of required fees by the registration verification date. The remaining balance, including any course fees, is payable approximately the eighth week of the semester. Specific dates are published in the class schedule bulletin for each semester. An installment payment service fee of \$20 is collected with the second installment payment.

Students who register during drop/add, post registration, and late registration will be required to pay all previously incurred University charges, 50 percent of tuition and room and board, and all required fees at the time of registration.

A late payment fee of \$20 per month to a maximum of \$100 per semester is assessed if the second payment is not received by the due date.

Winter semester registration procedures require that students will pay as a minimum all previously incurred University obligations, 50 percent of tuition and room and board, and all required fees by the registration verification date.

Spring and summer sessions are separate sessions. Registration procedures require that for each session, students pay all previously incurred University obligations, 100 percent tuition, room and board, and all required fees. There is no provision for installment payment for spring or summer sessions.

Eastern Michigan University accepts Visa and MasterCard credit cards in payment of tuition, fees, room and board.

If a student's account is past due for a current semester, enrollment, University housing, and other University services (such as release of grades or a certified transcript) are subject to suspension until the account is brought into current status. Payment of assessments for a current semester does not relieve the student of the obligation for payment of any balance from a prior semester. The privilege of using the installment plan for payment of tuition and room and board may be denied to students whose University account has been in arrears.

PROGRAM ADJUSTMENT FEE

Program adjustments may be made for five days prior to the beginning of classes without penalty. At least 50 percent of the increased tuition resulting from adjustments must be paid at the time of adjustment in the fall and winter semesters, 100 percent in the spring and summer sessions. Actual dates are printed in the class schedule bulletins.

During the first seven class days of the fall/winter semesters and the first four class days of the spring/summer sessions, a program fee of \$10 per transaction will be assessed for each student-initiated program adjustment. For the purpose of determining the program adjustment fee, one drop accompanied simultaneously by one add will be considered as one transaction. Individual adds or individual drops will be considered as individual transactions and will be assessed \$10 each. At least 50 percent of the increased tuition resulting from adjustments must be paid at the time of adjustment in the fall/winter semesters, 100 percent in the spring/

summer sessions. For final adjustment deadlines and coordinate fee schedules, see the class schedule bulletins.

No program adjustment fees will be assessed for changes required as a result of University actions.

LATE REGISTRATION FEE

A late registration fee of \$10 is charged to those students who, for any cause, do not complete registration prior to the official first day of classes each semester. Checks returned by a bank constitute late registration, and the late registration fee is charged.

CANCELLATION OF REGISTRATION

If a registered student should decide before classes begin not to return to Eastern, he/she must initiate a cancellation of registration form in person or by letter through the Registration Office, Pierce Hall. If the student has applied for University housing, the contract also must be canceled in the Housing Office. This is necessary for cancellation of tuition and room and board assessments.

WITHDRAWAL FROM THE UNIVERSITY

To be eligible for any adjustment of tuition or housing assessment after classes have begun, a withdrawal from the University must be initiated in person or by letter through the Registration Office, Pierce Hall. The date the request is made to the Registration Office or the postmark date will be used in determining the amount of any assessment adjustment.

The University withdrawal policy is:

1. Students who drop during the first seven calendar days of the semester (three calendar days for spring/summer) will receive a 100 percent tuition credit adjustment and no grades will be posted. An adjustment fee of \$10 is charged.
2. Students who drop during the next 14 calendar days of the semester (the next four calendar days for spring/summer) will receive a 50 percent tuition credit adjustment and no grades will be posted.
3. Students who drop after 21 calendar days of the semester (seven for spring/summer) through the day prior to the first day of University final examinations will receive no tuition credit adjustment and grades of "W" will be posted.
4. No withdrawal will take place after the official University final examination period has begun.

Actual dates are printed in the class schedule for each semester and session.

DECREASE IN ACADEMIC LOAD

1. A credit adjustment of 100 percent of the difference in tuition assessment for the fall and winter semesters will be made to those students who decrease their academic load prior to the sixth day of classes. For the spring and summer sessions, a 100 percent credit adjustment will be made during the first three days of classes. Actual dates are printed in the class schedule for each semester and session.
2. A credit adjustment of 50 percent of the difference in tuition assessment for the fall and winter semesters will be made to those students who decrease their academic load between the sixth and fifteenth class day. For the spring and summer sessions, a 50 percent adjustment will be made during the fourth through seventh class days of the session. Actual dates are printed in the class schedule for each semester and session.
3. No credit adjustments will be made after the above stipulated dates.

SUSPENDED OR DISMISSED STUDENT

During the semester or term, a student suspended or dismissed from the University for a violation of the Student Conduct Code shall receive a credit adjustment based on the Account Adjustment Schedule published in Eastern Michigan University bulletins. The date from which the credit adjustment will be calculated for tuition and fees will be the day the appropriate administrative officer, i.e., the dean of students or president or their designees, first notifies the student of suspension or dismissal. The date from which the credit adjustment will be calculated for housing and food service will be the day service is terminated to the student.

ACCOUNT ADJUSTMENTS AND REFUNDS

An appeals process exists for students who feel that individual circumstances warrant exceptions from published policy, as stated within those sections under "Withdrawal from the University" and "Decrease in Academic Load." The appeals process is as follows:

1. Obtain a Tuition and Fee Appeal Application from the Student Business Office in Pierce Hall. Complete and return the application along with an explanation of the extraordinary circumstances involved and supporting documentation of those circumstances. An approval or denial will be issued in writing by return mail.
2. If the application is denied, appeal in writing to the manager of student business services at the address above. Be sure to include any additional pertinent information with your written appeal.
3. If, after following the procedures in steps 1 and 2, an acceptable solution is not achieved, a final written appeal may be made to the Vice President for Business and Finance (101 Welch Hall, Ypsilanti, MI 48197).

Tuition and fee appeal applications must be submitted as early in the semester as possible. Applications received later than 15 calendar days after the close of the semester and the mailing of final grades may be denied on the basis of a lack of timeliness.

HEALTH SERVICE FEE

All students are charged a student health service fee of \$1.75 per on-campus credit hour. This will be shown as a separate fee on all student's bills.

APPLIED MUSIC FEE

All students accepted for private music lessons will be assessed an applied music fee. Applied music fee rates for 1993 are:

Music majors

\$60 per semester for all instruction

Graduate and other University students

\$60 per semester for one-hour lesson

\$30 per semester for half hour lesson

Students from public schools, the community, and EMU staff and families:

\$90 per semester for one-hour lesson

\$45 per semester for half-hour lesson

Lessons are arranged through the Music Department.

The applied music fee is assessed to each student's account at the close of the program adjustment period. This fee is not refundable after the first lesson.

STUDENT GOVERNMENT FEE

Graduate students are charged a nominal student government fee: \$2 each fall and winter semester; \$1 each spring and summer session.

STUDENT ACTIVITY/FACILITY FEE

A fee of \$47 per semester for fall and winter semesters is assessed of all students not living in University housing taking four or more credit hours. All students paying this fee are eligible for free admission to home basketball and football games. All students not living in University housing are assessed a student activity fee of \$23.50 during the spring and summer terms. This fee is used to renovate and enhance campus facilities and the campus environment.

OTHER COURSE FEES

Fees are assessed at the close of the program adjustment period to cover extra costs and materials involved with certain courses. These courses are identified in each semester's class bulletin.

EDUCATION BULLETIN

A charge of \$10 is made for each annual subscription to the University Education Bulletin service. Subscriptions are available on an annual basis only.

TRANSCRIPT FEE

Each student is furnished one official transcript at the time of graduation without charge.

A charge of \$5 is made for each additional transcript.

VEHICLE OPERATION AND PARKING

All students meeting the requirements of the law, and who live in University housing or are defined as commuting students, are eligible to maintain and operate a motor vehicle on campus by purchasing a proper parking decal. Motor vehicles are required to be operated within the provisions of the Traffic, Parking and Pedestrian Ordinance of the University, details of which are printed in the Ordinance and in the Parking and Traffic Regulation brochure.

FINANCIAL ASSISTANCE

There are several sources of financial assistance available to graduate students at Eastern Michigan University. The following are just a few; contact the Financial Aid Office, 403 Pierce Hall, (313) 487-0455, for additional information.

The **GRADUATE ASSISTANTSHIP PROGRAM** is administered by the Graduate School of Eastern Michigan University. This very competitive program provides financial support and experiential training to graduate students who are degree-admitted to a master's program and who display the skills to be a graduate assistant (GA) in an academic or administrative department on campus. Appointments to graduate assistantships are made for up to a two-year period and are contingent upon the recommendation of an academic department and the approval of the Graduate School. Once accepted into the assistantship program, the student must maintain at least a 3.0 cumulative grade point average and continue progress toward completing the program of study. Three categories of assistantships are available; departmental (hired by the academic department), minority approved by the Minority Graduate Assistantship Committee, and college work-study (approved by the graduate dean and the Office of Financial Aid). Please note that **foreign students are not eligible for minority or college work-study assistantships**, but are considered for departmental GA positions.

Eligibility

1. The graduate assistant applicant must be degree-admitted to a graduate program.
2. The undergraduate grade point average must be equal to the average of students admitted to the college's degree programs. Once admitted, a 3.0 graduate grade point average must be maintained.
3. College work-study GA applicants also must complete the proper financial aid forms through the Office of Financial Aid. FAF or FFS forms must be submitted by March 1 for consideration for the following Fall semester. Proof of degree admission and a copy of the graduate program of study must also be submitted to the Office of Financial Aid.

Benefits

1. For a full-time academic year GA appointment, the University covers **tuition up to 18 credit hours for each fiscal year of the assistantship**. For graduate assistants who are appointed to part-time positions, the number of credit hours covered by the award will be proportionately less.
2. The graduate assistantship program also provides payment of registration, student government, and health center fees.
3. Graduate assistants are provided a parking permit for selected faculty/staff lots, faculty library privileges and 10 percent discount on items purchased at the University Bookstore.
4. In addition to the above direct University payments and services provided, the full-time graduate assistant also receives a stipend which will be \$5,040 for the first academic year appointment, and \$5,250 for the second year. Again, part-time appointments will cause the stipend to be proportionately lower.
5. Graduate assistants receive priority registration, provided they register by telephone on a date specified to them beforehand by the Graduate School.
6. The experiential opportunities which are provided by the graduate assistantship program also should be recognized as intangible advantages.

Contact your department for information on graduate assistant positions that may be open. For more information on the

graduate assistantship program, please contact the Graduate Dean's Office, Starkweather Hall, (313) 487-0042.

The **Minority Graduate Assistantship Program** has as its main purpose the attraction of highly qualified minority students interested in academic disciplines that traditionally have not been accessible to minorities. Eastern Michigan University continually encourages the application and enrollment of promising minority graduate students and recognizes the need for well-trained minority scholars.

For more information on this program, please call (313) 487-0042.

The **Graduate Fellowship Program** is a distinction of honor awarded to selected graduate students on the basis of academic merit and with particular focus on minority and non-traditional students. The award is in the form of a \$300 tuition waiver per semester (fall and winter) with the provision that the fellow must enroll in and complete at least six hours of graduate level course work in each of the terms of the award. Undergraduate courses taken for graduate credit are not considered as part of the six hours.

Both new and continuing graduate students are eligible to apply for an appointment as a graduate fellow. New graduate students must present a minimum 3.2 cumulative undergraduate grade point average to receive consideration. Graduate students who have already begun their programs must present a minimum 3.6 cumulative graduate grade point average to receive consideration. Students having completed more than 15 graduate hours of their current degree program at the time of the initial award decision are not eligible for this program.

Graduate students who have been appointed as graduate fellows (1) must hold degree admission to an academic program leading to either a master's degree or a specialist's degree; (2) a cumulative graduate grade point average of 3.6 at all times during their fellowship in order to maintain the award; (3) are eligible to apply for reappointment for one additional academic year if they continue to achieve a 3.6 cumulative graduate grade point average. Students accepted into the graduate assistantship program are not eligible to be graduate fellows.

Applications are available in the Graduate Dean's Office, Starkweather Hall.

NEED-BASED AID

Application Process

To qualify for need based aid, graduate students must submit a financial aid application to either of the two national processors, American College Testing (ACT) or College Scholarship Service (CSS). The processor evaluates the student's financial strength and, based on the federal government's formula, determines whether the student has financial need. A student may be asked to provide parent information if he/she is determined to be a dependent applicant. Instructions in the financial aid application clearly indicate which students are dependent and which are independent. Students should begin the application process the December prior to fall enrollment. Aid is automatically granted for fall and winter. Students who will need financial aid for spring and summer must notify the Office of Financial Aid.

Financial aid applications are available from the Office of Financial Aid, 403 Pierce Hall.

Eligibility

Students must be accepted by the Graduate School as:

1. A master's degree admitted student
2. A master's degree conditionally admitted student (Please note that the yearly amount of the Stafford Loan is subject to undergraduate limits if there are undergraduate prerequisite classes which you must first complete).

To remain eligible, students must also be satisfactorily progressing toward completion of a degree. As addressed in the Satisfactory Academic Progress policy, graduate students are eligible for aid provided that:

1. A GPA of 3.00 or above is maintained.
2. 75% of the classes attempted are completed.
3. The master's degree is completed in 6 semesters of enrollment.

COLLEGE WORK-STUDY (CWS) is an employment program that allows students demonstrating financial need to work up to 20 hours per week on campus or at participating off-campus agencies. Student wages are paid 80 percent from federal funds and 20 percent from University funds. Hourly pay is set according to the campus-wide pay scale for student position classifications. Applications are available from the Office of Financial Aid, 403 Pierce Hall.

FULL-TIME SUMMER COLLEGE WORK-STUDY is for graduate students who will not be enrolled during the summer term and who would like to work full-time from July 1 through the end of August. Applicants must be eligible for need-based aid and must fill out an application for the upcoming aid year. (For example, a student who wants to work during the 1993 summer semester must complete the 1993-94 financial aid application). These are *not* graduate assistantship positions.

COLLEGE WORK-STUDY GRADUATE ASSISTANTSHIPS of a limited number are funded through the College Work-Study Program. Interested students should contact The Graduate Dean's Office. Students need to submit normal graduate assistantship application material, as well as the Family Financial Statement or Financial Aid Form for the College Work-Study Program (by March 1 for the following Fall semester).

PERKINS LOANS (FORMERLY NATIONAL DIRECT STUDENT LOANS) are long term educational loans made to students demonstrating financial need. Graduate students may borrow up to \$2,500 per academic year. Repayment of the loan at 5 percent simple interest depends on your borrowing status as described below:

if you have an outstanding principal or interest owing on any direct loan (**Perkins/National Direct Loan**) prior to July 1, 1987, you may begin paying six months after you graduate, leave school, or drop below half-time status.

if you are a new borrower who has no previous out-standing principal or interest owing on any direct loan as of July 1, 1987, you may begin paying nine months after you graduate, leave school, or drop below half-time status.

You may be allowed up to 10 years to repay your loans. The amount of your payment depends upon the size of your debt, but usually you must pay at least \$30 per month. Repayment terms must be arranged with the Student Loan Accounting Office before the student leaves Eastern Michigan University. Applications are available from the Office of Financial Aid, 403 Pierce Hall.

STAFFORD LOAN PROGRAM (FORMERLY GUARANTEED STUDENT LOAN-GSL) is a low interest loan available to graduate students who demonstrate financial need. Graduate students can borrow up to \$7,500 per academic year with a cumulative undergraduate and graduate limit of \$54,750. Interest payments are made by the federal government while the students are in school.

OTHER AID

STUDENT EMPLOYMENT listings for on and off campus employment are maintained by the Eastern Michigan Univer-

sity Student Employment Office, Career Services Center, Fourth Floor Goodison Hall. Many non-college work-study jobs are available. Students do not have to demonstrate financial need to work in regular on-campus jobs.

All students must make application with Student Employment in order to be placed in part-time positions with the University. On-campus employment is limited to 20 hours per week. Students who are eligible for the College Work-Study Program must be approved by the Office of Financial Aid, 403 Pierce Hall.

The student employment telephone number is (313) 487-0400.

Off-Campus and Summer Employment

Annually, thousands of students obtain part-time positions through the Student Employment Office in the Career Services Center, Fourth Floor, Goodison Hall. These positions are on campus and in the surrounding community. They range from odd jobs and babysitting to extended part-time highly skilled positions.

The Job Location and Development Office develops off-campus, career related part-time and summer jobs for students.

Summer employment opportunities are available with campus, resorts, recreation programs, businesses, industries, and governmental agencies. Listings for such begin about Christmas time. Many summer employers schedule on-campus interviews through the Student Employment Office.

THE PARENT LOAN (PLUS) AND SUPPLEMENTAL LOAN (SLS) are available to those graduate students who are not eligible for need based financial aid. The **PLUS** is made by a private lender to the parents of dependent students to assist the student with college expenses. The **SLS** is made by a private lender to independent students. A parent or independent student may borrow up to \$4,000 per academic year to a maximum of \$20,000.

Loans are based on the credit worthiness of the borrower.

The interest rate for each 12 month period is determined by the bond equivalent rate of the 52-week treasury bill auctioned at the final auction held prior to the June 30 preceding the 12-month period, plus 3.25 percent.

Monthly payments must begin within 60 days of disbursing the loan.

To locate a participating lender, call the Michigan Higher Education Assistance Authority at (517) 373-0760.

ADULT TUITION LOANS are tuition-only loans for up to \$500.

Eligibility

- be over 21 years of age or older
- have an annual income of \$15,000 or more;
- have repaid previous loans satisfactorily; and
- be in good academic standing.

For more information on this loan, see a financial aid adviser at the Office of Financial Aid, 403 Pierce Hall.

UNIVERSITY SHORT TERM LOANS (USTL) are available to Eastern Michigan University graduate students for educationally related expenses incurred while attending the University.

The interest rate is 4 percent simple annual interest from the loan date to the due date.

Eligibility

- be enrolled at the University at the time the funds are released;
- be in good academic standing
- demonstrate the ability to repay the loan by the due date; and
- have repaid previous UST's satisfactorily and have no past-due obligations owed to the University in excess of \$500.

EMPLOYER TUITION REIMBURSEMENT PLANS are offered by many companies. Graduate students are encouraged to investigate their company's policy. Effective March 1988, the Office of Financial Aid will have a brochure available listing companies which offer some form of tuition reimbursement.

AWARDS AND SCHOLARSHIPS

THE GRADUATE DEANS' AWARD FOR RESEARCH EXCELLENCE is a \$250 cash award made in the fall and winter semesters to reward excellence in on-going or completed research projects.

Currently enrolled Eastern Michigan University graduate students or recent graduates (within one year) are eligible to apply for the award. Part and full-time students in good academic standing, in all academic disciplines, who have completed a minimum of 15 semester hours, are encouraged to apply.

The major criterion for the award is the demonstration of superior initiative in the student's own research project. Deadlines for application are November 15 for the fall award and March 15 for the winter award. Applications are available in the Graduate Dean's Office, Starkweather Hall.

THE BARTON SCHOLARSHIP is a one-time competitive award of \$500 that is applied to the recipient's tuition fees. Applications will be considered by the Graduate School Scholarship Committee bi-annually for the fall and winter semesters. Applicants (1) must have earned a baccalaureate degree from Eastern Michigan University with no graduate level academic work completed prior to receiving the award; (2) must have a cumulative undergraduate grade point of 3.5 or better; (3) must become candidates for admission into a graduate academic program at Eastern Michigan University or the University of Michigan prior to submitting the Barton Scholarship application form. Students who wish to pursue their graduate studies at the University of Michigan must submit a completed Graduate Admission Verification Form before consideration can be given to their scholarship application. The deadline for submission of materials for a fall semester award is June 30; for a winter semester award it is November 30. Applications are available at the Graduate School, Starkweather Hall.

THE ANTON BRENNER SCHOLARSHIP is a one-time award of \$500 which is applied to the recipient's tuition and fees. Applications will be considered by the Graduate School Scholarship Committee for each fall semester. Applicants must (1) have completed at least one full academic semester (spring and summer combined equals one full semester) at EMU and earned at least 10 graduate credit hours toward their master's degree; (2) have a cumulative graduate grade point average of 3.5 or better; (3) be enrolled in at least four (4) graduate credit hours during the fall semester for which the scholarship award is granted; (4) submit an application on or before April 15 to be considered for an award the following fall. Applications are available at the Graduate School, Starkweather Hall.

THE GRADUATE SCHOOL POLICIES AND INFORMATION

ORGANIZATION

The Graduate School administers all graduate education at Eastern Michigan University. The dean serves as the chief executive officer and is charged with providing leadership for development of graduate education, the responsibility for adherence to educational policies and standards and for the effective operation of the Graduate School.

The Graduate School reserves the right to make modifications or changes in the curriculum pattern, admission standards, course content, degree requirements, tuition or fees at any time without advance notice. The information contained in this catalog is not to be considered as a binding contract between the Graduate School and the student.

The Graduate Council, with a membership of 30 persons, serves as a policy recommending body and engages in planning for the orderly development of graduate education. It consists largely of faculty, both elected and appointed, and four graduate students. A current roster may be obtained from the Graduate Dean's Office.

OBJECTIVES

The Graduate School at Eastern Michigan University encourages graduate education that establishes or upgrades professional competence by providing programs designed to train students for careers in areas such as teaching, school administration, counseling, business, etc.; that prepares individuals for more advanced academic work, particularly in the academic disciplines; that provides students the knowledge of research techniques and the opportunity for practicing research pertinent to their specific disciplines; and that serves the unique needs of students by providing post-baccalaureate educational opportunities for individuals and groups at convenient geographic locations and in special or individualized modes.

Faculties within all colleges and departments continually strive to meet the educational needs of graduate students. A variety of programs have been authorized and accredited, and others are in the process of development. Although formal graduate study programs have been established in many academic areas, there is sufficient flexibility in each program to enhance the professional goal of each individual student.

PROGRAMS

The University offers graduate work leading to several types of academic degrees; doctor of education, specialist in arts, master of arts, master of business administration, master of business education, master of fine arts, master of individualized studies, master of liberal studies, master of public administration, and master of science. Programs leading to these degrees are administered by the departments in the respective colleges. Departments that offer more than one concentration in their degree programs are identified.

DOCTORAL DEGREE

The doctoral program requirements place emphasis on a comprehensive understanding of and demonstrated competence in a field of knowledge, familiarity with related or cognate disciplines, skills in the use of research techniques, and, therefore, responsibility for dissemination and advancement of knowledge. Meeting the requirements for the doctorate is measured primarily by examinations and by completion and defense of the dissertation.

It should be noted that the policies and procedures for doctoral programming will undergo evolutionary development and have an initial focus on the doctoral program in the Department of Leadership and Counseling.

1. Admission

To be eligible for admission to the Doctoral Program at Eastern Michigan University, the applicant must meet all Graduate School requirements for admission. These might include some or all of the following:

- a. An earned master's degree with a minimum grade point average of 3.5 on a 4.0 scale for full admission. Applicants with grade point averages of 3.3 to 3.5 may be considered for conditional admission. The degree must have been earned from a regionally accredited graduate program. Departments or programs may require higher academic achievements.
- b. A department may require that an applicant submit additional materials for review. These might include: 1) valid teaching certificate, or waiver; 2) proof of teaching and/or administrative experience or equivalent; 3) recommendations by current supervisors familiar with the applicant's professional role; 4) recommendations by university professors who have had an opportunity to observe the student in an academic setting; 5) an autobiographical statement containing information on education, work experience, nature of current position, and personal and professional aspirations.
- c. The University requires the Graduate Record Examination and the applicant is responsible for having scores submitted to the Graduate School at EMU. Minimum scores or percentile rankings on standardized tests are established by individual departments. Some departments also may require the appropriate area examination in addition to the general test.
- d. The department may choose to interview applicants for the doctoral degree.

The applicant's academic record and test scores will be assessed by the Graduate School for admission to the University. The full dossier of materials submitted by the candidate will then be assessed by the department offering the doctoral program for an admissions recommendation. Once the department makes a recommendation, the Graduate School will review the department's admissions decision and will notify the applicant of his/her admissions status.

2. Chronological Outline of Doctoral Work

- a. **Plan of Study:** Following admission, the student and her/his program chair confer to construct a program which meets the requirements of the doctoral degree program. The program of study must be approved by the program chair and the department head and submitted to the dean of the Graduate School prior to completion of the first 12 semester hours of course work.
Directed Study: Registration in directed study must have advance approval of the student's adviser and advance authorization by the Graduate School. The **Petition and Authorization for Directed Study** form must be approved by the student's adviser, the course instructor, and the Graduate School dean *before registration*. The form must contain all relevant details, including an explicit course outline, rationale for the course, and information about the major academic requirements the student must successfully complete.
- b. **Doctoral Committee:** The committee consists of four persons, two from the doctoral program department, one from the cognate area, and a graduate faculty representative appointed by the dean of the Graduate School. The student selects the faculty member who serves as the

chair of the committee. With the assistance of the committee chair, the student then selects two additional graduate faculty members to serve on the committee, one of whom is from the student's cognate area, the other from his/her program area. Typically, the student's program adviser also serves as the chair of the doctoral committee.

- c. **Comprehensive Qualifying Examination:** The student's comprehensive qualifying examination is scheduled after completion of a minimum of thirty (30) hours of graduate work beyond the master's degree. To be admitted to candidate status for the doctoral degree, the student must successfully pass the Comprehensive Qualifying Examination. This written examination is prepared, administered, and evaluated by members of the graduate faculty in the student's major field of study. The examination tests knowledge in the student's major field, research, and the cognate. The results of the examination are reported to the Graduate School by the department head within one month after it is written.

Failure on the comprehensive qualifying examination will cause the student's overall performance in the program to be reviewed by the doctoral committee in consultation with the department head, which will recommend that either the student be dismissed from the program or will prescribe what must be done before re-examination is appropriate. Re-examination may not take place sooner than six months, but must occur within one year. The results of the second examination are final.

The Comprehensive Qualifying Examination Committee consists of no less than four members who are typically the same persons as the doctoral committee. The membership of this committee, once established, may not, under normal circumstances, be changed until the examination has been passed. When unusual circumstances requiring a committee change occur, the committee chair may recommend a change in the committee membership with the approval of the Graduate School.

- d. **Dissertation Prospectus:** The written prospectus or dissertation proposal is initiated by the student with permission of the doctoral committee after successfully passing the comprehensive qualifying examination. Departments may require an oral defense of the dissertation prospectus in order to avoid problems at the final defense. The following signatures are obtained on the approval page of the prospectus: the department head, the dissertation adviser, chair of the student's doctoral committee, and all other dissertation committee members. The approval is filed with the dean of the Graduate School.
- e. **Final Defense Form and Manuscript Approval:** These are initiated by the student after obtaining all necessary signatures of the dissertation committee members, and the graduate dean *at least one month before the dissertation defense*. The last day for scheduling the dissertation defense is determined each semester by graduation or commencement deadlines.

3: Graduation Requirements

Successful completion of the plan of study, comprehensive qualifying examination, and the dissertation will qualify the candidate to be recommended for graduation. Each student must file for graduation within the dates the University establishes for graduation/commencement.

Grade Point Average: To be recommended for the doctoral degree, the student must maintain a minimum grade point average of 3.5 on a 4.0 scale.

Transfer Credit: Applicable graduate course credit may be accepted from other accredited doctoral institutions and may

be included in the candidate's program if approved by the student's doctoral committee, the department head, and the graduate dean. Credits requested for transfer must be consistent with the Graduate School's policy concerning time limits for completing degree requirements (seven years for doctoral programs). A maximum of nine semester hours of graduate transfer credit will be allowed.

Residency Requirement: The doctoral requirement for residence following the master's degree is met by completion of sixteen (16) credit hours of course work, exclusive of dissertation research, during two adjacent semesters. Adjacent semesters are judged to meet the following pattern:

Adjacent Semesters ¹	Credit Hour Enrollment	Residency Requirement
Fall and winter	8 semester hours each	16 credit hours
Winter and spring/summer	8 semester hours each	16 credit hours
Spring/summer and fall	8 semester hours each	16 credit hours

¹Spring/summer terms together constitute one term.

Only course work taken on the University's main campus in Ypsilanti satisfies the residency requirement.

Important: The student must be available to participate in all doctoral activities scheduled during this period. *No exceptions will be made to this policy.*

Dissertation Registration: Early consideration of a dissertation topic is suggested. Generally, a student will not be permitted to register for dissertation research credit until she/he has fulfilled all requirements for advancement to candidacy for the doctoral degree. The doctoral dissertation is to be an original piece of work which addresses an intellectually significant problem, makes a valuable contribution, and is publishable. Since group research efforts are common, there is a concern about that part of a total project which is attributable to and identified with the candidate. A multi-authored dissertation is not allowable. Ownership of the research contained in the dissertation must be cleared before the project is approved at the prospectus stage. In some cases, with the approval of the student's adviser and the Graduate School, an applicant may be allowed to register for up to (but not more than) four hours of dissertation direction before being admitted to candidacy. The final year of the student's program should properly center on the requirements of the dissertation.

Dissertation Outline: *Prior to initiating research*, the doctoral student must prepare the Graduate School form: Doctoral Dissertation Prospectus and Approval. The form is approved by the student's dissertation committee and the department head of the department which offers the degree. A copy of the prospectus is forwarded to the Graduate School for the dean's approval.

Time Limitations: Students have seven years to complete all requirements for the doctoral degree. This period begins with the end of the semester during which the student was admitted to doctoral study and was completing work toward meeting the requirements for the degree. Credit earned after acceptance as a doctoral applicant may not be more than seven years old at the time the degree is conferred, except when, on the recommendation of an adviser, up to 10 credits previously earned at Eastern Michigan University may be specified for revalidation.

Adviser: The student's doctoral adviser also may serve as the chair of the dissertation committee and, in this role, represents the department in assisting the student in planning a program of study and research. The adviser also has the responsibility for assuring that the student meets degree requirements and, through the approval process, signs the **Plan of Study**, recommends candidacy, guides the student's research, approves the dissertation prospectus, serves on the **comprehensive qualifying examination committee**, and cer-

ties to the Graduate School that the degree requirements have been fulfilled.

Oral Defense of Dissertation: Before the oral presentation and defense of the dissertation are scheduled, the dissertation format and appearance must be acceptable to the Graduate School. The dissertation must be presented to the dissertation committee at least two weeks prior to the scheduled oral presentation and dissertation defense. The committee will certify in writing that the dissertation has been reviewed and approved for the oral presentation and defense.

The oral defense of the dissertation shall be presented by the candidate who shall state the methodology, research, and results of the investigation. Conducted by the candidate's committee, and presided over by the chair of the dissertation committee, it will be publicized in advance to the entire University community by the major department. In the discussion following the presentation of a dissertation lecture, other matters pertaining to the dissertation and preparation of the research may be discussed as they are deemed relevant. The oral defense will be open to the general University community, but questions are generated only by the student's dissertation committee members.

The Doctoral Committee chair will obtain signatures from each committee member on the **Oral Defense Approval Form** at the conclusion of the oral defense and file this document at the Graduate School within 24 hours of the completion of the dissertation oral defense.

Three final unbound copies of the dissertation will be submitted to the Graduate School within 14 calendar days after the lecture and oral defense. Graduation processing will take place upon receipt of these copies.

Graduation: The candidate for the doctoral degree must file an application for graduation not later than the end of the first week of classes during the semester in which he/she expects to complete the requirements for the degree. Consult the academic calendar in the Graduate Bulletin. If an application for a degree was filed for a previous semester in which the student did not graduate, a new application is necessary.

DOCTOR OF EDUCATION

Educational Leadership

SPECIALIST'S DEGREES

Educational Leadership

Guidance and Counseling

School Psychology

Special Education

Administration and Supervision

Curriculum and Development

THE CERTIFICATE OF ADVANCED STUDIES IN CURRICULUM AND INSTRUCTION (CASCI)

The Certificate of Advanced Studies in Curriculum and Instruction (CASCI), a 30-hour post-master's program, offers an opportunity for post-master's teachers to select study experiences that are specifically related to their current professional needs. There are no pre-determined course requirements. Advisers approve program choices that teachers make in accordance with their individual desires for professional growth.

CASCI is offered in response to the need for relevant, flexible individualized programs that will enable career teachers to keep abreast of new developments and to respond to the professional challenges in their classrooms and in their school districts.

A teaching certificate, a master's degree from an accredited university, and a minimum of one year's teaching experience are prerequisites to acceptance in the program.

MASTER'S DEGREES

College of Arts and Sciences

Applied Economics

Art

Art Education

Fine Arts (MFA)

Studio Art

Biology

Community College Teaching

Ecosystem (Aquatic and Terrestrial)

General Biology

Molecular/Cellular

Physiology

Chemistry

Communication

Oral Interpretation

Public Address

Criminology and Criminal Justice

Development, Trade and Planning

Drama/Theatre for the Young (MA, MFA)

Economics

English

Children's Literature

English Linguistics

Literature

Written Communication

Foreign Languages

French

German

Spanish

General Science

Geography

Cartography and Remote Sensing

Environmental Studies

Urban and Regional Planning

Physical Geography

Historic Preservation

Administration

Interpretation and Tourism

Planning

History

Language and International Trade

Liberal Studies

Social Studies and American Culture

Women's Studies

Mathematics

Computer Science

Music

Choral Music

Music Education

Music Literature

Music Theory-Literature

Performance

Piano Pedagogy

Physics

Physics Education

Psychology

Clinical

Clinical Behavioral

General

Public Administration

Social Science

Sociology

Family Specialty

Spanish (Bilingual-Bicultural Education)

TESOL (Teaching English to Speakers of Other Languages)

Theatre Arts

Arts Management

Drama/Theatre for the Young

College of Business

Accounting

Business Administration

General

Accounting-Taxation

Accounting-Finance and Operational Controls

Finance

International Business

Management-Human Resource

Management-Organization Development

Management-Information Systems

Marketing

Computer-Based Information Systems

Human Resource Management/Organizational Development

College of Education

Early Childhood Education

Educational Leadership

Educational Psychology

Development and Personality

Educational Technology

Research and Evaluation

Elementary Education

Guidance and Counseling

College Student Personnel

Community Counseling

School Counselor Endorsement

K-12 Curriculum

Middle School Education

Physical Education

Reading

Secondary School Teaching

Social Foundations

Special Education

Emotionally Impaired

General

Hearing Impaired

Learning Impaired

Mentally Impaired

Physically Impaired

Speech and Language Impaired

Visually Impaired

College of Health and Human Services

Occupational Therapy

Human, Environmental, and Consumer Resources

Clothing and Textiles

Family Services

Hospitality Management

Human Nutrition

Interior Design

College of Technology

Business Education

Industrial Education

Industrial Arts

Industrial-Vocational

Industrial Technology

Construction

Manufacturing

Quality

Liberal Studies

Interdisciplinary Technology

Polymer Technology

MASTER'S DEGREE PROGRAM IN
INDIVIDUALIZED STUDIES

The 36-hour master's degree program in individualized studies is designed to serve the needs and interests of mature students who have a minimum of three (3) years of career employment beyond the baccalaureate and whose occupational, vocational or educational goals are not met by other graduate degree programs offered at Eastern Michigan University. This program is structured so as to assure a quality graduate level experience, while making provision for flexibility and innovation in graduate study.

Each applicant is expected to develop a set of specific goals and objectives for the proposed program of study with the assistance of two or more faculty members. The applicant and advisers develop a structured sequence of courses that has academic integrity and that meets the goals and objectives of the program. The resulting proposal and program of study are submitted to a Supervising Committee composed of members of the graduate faculty for review and recommendation. Applicants interested in this program must apply at least six months prior to the enrollment period in which they wish to begin their studies.

For additional information regarding the master's degree program in individualized studies, please contact the Graduate School Office, Starkweather Hall.

GRADUATE CERTIFICATE PROGRAMS

Graduate Certificates

The graduate certificate programs provide expanded opportunities for those individuals who wish to further their education for personal or career advancement.

Certificates Available

At the present, a graduate certificate program is available in artificial intelligence, gerontology, historic preservation, state and local history, and quality technology. Other certificate programs in computer science, hazardous waste control, African American studies, acoustical physics, and holistic health care are expected.

Graduate Certificate

The graduate certificate program is for students who have an earned bachelor's degree from an accredited institution of higher education and have an interest in specialized studies but do not require a program as extensive as a master's degree.

Advanced Graduate Certificate

The advanced graduate certificate is designed for students who have earned graduate degrees and are interested in staying current in their fields or gaining expertise in a related area.

Graduate Certificate Admission

Students must satisfy admission requirements of the Graduate School and the department offering the certificate. Students must be admitted to the graduate certificate or advanced graduate certificate program before enrolling in required course work.

Graduate Certificate Requirements

1. Both programs shall consist of at least 12 graduate-level credit hours.
2. Not more than one 400-level course may be used on the Graduate Certificate program.
3. No 400-level course may be used on the Advanced Graduate Certificate.
4. A minimum grade point average of 3.0 ("B") must be achieved to obtain either certificate.
5. Credits earned for the Graduate Certificate or Advanced Graduate Certificate programs may apply, subject to applicability, to a graduate degree.
6. All requirements for either certificate must be completed within three years from the time of first enrollment.

MICHIGAN INTERCOLLEGIATE GRADUATE STUDIES PROGRAMS (MIGS)

The Michigan Council of Graduate Deans offers a guest scholar program, Michigan Intercollegiate Graduate Studies (MIGS), which enables graduate students of Michigan public institutions offering graduate degree programs to take advantage of unique educational opportunities such as special courses, workshops, field experience, and similar experiences. The MIGS program is available at the following member institutions: Andrews University, Central Michigan University, Eastern Michigan University, Grand Valley State University, Michigan State University, Michigan Technological University, Northern Michigan University, Oakland University, Siena Heights College, University of Detroit, University of Michigan, Wayne State University, and Western Michigan University. Students interested in additional information should contact the Graduate School Office, Starkweather Hall.

ADMISSION CATEGORIES

It should be understood that the admission policies presented are minimum standards and that many departments have established criteria above these minimums. For this reason, applicants for degree admission may have to meet additional requirements established by departments. These requirements often include admission tests, valid teaching certificates, letters of recommendation and/or personal interviews, and grade point averages above the minimum established by the Graduate School.

Anyone planning to enroll in graduate level courses must be admitted to the Graduate School through one of the following two admission categories: degree admission or non-degree student status.

For each semester, a final date for accepting completed applications for degree admission is established. Please see procedures for graduate admissions.

ADMISSION REQUIREMENTS

The Graduate School wishes to call to your attention that many departments may require you to submit test scores on the Graduate Record Examination (GRE) as part of the admissions process. All departments in the College of Education require GRE test scores. Students seeking degree admission to programs in the College of Business must submit test scores for the Graduate Management Admission Test (GMAT). Students need to be aware that academic departments may require additional subject area test scores for admission consideration.

Master's Degree

Degree admission requires that the applicant hold a bachelor's degree from an accredited college or university and possess a minimum undergraduate grade point average of 2.50 (on a 4.00 basis) or 2.75 in the last half of the undergraduate program. Applicants who do not possess minimum requirements for admission may be granted conditional admission. Conditions of admission must be met prior to beginning core course work for the degree.

Specialist's Degree

A minimum grade point average of 3.3 ("B+") in the master's degree program is required for admission to the specialist's degree. For those departments admitting students into the specialist's degree directly from the bachelor's degree, a minimum undergraduate grade point average of 2.75 is required. Departments may establish standards higher than this minimum.

Doctoral Degree (Ed.D.)

For degree admission requirements students are directed to the Doctoral Degree and the Department of Leadership and Counseling sections of this catalog.

TYPES OF ADMISSION

Degree Admission Status

Degree admission into a master's or Graduate Certificate program requires that the candidate meet both the Graduate School requirements (conferred bachelor's degree and at least a 2.5 GPA or 2.75 GPA in the last half of the undergraduate program) and the departmental admission requirements as stated in The Graduate Catalog. Specialist's degree admission requires a 3.3 GPA in the completed master's program. For doctoral degree admission status see the Doctoral Degree section of this catalog.

Conditional Admission

Condition 1: Curriculum Deficiencies is a conditional admission for students who meet the degree admission requirements of the Graduate School, but have curricular deficiencies in their undergraduate program and/or other departmental standards and therefore do not meet departmental admission requirements. In such cases, special conditions are noted on the departmental recommendation form and these must be completed prior to gaining degree admission.

Condition 2: Senior Status is a conditional admission granted to candidates completing an undergraduate degree at the end of the current semester and is valid for one enrollment period only. This condition is removed when the student submits an official undergraduate transcript with the baccalaureate degree posted.

Condition 3: English as a Second Language Program is a conditional admission status granted to international non-native speakers of English who scored below the required minimum score in the English proficiency exam (TOEFL and the Test of Written English, or MELAB) and will be required to elect appropriate ESL courses. The ESL courses are determined by the ESL program staff based on the candidate's score and a placement examination. The examination is administered by the English as a Second Language program staff at Eastern Michigan University prior to the beginning of each term.

Non-Degree Admission

The purpose of graduate study at Eastern Michigan University is a planned program of study leading to an advanced degree. Students who are exploring graduate study opportunities may enroll in a non-degree status. Non-degree students may enroll under this status for any of the semesters or sessions (fall, winter, spring or summer). Students can transfer from non-degree student status to degree status if they meet departmental and Graduate School requirements (see Transfer of Credit to Degree Programs from Non-Degree Student Status). Policy states that a student must complete a minimum of 10 semester hours after admission to the degree program. Subject to University policy, non-degree students can earn a graduate certificate in such programs as artificial intelligence, gerontology, and state and local history.

Credits earned do not automatically apply toward a degree program but are dependent upon admission to the Graduate School, the requirements of the program, recommendation by an adviser, and the approval of the Graduate School.

Status 1: Academic Deficiencies is a non-degree admission status granted on the recommendation of the academic department to candidates who do not meet the minimum undergraduate grade point average (2.5 GPA) requirement of the Graduate School or the academic department GPA requirements, whichever is higher; or who have graduated from a non-accredited academic institution; and/or have demonstrated the potential to perform graduate level work at Eastern Michigan University. This type of admission provides students with an opportunity to demonstrate that they can be successful in a graduate program at EMU by completing a minimum of nine and no more than 12 graduate level credit hours specified by the department, while maintaining good academic standing (3.0 GPA). The hours elected as a non-degree admission

candidate can only be applied to a graduate degree program upon the recommendation of the coordinator of graduate advising. It should be specifically noted that successful completion of nine and not more than 12 graduate level credit hours with a 3.0 GPA does not guarantee, nor does it constitute admission to a graduate degree program.

Status 2: Professional Certification is a non-degree admission status granted to certified teachers and other professionals in education who explicitly indicate that they do not intend to pursue a graduate degree program but wish to enroll only in graduate level courses to meet professional certification requirements. The academic courses which are elected via the non-degree admission status do not follow a prescribed graduate degree program and do not earn the student a graduate degree.

Status 3: Continuing Education Courses is a non-degree admission status granted to students who enroll in courses through Continuing Education. Courses taken under this non-degree admission status do not automatically apply to a graduate degree. Students intending to use graduate-level courses offered through the Division of Continuing Education on a degree program must seek formal admission to a graduate degree by completing an admission application and providing the Graduate School with official transcripts. The applicability of the courses to a degree program is subject to acceptance by and recommendation of the department offering the degree, and the approval of the Graduate School.

Status 4: Personal/Professional Development is a non-degree admission status granted to candidates who wish to enroll in graduate level courses for self-enrichment purposes and/or participate in a graduate certificate/advanced graduate certificate program. Courses taken under this admission status do not automatically apply to a graduate degree at Eastern Michigan University.

Teacher Certification

Students interested in taking undergraduate courses for the purpose of teacher certification may do so as non-degree graduate students. A student must be admitted to the College of Education and have achieved a 2.5 grade point average in the baccalaureate degree in order to be admitted to a teacher certification program and obtain a provisional certificate. Students working toward teacher certification must take and pass the Basic Skills portion of the Michigan Test for Teacher Certification (MTTC) as a condition of admission.

Guest Students

Students who wish to earn graduate credit at Eastern Michigan for transfer to the parent institution may do so as non-degree students. Guest students in the College of Business must meet the standards for regular admission to business programs. This status is granted for one semester only but may be renewed with permission of the Graduate School.

Second Bachelor's Degree

Students wishing to pursue a second bachelor's degree are admitted to the University through the Undergraduate Admissions Office, Fourth Floor Pierce Hall. Application for admission and official transcripts of all prior academic work must be submitted. The prospective candidate should make an appointment with the coordinator of Second Bachelor's Degree Programs in the Academic Advising Center, 301 Pierce Hall (313) 487-2170 for evaluation of transcripts and development of a program of study. That program is approved by the appropriate academic department and is the basis of degree completion.

General requirements for a Second Bachelor's Degree are as follows:

- Completion of a first bachelor's degree from an accredited college or university with a minimum of 120 semester hours.
- Completion of a basic studies (liberal arts) program.

- Completion of a course in American Government or equivalent.

- Completion of curricular requirements for new academic major.

- Completion of a minimum of 30 semester hours post-baccalaureate at Eastern Michigan University.

- Second bachelor's degree students may enroll only in undergraduate courses.

Students holding a bachelor's degree from EMU may only pursue a second bachelor's degree different from their first one: i.e., a student with an EMU Bachelor of Science degree may pursue a Bachelor of Arts degree and, conversely, a student with an EMU Bachelor of Arts degree may pursue a Bachelor of Science degree. Students not pursuing a different degree may complete additional majors or minors to supplement the original degree.

PROCEDURES FOR GRADUATE ADMISSION

Degree Status

Complete and submit the application form and nonrefundable fee to the Graduate School Office. Submit official transcripts of all undergraduate and graduate credit at each institution attended. Transcripts must be in a sealed envelope directly from the university.

Where necessary, have official scores from national examinations submitted. (Departments requiring test scores state this in The Graduate Catalog.)

Please note the following deadline schedule for receiving all application materials required for admittance to a degree program at Eastern Michigan University:

Fall admission	March 15
Winter admission	September 15
Spring/Summer admission	February 15

Because of the complexity of processing foreign student applications, earlier deadlines have been established for this population. Please contact the Foreign Admissions Office, (313) 487-3061, for these deadlines.

Applications received after the above established deadlines will be moved to the next open application semester; i.e., an application for fall semester received April 1 will be processed for winter semester.

All documents and supporting data required for admittance become the property of the Graduate School and will not be returned to the applicant.

Applicants are not officially admitted to a graduate academic program until they have been notified in writing of acceptance by the dean of the Graduate School.

Non-Degree Student Status

Complete and submit the application form and nonrefundable fee to the Graduate School Office.

Submit official transcripts of all undergraduate and graduate credit at each institution attended. Transcripts must be in a sealed envelope directly from the university.

Students may enroll for as many enrollment periods as they wish with non-degree student status. Students holding non-degree student status are not eligible to enroll in undergraduate or graduate business courses.

International Students

The Graduate School considers an applicant an international student if either or both of the following are true:

- applicant received a baccalaureate degree from an institution outside the United States;
- applicant currently holds or will hold F-1 (student) or J-1 (exchange visitor) visa status.

For admission, international students must:

meet the minimum academic requirements for admission to the Graduate School (e.g., a bachelor's degree or its equivalent from an accredited institution); submit evidence of proficiency in the English language; present a statement of financial responsibility; provide two letters of recommendation from administrators or professors in the college or university from which the applicant holds a bachelor's degree; and submit official scores on a standardized test (GRE, GMAT) if required for admission to the selected degree program.

The Graduate School requires that all international students applying for admission and residing in this country or abroad demonstrate proficiency in the use of the English language. This may be done one of two ways:

1. Taking the Test of English as a Foreign Language (TOEFL) and the Test of Written English (TWE).
2. Taking the Michigan English Language Assessment Battery (MELAB) at the English Language Institute, University of Michigan, Ann Arbor, Michigan.

For information on these two tests, write or telephone:

Test of English as a Foreign Language
Education Testing Service
Princeton, New Jersey 08540
Telephone 1-609-921-9000

English Language Institute
University of Michigan
Ann Arbor, Michigan 48109
Telephone 1-312-764-2416

The scores received on the TOEFL or the Michigan English Language Assessment Battery (MELAB), formerly the Michigan Test, must be submitted to the Graduate School office before consideration can be given to the student's application.

English as a Second Language (ESL)

English as a second language (ESL) courses are taught in the Department of Foreign Languages and Bilingual Studies.

Three levels of ESL instruction are offered, intermediate, advanced and academic support, in both fall and winter terms. Only advanced and academic support levels are offered in the combined spring-summer term.

Students admitted with an official (not institutional) score of 80 or above on the Michigan English Language Assessment Battery (MELAB), or a score of 500 or above on the Test of English as a Foreign Language (TOEFL) and a score of 5/6 (determined by departmental requirement) on the Test of Written English (TWE) will not be required to take any ESL courses. They may choose to take an ESL class if they wish to further improve their ability.

Students admitted with a Michigan English Language Assessment Battery (MELAB) score below 80 or a TOEFL score below 500 are required to take the departmental placement test before registration.

This test is usually given the week prior to the beginning of the semester. All students required to take this test must be on campus at that time.

Depending upon the results of the placement test, students will be placed in either part-time or full-time English (two, three, four or five courses of ESL) during their first semester.

Those students taking part-time English will be allowed to register for other University classes. Students placing in full-time English may not take any other University courses until a later semester. Some students may require two consecutive semesters of full-time English before they can register in other courses.

Once placed in ESL courses, students must complete each course with a grade of "C" or better. Successful completion of a

course allows the student to move on to the next higher level of that course in the following semester. Students starting below the 400-level must continue to enroll in ESL courses until two 400-level courses are taken. Students must repeat all ESL courses in which they receive a "C-" or below.

When students have successfully completed ESL 412 and ESL 414 or 416, their admission status is changed from conditional to regular. Admission status is based on the first English proficiency score that students send to the University. If a later test results in a higher score, it also should be sent to the Admissions Office. All scores must arrive in the Admissions Office two weeks before the first day of the term.

Failure to enroll in the required ESL courses during the first semester and any required subsequent semesters will result in the cancellation of University enrollment and a possible loss of tuition for that semester.

Regular University academic probation and dismissal policies apply to students who are enrolled in ESL.

Fall Term

Intermediate ESL 210, 212, 214, 216
Advanced ESL 118, 310, 312, 314, 316
Advanced Support ESL 412, 414, 416

Winter Term

Intermediate ESL 210, 212, 214, 216
Advanced ESL 118, 310, 312, 314, 316
Academic Support ESL 412, 414, 416

Spring/Summer Term

Advanced ESL 118, 310, 312, 314, 316
Academic Support ESL 412, 416

The following is a brief description of the ESL courses:

Grammar

ESL 210 Intermediate Grammar continues to teach the basic components of the simple sentence.

ESL 310 Advanced Grammar presents the formation and usage of clauses, the sequence of verb tenses in complex sentences and the more refined uses of English grammar.

Writing

ESL 212 Intermediate Writing focuses on paragraph construction while teaching unity, cohesion and transition.

ESL 312 Advanced Writing teaches rhetorical patterns in composition length papers.

ESL 412 Academic Support Writing continues practice with rhetorical patterns in compositions and guides students through the process of researching, outlining and writing an original research paper.

Reading

ESL 214 Intermediate Reading moves from personal narratives to informational reading in simplified English. Vocabulary developing techniques and reading skills are taught.

ESL 314 Advanced Reading continues to provide practice in reading and analyzing unsimplified passages of greater length and linguistic complexity.

ESL 414 Academic Support Reading promotes reading in specialized fields at professional levels and provides practice in outlining, summarizing and synthesizing ideas from different sources.

Speaking/Listening

ESL 118 Elementary ESL Lab. Must be taken concurrently with ESL 316.

ESL 216 Intermediate Speaking/Listening provides practice in sustained interchange of social conversation and in discreet point listening.

ESL 316 Advanced Speaking/Listening continues to develop conversational skills and prepares students to present short mono-

logues and comprehend short lectures. Must be taken concurrently with ESL 118.

ESL 416 Academic Support Speaking/Listening focuses on academic oral/aural skills; lecture comprehension, note-taking essay exam preparation and group speaking strategies.

All levels of this skill area have accompanying lab work and/or classes.

English for Special Purposes

The Department of Foreign Languages and Bilingual Studies also offers courses for non-native speakers preparing to enter the specialized fields of business and technology. These courses develop language skills necessary for professional settings.

GRADUATION REQUIREMENTS

Before receiving a diploma, certain requirements must be fulfilled. It is the student's responsibility to see that all requirements are met.

Graduation Fee

A non-refundable graduation fee of \$35 is to be paid when a student makes application for graduation.

Application for Graduation

Candidates for graduation must submit to the Graduate School Office a Diploma Application at the time of registration for the semester or session in which they plan to complete requirements for a graduate degree.

Fall registration for December graduation

Winter registration for April graduation

Spring registration for June graduation

Summer registration for August graduation

Diploma applications may be obtained in the Graduate School Office; applications also may be found in the Class Schedule Book. The completed application, together with the application fee, should be turned in at the Cashier's Office, Pierce Hall.

Failure to apply for graduation will result in a delay in receiving the degree.

A candidate for graduation who enrolls at another college or university for credit to be transferred to Eastern Michigan University and applied toward meeting degree requirements must submit an official transcript of such credit not later than one month prior to the closing date of the semester in which the degree is to be awarded. Delay of at least one enrollment period in granting the degree will result if transfer credit has not been received by this time. Grade reports and/or letters from instructors will not be accepted in lieu of official transcripts. Students completing their degree work at the close of the summer session should expect to receive their degree verification letter two or three weeks after the close of the session. Special requests for advance verification cannot be honored. The student's degree recommendation letter documents the University's degree verification process and can be used to inform any employer of the date when the student's degree verification can be expected.

Grade Point Average Requirements for Graduation

The grade point average requirement for graduation applies to:

- all graduate credit earned at Eastern Michigan University;
- all graduate credit included in the area of specialization.

Only grades received in courses taken for graduate credit at Eastern Michigan University are used in computing a student's grade point average. Grades received in courses accepted as transfer credits are not included in the grade point average.

With the revised grade point scale that was instituted in fall 1979, some students graduating will have grade points on the permanent record and averages consisting of a mix of the old "A" = 8.0 and the new "A" = 4.0 systems. Questions with respect to calculation and interpretation should be directed to the records supervisor in the Graduate School Office, Starkweather Hall.

Credit Requirements

The minimum credit requirement for the specialist's degree is 32 hours beyond the master's; the master's degree requires 30 hours. Some programs have credit requirements in excess of these Graduate School minimums. For the doctorate degree credit requirements, see sections on Doctoral Programs and the Department of Leadership and Counseling.

A program of study must be on file in the Graduate School Office by the end of the first enrollment period following degree admission.

Cognate Requirement

Cognates are defined as those supportive and complementary courses which are related to the area of concentration and are outside the department and/or college in which the degree is to be earned. Each program of study should include cognates. The number of hours associated with the component (specialist's and master's, usually six) is determined by each department.

For the cognate requirement associated with the specific degree program(s) of interest, see program description and graduation requirement.

Course Limitations

If courses in any of the categories listed below are used to satisfy the requirements of a graduate degree, no more than six hours in that category may be used:

Special Topics—course numbers 590, 591, 592, 679, 680, 681

Independent Study—course numbers 697, 698, 699

Seminar—course numbers 693, 694, 695, 696

Workshop—course numbers 594, 595, 596, 682, 683, 684, 685

Thesis/Final Project—course numbers 690, 691, 692, 790, 791, 792

Correspondence Courses—No more than four hours of approved correspondence courses may be used on a graduate degree; Graduate School approval required; contact Office of Continuing Education for details.

Not more than 12 hours of special topic, independent study, seminar, and workshop courses, in combination, may be used on a graduate program of study.

RESIDENCY REQUIREMENTS

The doctoral requirement for residence following the master's degree is met by the completion of sixteen (16) credit hours of course work, exclusive of dissertation research, during two adjacent semesters. Only course work taken on the University's main campus in Ypsilanti satisfies the residency requirement. Student is directed to read specific department requirements.

For the specialist's degree, at least 16 hours of credit must be earned on the campus in Ypsilanti. It also is expected that one semester or two summer sessions will be spent in full-time work on the campus.

For a master's degree, at least six hours of graduate credit used on a degree program must be earned on campus in Ypsilanti. This requirement also may be met by enrollment in travel-study tours sponsored by Eastern Michigan University and at the facilities at the Kresge Environmental Center.

Enrollment in a Division of Continuing Education course that meets on the campus in Ypsilanti may fulfill this residency requirement.

TIME LIMITATIONS

Students have seven years to complete the requirements for the doctoral degree. For additional information on time limitation policy, read the section on doctoral programs.

All requirements for a specialist's degree are expected to be completed within six calendar years if a master's degree is held at time of first enrollment, and within eight calendar years if a bachelor's degree is held at time of first enrollment. Graduate credit that is more than six/eight years old respectively, prior to the date on which the degree is to be granted, is not counted toward meeting graduation requirements without validation.

All requirements for a master's degree are expected to be completed within six years from the time of first enrollment. Courses used on a master's degree program that are over six years old are out of date for use on the program. It is possible to validate out-of-date credit for use on a degree program if the appropriate procedure available in the Graduate School is followed. Validation of out-of-date credit is dependent upon the requirements of the program on which they are to be used, the recommendation of the adviser, and the approval of the Graduate School.

Graduate students admitted to the Graduate School prior to September 1, 1971, have had the option of applying four hours of out-of-date course work to a degree program without validation. This option is no longer available. As of fall, 1988, all out-of-date credit (no older than 15 years) must be validated if it is to be used on a degree program. No more than 15 hours of out of date credit can be validated. For additional information on the policies and procedures governing validation, contact your adviser or the Graduate School.

Graduate students files are kept for a period of six years in either an active or inactive category. If there is no student action in the form of updating one's status, filling out a transfer request to another program area, or active enrollment after a period of six years then the student file is purged and a Permanent Record Card (PRC) becomes the only information retained on a student.

TRANSFER OF CREDITS TO DEGREE PROGRAMS

From Other Institutions

Applicable graduate course credit may be accepted from other accredited doctoral institutions, and may be included in a doctoral candidate's program, if approved by the student's doctoral committee, the department head, and the graduate dean. Credits requested for transfer must be consistent with the Graduate School's policy concerning time limits for completing degree requirements. A maximum of nine semester hours of graduate transfer credit may be allowed on a doctoral program.

Of the total number of credit hours required for specialist's degree programs, a minimum of 24 hours must be taken at this University; and, for the master's degree program, a minimum of 18 semester hours must be taken at Eastern Michigan University. Any graduate credit transferred must:

- be applicable to the degree program;
- have associated with each course a grade of "B" or higher;
- be viable in terms of the six year time limitation for completion of degree requirements;
- appear on an official graduate transcript from an accredited degree granting institution;
- be upon recommendation of the adviser and the approval of the Graduate School.

Such credits are recorded on the student's permanent record card only when a program of study is on file in the Graduate School. Some departments have specified a more limited transfer credit policy; see individual department.

From Non-Degree Student Status

Students admitted to non-degree student status may apply for admission to a degree program after meeting all special entrance requirements, including any test requirements, of the academic area of specialization selected. Admission Transfer Request forms are available in the Graduate School Office and must be submitted to that office at least two months prior to the semester or session that transfer is contemplated. A request for admission to a degree program will be approved only upon written recommendation of the coordinator of graduate advising in the area of specialization.

Credits earned while on non-degree student status do not automatically apply to the requirements of a degree program. Transfer of credits depends upon the requirements of the program, the recommendation of the adviser, and the approval of the Graduate School Office. *A student transferring from non-degree student status must complete a minimum of 10 graduate hours after admission to a degree program.*

From Previous Master's Degree

On occasion, individuals may wish to obtain another master's degree. Appropriate credit from a previous master's degree may be applied to the second program under these conditions:

- the degree be in a discipline different from the previous master's degree;
- not more than six semester hours of appropriate credit may be applied.

INDEPENDENT STUDY

Independent study is designed to enable graduate students to pursue academic interests beyond those normally covered in conventional courses. Independent study is structured on a tutorial basis, affording opportunity for student and faculty interaction on a project of joint interest. *No more than six hours of independent study may be used on a degree program.*

Expectations Regarding Instructional Requirements

A clearly defined proposal for the study is presented by a student and approved by a professor before enrollment.

Regular student/faculty meetings to monitor progress and to provide assistance are held.

Evaluation is established on the basis of the completed product.

THESIS

Aside from independent study, more opportunity for the degree student to demonstrate individual initiative and creativity is provided by a number of departments where the writing of the thesis is offered either as an option or as a requirement. Taken toward the end of a student's program of study, it serves as a capstone experience affording an opportunity for the integration of one's specialized subject matter. *No more than six hours of thesis may be used on a degree program.*

Guidelines and requirements governing this activity are available through the departments and the Graduate School.

GENERAL REGULATIONS

Once degree admission to the Graduate School has been granted, but prior to graduation, various policies and procedures regulate the pathway to the degree.

REGISTRATION INFORMATION

Students may not attend classes unless they are properly registered and have paid appropriate fees.

New students who have satisfied all admission requirements are eligible to register by telephone. (See the current class schedule booklet color insert for telephone registration procedures).

Returning students who have not been enrolled during one of the four preceding enrollment periods, must complete a student

information update form from the Graduate School before attempting to register.

Registration

Graduate students register for on-and off-campus classes via telephone registration and in accordance with the procedures for telephone registration as they are described in the class schedule booklet which is issued each semester or session.

Adviser's Signature on the Enrollment Plan

An adviser's signature is required for students in degree programs in business, economics, geography, hearing impaired, history, industrial education, industrial technology, mathematics, music, psychology, public administration, social foundations, sociology, speech and language impaired. Other students enrolling in either business or industrial education courses also must obtain the departmental adviser's signature before registering. Students on degree programs who do not obtain the adviser's signature assume full responsibility for their registrations. Courses that do not satisfy requirements on the student's program of study will not be applied toward the degree.

Registration in Undergraduate Courses

Some upper division 400-level undergraduate courses are identified in this catalog as available for graduate credit. Graduate School authorization for graduate credit must be obtained by the student before enrolling in these courses.

Some departments make no provision for the use of upper division courses on a graduate degree program; others make only limited use. In no case, however, may the number of upper division courses exceed nine semester hours. See Undergraduate Courses for Graduate Credit at the back of each departmental section of this catalog.

Students should consult their department regarding its policy before seeking Graduate School authorization to enroll in upper division courses for graduate credit.

AUDITING COURSES

Graduate students who wish to audit a course must register for audit status and pay the same tuition and fees as for academic credit enrollment. No student may receive academic credit for audited courses. See class schedule for audit deadline.

ACADEMIC LOAD

Twelve hours of graduate credit for the fall or winter semester is the usual full-time load. The usual full-time load for the spring or summer session is six hours.

The recommended academic load for graduate students employed in remunerative work on a full-time basis is six credit hours per semester. Special permission for a program in excess of this must be obtained from the adviser.

Course loads in excess of the 12-13 hour limit for the fall and winter semesters, and eight hours for spring and summer sessions, are not permitted. In addition, a maximum of two courses may be taken during the year through such programs as Adventures in Education (e.g. Petoskey and Traverse City), offered through Continuing Education.

Since graduate assistantships are granted for the support of students making substantial academic progress, each person holding an assistantship is expected to enroll for a minimum of six credit hours per semester during the period of appointment. For the spring/summer session, two or three hours per session are required. For Title IV programs, veterans' benefits purposes and loan deferment purposes, the following formula is used: (Please note that per federal requirements, a student must be enrolled in at least four semester hours to be considered a half-time student.)

With regard to loan deferments, please note credit hours required for full-time student status.

Fall and Winter Semesters

maximum load: 12-13 hours

full-time student: eight to 12 hours

half time student: four to seven hours

less than half-time student: less than four hours

Spring/Summer Sessions

maximum load: eight hours

full-time and half-time student: four hours

less than half-time student: less than four hours

REPEATING COURSES

For a variety of reasons, students sometimes find it desirable to repeat a course. When this occurs, the grade received in the second attempt is substituted for the first in the computation of the student's grade point average. However, the first grade remains on the record. A course may be repeated only once, and then only those courses in which grades of "E," "C-," "C," "C+," or "B-" were received the first time.

UNDERGRADUATE COURSES FOR GRADUATE CREDIT

1. Effective with the winter semester 1983, no 300-level course work is permitted in earning of any graduate degree at Eastern Michigan University. (This will affect new students only and will not be applied retroactively to students admitted prior to winter semester 1983.)
2. Before enrolling in approved 400-level courses, students must (a) obtain recommendation of their adviser; and (b) written permission from the Graduate School. This approval must be obtained no later than three weeks into the semester (fall/winter); no 400-level courses will be approved for graduate credit after that time.

COURSE NUMBERING SYSTEM

400-500: For advanced undergraduates and graduate students. Lists of senior level courses available for graduate credit are found toward the end of the departmental sections in the Graduate Catalog. Students must obtain approval of the Graduate School before enrolling for such courses. To achieve graduate credit for a 400-level course, the student must do work at the graduate level. The 500-numbered courses are open to advanced undergraduates under existing policies; see Enrollment in Graduate Courses by Advanced Undergraduates.

600: For graduate students only.

700-800: Courses that are utilized on the doctoral and specialist's degree programs and other advanced level graduate work as well as the master's in fine art.

GRADING SYSTEM

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

Grade Point	Per Semester Hour	Effective Fall 1979
A	Outstanding Performance	4.0
A-		3.7
B+		3.3
B	Good Performance	3.0
B-		2.7
C+		2.3
C	Inadequate Performance	2.0
C-		1.7
E	Failing Performance	

Graduate students' academic records are kept on permanent file in the records division of the Graduate School, Starkweather

Hall. Unless there are past due financial obligations, students may get an official transcript of their complete records by requesting them in writing from the Academic Records and Certification Office, 302 Pierce Hall, and upon payment of the transcript fee specified.

Credit/No Credit

The Graduate School awards credit/no credit only in theses, practica, selected field work, selected independent study courses and special cases such as exhibitions in art.

Academic departments may recommend to the graduate dean those appropriate types of courses for inclusion on the approved list of credit/no credit courses. It is not a student's prerogative to elect a course for credit/no credit; only previously designated courses are available for such credit.

To receive credit for a credit/no credit course, a student must perform in a manner equal to the "B" level according to the judgment of the faculty supervising the student's work.

"I" (Incomplete)

An "I" grade is awarded when these conditions prevail: illness or extenuating circumstances beyond the control of the student which have prevented completion of the required components of the course; academic performance for the completion portion of the course was equivalent to a grade of "B" or better.

In such cases, the instructor will provide the student and the department head with a statement of the reason or reasons for the "I" grade and will specify the amount and nature of the work required in order to remove the incomplete.

An "I" grade must be removed within one calendar year from the end of the semester or session in which that grade was issued; one and one-half calendar years from the beginning of the semester of registration for correspondence courses. The time for removal of an "I" may be extended upon written recommendation of the instructor and approval of the graduate dean. An extension will be granted only under unusual circumstances. The initiative for conversion of an "I" to a letter grade rests with the student. If not converted to a letter grade by the end of the one year period, the "I" will remain as a permanent part of the student's academic record.

Incompletes received in thesis type courses are not governed by these regulations.

"W" (Withdrawal)

The grade of "W" will be assigned only when the previously described withdrawal process has been completed. If a student stops attending a class without officially withdrawing, the grade of "E" will be assigned for the course. Requests for a grade change of an unearned "E" to "W" will be accepted no later than the semester following the semester of the grade; i.e., an unearned "E" received in the fall semester must be appealed during the following winter semester. No other requests will be honored.

ATTENDANCE

Students who find it necessary to be absent from classes in order to observe major religious holidays may arrange with their instructors to make up work, including examinations, that they miss as a result of their absence. If satisfactory arrangements cannot be made with the appropriate instructors, students may appeal to the head(s) of the department(s) in which the course(s) is/are offered.

Expectations regarding class attendance should be included in the printed syllabi which instructors distribute at the beginning of the semester.

WITHDRAWAL

Policy and procedures have been established for withdrawal from the University and from individual classes. Because of this, appropriate procedures must be followed; *non-attendance and/or*

non-payment of tuition does not absolve one of academic and financial responsibility nor does it constitute withdrawal.

WITHDRAWAL FROM INDIVIDUAL CLASSES

First Three Weeks—Students who find it necessary to reduce their academic load may do so as part of the registration adjustment process at the Registration Office.

Fourth Through 10th Week—During this period, a student completes a Request for Withdrawal from Class form in the Registration Office, 302-303 Pierce Hall. The student will receive a grade of "W" in each course if officially withdrawn during this period.

Beginning with the 11th Week—Students may withdraw from individual classes with a grade of "W" for any reason up to one week before the end of the semester, providing the academic performance in each course (graduate/undergraduate) is a grade of "B" or better at the time of withdrawal. Poor academic performance is not recognized as a valid reason for withdrawal. Because of this, students not performing at least at "B" level will be denied permission to withdraw with a grade of "W." Exceptions may be granted when due to extended personal illness, verifiable by a physician's statement, or death in the student's family. Withdrawal forms are obtained from the Graduate School.

Prior to considering withdrawal, a student should consult with the instructor(s). Students should not stop attending class until they have received official notification that their withdrawal has been approved. If a student stops attending class without officially withdrawing from the class and does not take the final examination, University policy requires that the instructor assigns a grade of "E" for the course.

Policies governing the refund of tuition and fees are to be found in another section of this catalog.

The class schedules should be consulted for the calendar regulating withdrawals.

See Tuition and Fees section of this catalog for more information.

WITHDRAWAL FROM ALL CLASSES

Students may withdraw from all classes up to one week before the end of the semester (withdraw from the University) for a given enrollment period for any reason and receive grades of "W" for all courses in which they are enrolled.

ACADEMIC PROBATION AND DISMISSAL

ACADEMIC PROBATION

A graduate student (degree/non-degree) is placed on academic probation at the end of the semester in which his/her cumulative grade point average in courses taken for graduate credit at Eastern Michigan University is less than 3.0 ("B" average) based on the student's completion of at least six graduate hours. A graduate student placed on academic probation who does not remove his/her probationary status at the end of the next two periods of enrollment (spring and summer equal one enrollment period) is dismissed from the University for academic reasons.

1. At the end of any semester in which a student's cumulative grade point average falls below a 3.0, he/she is placed on academic probation. A letter is sent to the student from the Graduate School indicating the probationary status.
2. In the case that a student's cumulative grade point average is still below 3.0 at the end of the subsequent period of enrollment, the student will remain on academic probation.
3. A letter is sent to the student from the Graduate School indicating that enrollment in only one more semester will be allowed.

4. If the student's cumulative grade point average remains below 3.0 at the end of the third semester of probation he/she is dismissed from the University.
5. If at any time a student's cumulative honor points are 15 or more points below those required for a "B" in all completed graduate level courses, the student will be dismissed.

When the student's cumulative grade point average rises to 3.0 or above during any probationary period, the student is removed from academic probation.

DISMISSAL PROCESS

At the end of the third consecutive enrollment period in which any graduate student has a cumulative grade point average of less than 3.0, the student is dismissed from the University. A letter of dismissal is sent to the student from the Graduate School.

After the dismissal letter is received, the student may appeal the expulsion from the Graduate School and the University by submitting an appeals petition (letter form) for re-entry to the Graduate Dean. This petition should include information that reveals the causes of the student's academic problems, the modifications/changes in the student's individual situation which have occurred and how such will presumably help to rectify the situation; and the student's proposed plan of action to become successful in his/her graduate studies.

APPEAL PROCESS

Upon receipt of the appeals petition, it is the responsibility of the dean of the Graduate School to uphold the dismissal decision, re-admit the student, or initiate the appeals process with the Academic Dismissal Appeals Board. A review by the board may not be considered for dismissed students with a GPA of less than 2.0 unless extreme circumstances can be documented.

- A. The dean of the Graduate School will notify the chair of the Academic Dismissal Appeals Board.
- B. An appeals hearing is to be held within 30 days of the receipt of the appeals petition.
- C. The appeals hearing will adhere to the following guidelines:
 1. A detailed record shall be kept of the hearing, preferably a taped sound recording.
 2. The student shall be permitted an adviser. The adviser must be a member of the University community (staff, full-time faculty or student.)
 3. The hearing shall be open unless the student requests a closed hearing.
 4. The student may call witnesses and the Academic Dismissal Appeals Board may question the witnesses called.
 5. All deliberations of the Academic Dismissal Appeals Board will be in executive sessions.

THE ACADEMIC DISMISSAL APPEALS BOARD

- A. The Academic Dismissal Appeals Board, which will serve for one year, will consist of a chair and four members.
 1. The chair will be selected by the dean of the Graduate School from the membership of the Graduate Council.
 2. Two members of the Academic Dismissal Appeals Board will be selected by the dean of the Graduate School from the membership of the graduate faculty.
 3. Two members of the Academic Dismissal Appeals Board will be selected by the dean of the Graduate School from the student members of the Graduate Council.
- B. The chair does not have voting rights except in the case of a split decision.

ADDITIONAL APPEALS

An additional appeal will be considered only if new evidence is presented.

REGARDING TEACHER CERTIFICATION

Students who seek provisional teacher certification must be admitted to the College of Education. Among the prerequisites for admission are a minimum overall undergraduate GPA of at least 2.50, a minimum GPA of 2.50 in the teaching major or three minors, and a letter of recommendation. In addition, applicants are required to take the Michigan Test for Teacher Certification (MTTC) Basic Skills Test. More information concerning admission standards and procedures is available in the College of Education Admissions Office, 101 Boone Hall.

Most questions regarding teacher certification should be directed to:

Provisional Certificate

Office of the Registrar
Third Floor, Pierce Hall
Ypsilanti, Michigan 48197
(313) 487-4111

Professional or Renewal Certificate

Nancy Dahl
Office of Continuing Certification
101 Boone Hall
Ypsilanti, Michigan 48197
(313) 487-0275

In some unusual circumstances, it may be desirable to seek information from the state office. In those cases, write to:

Michigan State Department of Education
Teacher Education and Certification Section
Box 30008
Lansing, Michigan 48909

PROVISIONAL CERTIFICATION

(Students who hold a bachelor's degree)

Graduates of Michigan Institutions

A graduate of a Michigan institution must be recommended for certification by a Michigan teacher training institution. The certificate will usually be recommended by the institution offering the professional education program. When part of the professional education courses were completed at the degree granting institution, it may be advantageous to ask that institution to make the recommendation and approve the balance of requirements being completed at Eastern Michigan University.

Graduates of Approved Out-of-State Teacher Training Institutions

1. Persons with an earned bachelor's degree who hold a currently valid teaching certificate in another state based on the completion of an approved teacher education program in that state may apply to the Michigan Department of Education for a Michigan provisional certificate. Application forms are available in the Office of the Registrar, Third Floor, Pierce Hall.
2. Persons who have completed 12 or more academic credit hours on an education program at a regionally accredited out-of-state institution approved for teacher training may apply to the Michigan Department of Education for an evaluation of their credentials to ascertain what courses they will need to take to qualify for a Michigan provisional certificate. Application forms are available in the Office of the Registrar.

The student then applies for admission to the Graduate School and submits a copy of the plan of work prepared by the Michigan Department of Education to The Graduate Office.

3. Graduates who do not fit category 1. or 2. must be recommended for certification by a Michigan teacher training institution. Although requirements vary depending upon the

curriculum pursued, the basic minimum requirement for recommendation for certification is normally 30 semester hours work with Eastern Michigan University. Information about the specific requirements for certification may be obtained from the EMU Office of the Registrar. A written plan of work will be provided on request, following admission to the Graduate School.

Elementary endorsement to secondary certificate or secondary endorsement to elementary certificate

Persons seeking to qualify for an additional provisional certificate must complete a minimum of 18 semester hours of credit following the first certificate, that includes the appropriate methods courses and 3-4 hours of student teaching or proof of two years teaching experience appropriate to the level of certification sought. A written plan of work will be provided by the Office of the Registrar on request, following admission to the Graduate School.

Additional teaching majors and/or minors

Persons who seek to broaden their teaching qualifications by the addition of majors and minors do so by completing the course work required.

1. Minor—a minimum of 20 hours in courses appropriate to the pure minor or 24 hours in a group minor.
Major—a minimum of 30 hours in courses appropriate to the pure major or 36 hours for a group major.
2. Students should contact the Office of the Registrar for information about course requirements. Departmental approval may also be required. A copy of the approved plan of study must be placed on file in the Graduate School.

Renewal of a Provisional Certificate

Persons whose provisional certificate has been permitted to expire without having acquired three years of successful teaching experience may renew the certificate by completing 10 hours of approved credit after the issuance of the provisional certificate. Application to renew an expired certificate is made through an approved teacher training institution where a person has earned at least 10 semester hours of approved credit following the provisional certificate as part of the 18 hour planned program for a professional certificate.

Certification in special fields

(art education, physical education, industrial education, special education, home economics, music, reading): Persons seeking certification in a special field should contact the Office of the Registrar for more information. A copy of the approved plan of work must be placed on file in that office.

PROFESSIONAL CERTIFICATION*

Persons may apply for the professional certificate upon completion of three years of successful teaching and 18 semester hours of credit on a planned program after the date of issuance of the Michigan provisional certificate. The recommendation must be made by the Michigan teacher training institution which approved the 18 semester hour planned program and where the majority of the 18 semester hours was earned.

Students on master's degree programs appropriate to K-12 education may apply the first 18 hours of a degree program toward this requirement. For this reason, applicants seeking professional certification are strongly urged to seek admission to a degree program.

All other students who wish to be recommended for professional certification by Eastern Michigan University should have a plan of work approved by the Office of Professional Certification (College of Education, 101 Boone Hall) on file in the Graduate School Office before enrollment in course.

**To qualify for the professional certificate, all candidates must also satisfy the Michigan Department of Education's reading methods requirements (effective July 1, 1983).*

Use of Credit

Undergraduate credit earned to satisfy the requirements for a provisional certificate cannot apply to a graduate degree.

Graduate credit earned for a provisional certificate cannot apply to the requirements of a professional certificate.

Graduate credit earned for a professional certificate may apply to a graduate degree only if it meets the requirements of a degree program, the recommendation of the adviser and approval of the Graduate School.

SCHOOL PERSONNEL CERTIFICATES AND PERMIT FEES

Public Act 339 of 1988 authorizes collection of fees for teacher certification in Michigan in accordance with the fee schedule listed below. In addition, the Administrative Rules Governing the Certification of Michigan Teachers requires that an application for certification must be made no later than five years after credit requirements have been met. Payment of the fee is a certificate requirement that must be met prior to the issuance of your Michigan teaching certificate.

Effective October 18, 1988	In-State Applicant	Out-of-State Applicant
Original Application Fee		
Provisional teaching certificate	\$125	\$175
Professional teaching certificate	125	
Vocational temporary authorization	125	
Full vocational authorization	125	
Occupational education certificate	125	
Additional teaching certificate endorsement		50
Substitute teacher permit	25	
Full-year teacher permit	25	
Emergency permit	25	
Annual vocational authorization	25	
Duplicate certificate or authorization	10	
School psychologist certificate	125	175
Parent cooperative preschool certificate		50
Temporary special education approval		50
School administrator certificate for persons eligible for certificate on July 1, 1988	75	
School administrator certificate for persons eligible for certificate after July 1, 1988	125	175
School administrator endorsement	50	
School admission permit	125	
Renewal or Reinstatement Application Fee		
Provisional teaching certificate	75	
Professional teaching certificate	125	
Vocational temporary authorization	75	
Full vocational authorization	125	
Occupational education certificate	125	
School administrator	125	

ENROLLMENT IN GRADUATE COURSES BY ADVANCED UNDERGRADUATES

An advanced undergraduate student in good academic standing at Eastern Michigan University may register for specified 500-level graduate courses if recommended by the adviser and approved by the dean of the Graduate School. Credit so earned may be used for only one of two purposes:

- to meet the requirements of the baccalaureate degree, and thus receive undergraduate credit;
- to apply towards a master's degree, and thus receive graduate credit.

To be eligible to enroll in graduate courses, an undergraduate student must meet one of two criteria:

1. hold undergraduate admission at Eastern Michigan University, must have completed 76 hours or more of undergraduate credit, and have a cumulative grade point average of 2.5 in all course work taken at Eastern Michigan University;
2. hold undergraduate admission at Eastern Michigan University, be a participant in the undergraduate Honors Program, have completed at least 55 hours of undergraduate credit and have written authorization from the director of the Eastern Michigan University Honors Program.
3. Before enrolling in approved 500-level courses, students must obtain written permission from the Graduate School, Starkweather Hall.

Approval must be obtained no later than three weeks into the semester (fall/winter); there will be no 500-level courses approved for undergraduate students after that time.

Advanced undergraduate students who hold guest or special admission as an undergraduate are not eligible to enroll in graduate courses.

Permission to enroll in graduate courses as an advanced undergraduate should not prolong the completion of the undergraduate degree requirements.

The maximum number of graduate hours that can be taken as an advanced undergraduate student is 15. See Course Numbering System for level of courses available to advanced undergraduates.

There are several restrictions on the use of credit earned in graduate courses by advanced undergraduates:

Permission to take graduate courses does not represent degree admission to the Graduate School.

Students desiring to continue graduate study and utilize the graduate credit earned in courses taken as an advanced undergraduate must apply and meet all requirements for admission to the Graduate School and degree program.

Graduate courses taken for either undergraduate or graduate credit and taken prior to receipt of a provisional teaching certificate cannot be used to satisfy any requirement of the professional certificate.

Advanced undergraduates are not permitted to enroll in 600 and above numbered courses.

CONTINUING EDUCATION

Paul T. McKelvey
Dean
321 Goodison Hall
487-0407

Continuing Education offers flexible, innovative, and exciting credit course and program options available to all EMU students. This includes full or part-time, residential or commuter, graduate or undergraduate. Courses offered through Continuing Education are available at times, locations, and in formats that are convenient for students, balancing a full or part-time job, co-curricular activities, and/or family responsibilities with their college education. Credit earned in Continuing Education courses and programs is regular university academic credit.

Course Listings

Each semester, Continuing Education publishes a Course Bulletin listing the courses available that semester. These bulletins are available at the Continuing Education Office in 321 Goodison Hall and in display racks in various locations around the EMU campus. Since some courses are scheduled after the Course Bulletin is published, you may also want to stop by the office to check the course listing update posted in the hallway. You can also call 487-0407 with questions about the availability of a particular course.

As with all EMU courses, your academic adviser is the person best equipped to guide you and answer specific questions about which courses will meet the requirements of your program of study.

ACADEMIC PROGRAMS ABROAD

George Klein
Director
333 Goodison Hall
487-2424

In today's interconnected world, a global perspective is increasingly important and valuable. The Office of Academic Programs Abroad provides opportunities for EMU students to diversify and enrich their university education through several kinds of study abroad programs:

Semester-Long Programs

- 1) The European Cultural History Tour, offered fall semester, is a unique travel-study program that includes more than 40 cities in 18 countries throughout Europe, Russia, and the Mediterranean. Students and EMU professors visit major historic and cultural sites while pursuing in-depth academic studies in an interdisciplinary context. Up to 15 hours of credit are available in history, art, literature, and political science. Since its beginning in 1974, ECHT has grown to become the largest university-sponsored program of its kind in the country, drawing students from EMU as well as other colleges and universities throughout the United States and Canada. ECHT is also offered in summer. A program in Asia is anticipated for winter semester 1994.
- 2) Exchange with the University of Groningen, The Netherlands, available fall and winter semesters. A limited number of EMU students spend a semester in residence at the University of Groningen studying Dutch language, history, art, literature, society, and politics. All courses except Dutch language are taught in English. Tuition and housing costs are the same as a semester in residence at EMU.

Summer Intensive Language Programs

Intensive French, Spanish, and German language programs are available in Canada, Mexico, and Austria respectively, in settings of cultural immersion with additional instruction and supervision by EMU faculty. These programs are offered in cooperation with the Department of Foreign Languages and Bilingual Studies.

Other Summer Programs

A version of the European Cultural History Tour is available in summer, along with a variety of travel and residence programs that carry credit in such fields as art, business, economics, education, history, political science, and social work. These study abroad programs have taken students to countries in Europe, Asia, and Latin America.

Access to Programs Sponsored by Other Universities:

The Office of Academic Programs Abroad has a library of information on hundreds of study abroad programs sponsored by universities all over the world and offers comprehensive advising and assistance to interested EMU students. EMU students who qualify for financial aid may apply that aid to all EMU-sponsored programs and to many programs sponsored by other universities.

ADVENTURES IN EDUCATION

Karen Cline
 Coordinator
 314 Goodison Hall
 487-0407

Adventures in Education programs are all built around the concept of intensive shortened courses offered in beautiful resort-like or *adventurous* settings appropriate or relevant to the course content. Most Adventures in Education programs are held in the summer months or during other traditional breaks in the academic year. The students who take advantage of these programs do not fall into a stereotype. They include adult learners, traditional age undergraduates, teachers, and other seasoned professionals from many fields. The diversity of participants is a strength of the Adventures programs. A pre and/or post assignment is required for each course.

CONFERENCES AND INSTITUTES

Neeta Delaney
 Director
 304 Goodison Hall
 487-4045

Continuing Education's Office of Marketing and Special Programs is responsible for the administration of conferences and institutes. Although some conferences are held on an annual basis, new programs are added each year. Most range in length from two to ten days. Several credit and non-credit attendance options are typically available. Topics are most often tied to major national or international issues and/or targeted at certain professions. In addition to one or more University instructors, nationally known experts in the field are usually involved. All conferences and institutes involve additional fees.

INDEPENDENT STUDY (DISTANCE EDUCATION)

Michael McPhillips
 Coordinator
 327 Goodison Hall
 487-1081

The Independent Study Program allows you to enroll anytime and earn university credit without classroom attendance. The time limit for course completion is six months. When you register for a course through our Independent Study Program, you receive study guides, instructions, and all required assignments. In addition, all courses incorporate audio and/or video materials. Assignments, papers, and proctored exams are an integral part of each course. Courses are academically rigorous; students on probation may not enroll. For course listings and additional information, contact the Independent Study Office.

REGIONAL LEARNING CENTERS

In order to make it more convenient for individuals living in southeastern Michigan to take courses through Eastern Michigan University, Continuing Education offers a wide range of courses at a number of off-campus locations. These courses are coordinated through three EMU Continuing Education Regional Learning Centers located in Detroit, Flint, and Jackson and are listed in the Continuing Education Course Bulletin. Registration for these courses is no different than for any other course. See the Course Bulletin for details. For more information, you can either call the Regional Center directly or our main campus office at (800) 777-3521 long distance or (313) 487-0407 local.

Regional Learning Centers
 Detroit: (313) 831-5280
 Flint: (313) 762-0303
 Jackson: (517) 787-7265

WEEKEND UNIVERSITY

Arthur Hoover
 Coordinator
 321 Goodison Hall
 487-0407

Continuing Education's Weekend University program offers a wide range of undergraduate and graduate courses scheduled on the weekend. All Weekend University courses are held either on EMU's main campus or at the EMU Corporate Education Center. Among the many Weekend University offerings is a Weekend MBA program designed to meet the needs of students already in the workplace. For information about the Weekend University, call (313) 487-0407. For information about the Weekend MBA program, call the College of Business at (313) 487-4444.

For more information about EMU Continuing Education in general or about any of the specific programs or services, either call the appropriate numbers listed with each special program or the main office at (800) 777-3521 long distance or (313) 487-0407 local.

WORLD COLLEGE

Ray Schaub
 Director

Geoffrey M. Voght
 Associate Director
 307 Goodison (313) 487-4448

The World College serves as a facilitating and coordinating center for international education at Eastern Michigan University, promoting the development of global perspectives in University curricula. It is a center for international relations, developing and maintaining liaison with foreign academic institutions, governments and businesses, and serving as a clearing-house of information and referrals regarding internationally focused projects, programs, events, and activities in which EMU is involved.

The World College is not a traditional college in the sense of an academic unit having its own departments and courses, with faculty members teaching classes in academic programs with majors and degrees. Rather, it is a collegium of individuals committed to assisting EMU faculty and staff in internationalizing their own expertise and their offerings to students. The emphasis is on collaboration and cooperation with all members of the University community who seek ways to broaden their awareness and understanding of the world outside the borders of our country.

The three-fold mission of the World College is:

1. to increase educational opportunities for students and faculty abroad;
2. to develop contract-based international programs with educational agencies, governments and corporations both in the U. S. and abroad; and
3. to provide on-campus international learning opportunities for students, and on-campus international professional resources and development opportunities for faculty.

CAMPUS RESOURCES

COATINGS RESEARCH INSTITUTE

The Coatings Research Institute (CRI) was established in 1985 with the assistance of a major grant (totalling nearly one million dollars) from the state of Michigan. The institute is designed to conduct research and development efforts under contract to industry and government, and represents the formalization of research activities that started in 1980.

The CRI comprises a fully-equipped laboratory capable of conducting research ranging from the synthesis and modification of polymers to the formulation and testing of paints. Including the adjacent PRA (Paint Research Associates), the coatings effort comprises a microcosm of a large paint company including research, development, analysis, formulation, and testing capabilities.

The coatings effort occupies 12 thousand square feet of facilities with an additional three thousand under construction to house the Emissions Evaluation Center.

HURON INSTITUTE FOR CORPORATE LEARNING

Eastern Michigan University is in the forefront of education nationally, providing life-long learning opportunities in both its credit and non-credit programs. The Huron Institute for Corporate Learning delivers creative, cutting edge, learning opportunities to non-traditional, life-long learners. It is the non-credit service provider for Eastern Michigan University. The classroom setting for these tailored learning experiences can be the shop floor or the boardroom, whatever best fits the required learning outcome. It's highly innovative, professional staff have at their disposal creative tools and mechanisms that facilitate and enhance opportunities for Eastern's faculty to link with the educational needs of the public and private sectors. Conversely, the institute provides entities in the public and private sectors with easy access to University and national resources that can be utilized to meet continually changing, distinctive educational needs.

CENTER FOR CORPORATE LEARNING

Walter DiMontova
Director
119 Pearl Street
Ypsilanti, MI 48197
(313) 487-2977

The Center for Corporate Learning (formerly Center for Organizational Risk Reduction—CORR) is dedicated to providing innovative training, educational, research, development, and consulting services in all areas of risk reduction, including occupational health and safety, risk assessment and reduction, worker skills assessment and enhancement, and improved labor-management relations.

The center's programs help large organizations assess, prepare for and respond to risks to their physical, financial, and human resources especially as a result of rapid technological or organizational change.

The new and evolving economic and industrial environment required that industries develop alternative ways of organizing work, training employees, increasing labor/management cooperation, and ensuring workplace safety. The center's services are direct responses to these needs.

The center provides a broad spectrum of practical and professional services to large organizations from business, industry, and labor.

It has conducted a wide range of interventions for some of the largest corporations and labor organizations in the Midwest in areas such as emergency spill response and incident command for

hazardous materials incidents, worker skills evaluation and enrichment, auto industry education, and the analysis of lifelong learning centers.

CENTER FOR ENTREPRENEURSHIP

Patricia Weber
Director
34 N. Washington
487-0225

The Center for Entrepreneurship was established in January 1986 to provide training and build a network of peer support for entrepreneurs and heads of high-growth companies. Its services are based on a foundation of applied research designed to increase our knowledge of entrepreneurship and growth management.

The primary purpose of the center is to increase the number and success rate of Michigan entrepreneurs and of entrepreneurially managed firms. The desired end result is the stimulation of greater job creation as well as greater job stability in Michigan's economy.

The key objectives of the Center for Entrepreneurship are:

- To provide entrepreneurs and growth managers with success tools and skills,

- To foster public recognition and understanding of the achievements and accomplishments of entrepreneurs, and

- To foster interest in and appreciation of entrepreneurship among our youth.

Talented entrepreneurs cannot be created by universities. But they can be helped to be more successful if trained in the use of the tools and skills required to run a growing business. The center is a vehicle for helping to develop and disseminate these tools and skills.

CENTER FOR PUBLIC SERVICE (INSTITUTE FOR COMMUNITY AND REGIONAL DEVELOPMENT (ICARD))

Charles M. Monsma
Director
34 N. Washington
487-0243

ICARD is a public service unit of Eastern Michigan University. Its purpose is to make the expertise and capabilities of the University available to governments, community agencies, and businesses. It is part of an overall effort by EMU to establish a closer working relationship with the communities it serves and to aid them in meeting their needs and in solving their problems.

Eastern Michigan University, through ICARD, can provide expertise and resources for the identification of problems, the assessment of needs and the development of solutions in a wide variety of settings. By drawing upon University-wide resources for project development and implementation, faculty, staff, and students with appropriate skills and experience are brought together from a variety of disciplines. When needs cannot be met within an organization or from outside commercial sources or private consultants, ICARD can fill the gap.

ICARD staff develops projects through personal and professional contacts and responds to requests from clients outside the University. Once a project has been identified, support staff and methodologies are determined. Individual faculty members serve as project directors, using additional faculty and student help in project implementation.

Examples of ICARD activities include economic development and planning efforts for local communities, economic and environmental impact assessments, management analysis, evaluation of personnel systems, and scientific analysis of environmental concerns. Twice a year, ICARD publishes an economic

forecasting report, available by subscription, *Regional Economic Forecasts for Michigan*. Also published twice a year is the newsletter *Michigan Economic Notes*. Each spring, ICARD hosts an Economic Forum on campus.

Since 1991, ICARD has offered training programs for public sector employees in cooperation with the Government Educational Institute. Through ICARD's Public Service Education Program, a monthly series of open subscription workshops has been offered. In addition, educational and training programs are customized under contract to meet the needs of specific communities or employee groups.

Another integral part of ICARD is the SER-GEM Center (Southeast Regional Groundwater Education in Michigan), funded in part by the Kellogg Foundation. SER-GEM's capabilities include environmental educational services, environmental audits, and computerized database assembly.

For further information, contact ICARD at 487-0243 or the Consortium at 487-0920.

CORPORATE SERVICES/CENTER FOR QUALITY

34 N. Washington
487-2259

Corporate Services, established in 1988 through a consolidation of the college service centers, is an agency within the Executive Division. Its primary responsibility is to carry out the University mission of service through contract learning. Corporate Services provides business, industry, education, health, and human services agencies with short- and long-term assistance in training, research and development. Corporate Services' staff, including select University faculty and contracted outside experts, are involved in training both hourly and salaried personnel in a large number of diverse industries. To date this assistance has been provided in locations across the country as well as in Toronto, Canada; Sao Paulo, Brazil; London, England; and Cardiff, Wales. Contracts have ranged from one day to one year, with much of Corporate Services' activities relating to workforce training-on-site in manufacturing plants.

Major areas of programming include:

- Workplace literacy; basic skills enhancement
- Quality science consulting and training
- Environmental technology
- Computer training
- Hazardous waste management
- Nurse aid training
- Cross-cultural communication
- Health and safety training
- Technical writing
- Office automation and information technology
- JIT inventory systems
- Marketing and management training
- Communication skills

Corporate Services is currently regarded as one of the premier agencies capable of providing comprehensive training and consultation in workplace literacy, statistical process control (SPC), and experimental design/industrial statistics.

CHILD DEVELOPMENT LABORATORY

Lindy Bush
Director

Lorraine Paffenroth
Assistant Director
209-213 Rackham (313) 487-0286

The Child Development Laboratory is the University's demonstration preschool for instruction and research. The laboratory classrooms are staffed and operated under the auspices of the Department of Human, Environmental, and Consumer Resources.

The purpose of the center is to provide comprehensive developmental programs for approximately 100 community-area children each year while also offering credit-producing and non-credit opportunities to approximately 350 University students. The children served are from three to five years of age and are enrolled in four half day programs. Infants, toddlers, and two year-olds attend on a semi-regular basis as University courses are scheduled.

Students enrolled in beginning courses learn to apply principles of growth and learning to individual children and groups of young children in 12 laboratory classes. Students in advanced child development, administration, and supervision learn to apply their knowledge to the management of preschool and child development centers.

The director and assistant director oversee the administration of the programs for the children and instruct the University students. Students are directed by staff lab supervisors and graduate assistants in child/family development. The laboratory was accredited by the National Academy of Early Childhood Programs in July 1987.

THE HURON CENTER

1275 Huron Street
Ypsilanti, MI 48197

The Eastern Michigan University Huron Center, a \$36.1 million complex, consists of a 38,000-square-foot Corporate Education Center, an adjoining 243-room Radisson on the Lake Hotel situated on a bluff overlooking an 18-hole championship golf course and Ford Lake in Ypsilanti Township. The hotel is owned by Huron Shores Limited Partnership with Radisson as the franchise and is managed by Motel Hotel Management in Dallas, Texas. The Corporate Education Center (CEC) and Huron Golf Club are owned and operated by EMU. The CEC and Huron Golf Club were built without using any of the University's general fund, which contains such revenues as student tuition. Along with Eastern Michigan University and MHM, included in the Huron Center "team," are the City of Ypsilanti, Ypsilanti Township, and the Joint Ypsilanti Recreation Organization; other team members that have given grants and contributions to the project are the state of Michigan, Huron Shores Limited Partnership, Morgan Mitsubishi Development Company, General Motors, Ford Motor Company, Chrysler Corporation, Michigan Bell, Michigan Consolidated Gas, and many others.

The idea for the Huron Center was the result of a recognized need for non-traditional educational programs in business and industry. With that recognition, the idea of a Corporate Education Center for contract learning programs materialized.

CORPORATE EDUCATION CENTER

Marcia D. Harrison
Director
1275 Huron Street
487-0600

The Corporate Education Center is an entrepreneurial organization owned and operated by EMU that serves both the public and private sectors.

The center has 38,000 square feet of conference and seminar space designed to accommodate multiple meeting needs with advanced communications and audio-visual equipment. Such features include:

- two auditoriums seating 100 and 200 respectively, complete with audiovisual systems including rear screen projection, a simultaneous translation system, and closed circuit teleconferencing.
- a networked computer laboratory with 15 stations
- seven conference rooms and five seminar rooms
- an executive boardroom
- an outdoor court area for informal gatherings during the spring, summer and fall seasons.

The center is located on Ford Lake at the Huron Street exit off I-94 in Ypsilanti. It is part of a 186-acre development that includes a 236-room Radisson hotel and the Eastern Michigan University Huron Golf Club, featuring an 18-hole championship golf course.

INSTITUTE FOR THE STUDY OF CHILDREN AND FAMILIES

Patricia Ryan and Bruce L. Warren
Directors
102 King Hall
487-0372

The Institute for the Study of Children and Families was established in 1979 for the purpose of providing focus and support to the study of children and families through research, demonstration projects, non-credit educational activities and consultation concerned with the determinants and/or consequences of childhood and family life.

The institute promotes and encourages interdisciplinary study of children and families throughout the University and offers opportunities for undergraduates and graduate students interested in research or demonstration projects relating to children and families. Cooperative interaction extends beyond the University to other organizations, agencies and institutions.

Institute-sponsored programs include the National Foster Care Resource Center, the Teaching-Learning Community Intergenerational Program, and the Behavioral Medicine Project. The institute cooperates in workshops sponsored with other University departments and community organizations. Its Child and Family Publications Division disseminates 46 publications based on institute projects.

LEARNING RESOURCES AND TECHNOLOGIES

Morell D. Boone
Dean

Jennie Meyer Howard
Associate Dean, Learning Technologies

Sandra G. Yee
Library Department Head

487-3316

Learning Resources and Technologies, housed in the University Library building, has two major responsibilities: Learning Resources (including the Library, Media Services and Instructional Support Center) and Learning Technologies (academic computing activities for faculty and students). Learning Resources and Technologies supports the academic mission of the University through its services, collections, facilities, and equipment.

The Library is essential to the instructional programs of the University. It houses more than 600,000 volumes, 195,000 government documents and 665,000 microforms. The library is fully automated and provides a variety of electronic reference sources.

Special collections include an Instructional Materials Center in conjunction with the educational and psychology holdings, a map library in the science and technology unit, government documents and University archives. Special library features include small study rooms, faculty and student seminar rooms, and a Copy Services Center with rental typewriters, photocopy machines, and print from microforms. Reserve reading materials assigned for use in course work may be checked out at the Materials Access Services Desk. Each library unit maintains pamphlet files for ephemeral materials, such as newspaper clippings and pamphlets.

The Access Services Office (Room 214) provides an active orientation program designed to acquaint all students with basic and subject-oriented resources. Library instruction is given progressively to prepare students for life-long learning after their formal education has been completed.

The LOEX (Library Orientation/Instruction Exchange) Clearinghouse, a national office collecting and sharing data and materials on teaching library skills, was established at Eastern Michigan University over 10 years ago and currently provides services to more than 2,000 U.S. libraries.

The Media Services Center, on the first floor of the Library, assists departments and/or faculty in integrating media within their instructional programs. Consultation is usually followed by the selection of appropriate existing media and/or production of original media to achieve educational goals.

The center is responsible for the purchase, storage and circulation of non-print materials which include films and videocassette recordings. Other services include providing the equipment required to utilize the non-print materials, a pool of audio-visual machines to check out, preview rooms for viewing video materials, and a campus instructional television system.

The center is equipped to produce charts, graphs, photographic slides, mounted and laminated materials, overhead visuals, and computerized visuals.

The Instructional Support Center (Room 102) provides individual and group assistance to registered students with a well-equipped facility, including an expanded microcomputer laboratory. Through these services, students receive not only tutoring assistance for classes, but also training to master academic skills. More specifically, the Instructional Support Center offers:

1. Free tutoring in a variety of basic studies areas (current schedules are posted in Room 102).
2. Individualized academic assistance.
3. Audio-tape recordings and phono discs with available stereo and video equipment for personal use or class assignment.
4. A Foreign Language Laboratory equipped with audio-aural assignments for students taking classes in the Department of Foreign Languages and Bilingual Studies.

Learning Technologies provides support for research and instructional computing for students and faculty by managing mainframe and workstation services and facilities.

Learning Technologies operates computing labs open to all EMU students in the Library's Instructional Support Center, the College of Business, Goddard Hall, and McKenny Union.

The CIC (Center for Instructional Computing), housed in Room 215 University Library, is a computing development center for use by faculty.

The Learning Technologies Resale Program, Room 208 University Library, offers discounted Apple Macintosh computers, IBM computers, and WordPerfect and Microsoft software. These programs are available to individual students, faculty, and staff.

NATIONAL INSTITUTE FOR CONSUMER EDUCATION

Rosella Bannister
Director
207 Rackham
487-2292

The National Institute for Consumer Education, formerly called Michigan Consumer Education Center, was established in 1973 and is a professional development center in consumer and economic education. It provides an interdisciplinary program and involves faculty from all of the colleges within the University.

Among the Institute's patrons are students and faculty at this and other universities, classroom teachers (elementary through adult) and representatives of business, labor, government, clergy, and community groups. It also maintains networks with leaders in consumer affairs at the local, state, and national levels through advisory groups, newsletters, and professional associations, and is an affiliated center of the National Council on Economic Education.

Its objectives are to provide program development services, including courses, conferences and publications for educators; consultant and cooperative activities; and a clearinghouse of education resources in consumer and economic education.

The Institute houses the nation's leading collection of consumer education resources. The publication *Classification of Concepts in Consumer Education* is distributed internationally for use by educators in program planning and curriculum development.

Program funding in excess of nearly \$2 million has been received from external public and private sources since 1973.

OFFICES OF PUBLIC INFORMATION AND UNIVERSITY PUBLICATIONS

Susan Bairley
Acting Director, Public Information

Karen M. Pitton
Acting Director, University Publications

Public Information
18E Welch Hall (487-4400)

University Publications
Lower Level, Dining Commons #1 (487-3600)

The Offices of Public Information and University Publications encompass the University news bureau and the University photographer. Staff members offer professional assistance and counsel to the campus community in public relations and media relations.

The news bureau is the focal point for all contact with the news media. University events and activities are publicized through this office, and inquiries of reporters generally are directed here. The news bureau also coordinates internal campus communication and is responsible for *Focus EMU*, a weekly bulletin for faculty and staff. For daily calendar events, call the News Information Line: 487-2460.

The University photographer provides black and white and color photographs and slides for news and sports releases, slide shows, displays, and various publications.

University publications are produced through the University Publications Office, located in the lower level of Dining Commons #1. Complete editorial, design, typesetting, copying, and printing services are available to University departments, faculty, staff, and students.

UNIVERSITY COMPUTING

S. Alan McCord
Executive Director

Gary J. Carlson
Manager, Applications Development and Support

Lynn Dixon
Manager, Applications Development and Support

Sam Creclun
Manager, Technical Services

Wayne L. Starr
Manager, User Support Services
First Floor, Pray-Harrold
487-3141

Under an executive director of University Computing, access to a VAX 650, VAX 11/785, and many microcomputers is available. Time-sharing systems with unrestricted use are available to faculty, students, and administrative offices.

Low to high speed printers, 150 computer terminals, and 10 graphics terminals are placed at strategic locations around campus. Optical scanning equipment also is used for tests, course evaluations, and research.

Students can develop skills from computer literacy to undergraduate and graduate computer science majors and minors.

LIST OF CATALOG ABBREVIATIONS

ACC	Accounting
AMU	Applied Music
ANT	Anthropology
AST	Astronomy
ATGSB	Admission Test for Graduate Study in Business
ATH	Athletic
BE	Business Education
BIL	Bilingual
BIO	Biology
BOT	Botany
CEC	Corporate Education Center
CHM	Chemistry
CLA	Classics
CLEP	College Level Examination Program
CLS	Clinical Laboratory Services
CRM	Criminology
CSC	Computer Science
CTA	Communication and Theatre Arts
CUR	Curriculum
CWS	College Work Study
DAN	Dance
DTC	Dietetics
ECO	Economics
EDL	Educational Leadership
EDM	Educational Media
EDP	Educational Psychology
EDT	Educational Technology
EFL	English as a Foreign Language
EMU	Eastern Michigan University
ENG	English
ESL	English as a Second Language
FA	Fine Art
FCS	Family and Child Services
FCSP	Family and Children's Services Programs
FIN	Finance
FLA	Foreign Language
FM	Fashion Merchandising

FRN	French
GA	Graduate Assistant
G&C	Guidance and Counseling
GEO	Geography
GER	German
GES	Geography of Earth Science
GHP	Historic Preservation
GLG	Geology
GMAT	Graduate Management Admission Test
GNP	Gross National Product
GPA	Grade Point Average
GRE	Graduate Record Examination
GRT	Gerontology
HAD	Health Administration
HEC	Human, Environmental, and Consumer Resources
HED	Health Education
HIS	History
HM	Hospitality Management
HPER&D	Health, Physical Education, Recreation and Dance
HRM/OD	Human Resource Management/Organizational Development
I	Incomplete
IDE	Interior Design
IDT	Interdisciplinary Technology
IE	Industrial Education
IT	Industrial Technology
KATS	Campus Antenna Television System
KITS	Campus Instructional Television System
LAW	Law
LIN	Linguistics
LIT	Literature
MA	Master of Arts
MAT	Miller Analogies Test
MBA	Master of Business Administration
MBE	Master of Business Education
MELAB	Michigan English Language Assessment Battery
MFA	Master of Fine Arts
MGT	Management
MIC	Microbiology
MKT	Marketing
MLS	Master of Liberal Studies
MPA	Master of Public Administration
MS	Master of Science
MSA	Master of Science in Accounting
MSIS	Master of Computer-Based Information Systems
MTH	Mathematics
MUS	Music
NDSL	National Direct Student Loan
ORD	Office of Research Development
ORI	Operations Research and Information Systems
OT	Occupational Therapy
PED	Physical Education
PHI	Philosophy
PHY	Physics
PLS	Political Science
POM	Production/Operations Management
Prereq	Prerequisite
PSY	Psychology
RDG	Reading
REC	Recreation
RES	Real Estate
SEI	Special Education-Emotionally Impaired
SEM	Semester
SFD	Social Foundations
SGN	Special Education-General Courses
SHI	Special Education-Hearing Impaired
SLD	Special Education-Learning Disabilities
SLI	Special Education-Speech and Language Impaired

SMI	Special Education-Mentally Impaired
SPA	Specialist in Arts
SPI	Special Education-Physically and Otherwise Impaired
SPN	Spanish
SOC	Sociology
SWK	Social Work
TESOL	Teaching English to Speakers of Other Languages (Program)
TOEFL	Test of English as a Foreign Language
TSL	Teaching English to Speakers of Other Languages (Courses)
TV	Television
TWE	Test of Written English
W	Withdrawal
WMS	Women's Studies
ZOO	Zoology

DEPARTMENTS OF INSTRUCTION

The courses here listed are those which have been authorized in accordance with policies approved by the Graduate Council. Class schedules must be consulted for courses to be offered during a given semester or term since the frequency of offering of each course is determined by the department as program needs dictate, with no assurance that a given course will be offered every year. The requirements as stated in the departmental summaries are designed to serve as a guide to program planning and are subject to specific determination and consultation with the department adviser.

COLLEGE OF ARTS AND SCIENCES

Barry Fish, Dean
Barbara Richardson, Associate Dean
James Waltz, Acting Associate Dean
Velma Clark, Administrative Associate II
411 Pray-Harrold
487-4344

DEPARTMENTS

Art
Biology
Chemistry
Communication and Theatre Arts
Computer Science
Economics
English Language and Literature
Foreign Languages and Bilingual Studies
Geography and Geology
History and Philosophy
Mathematics
Music
Physics and Astronomy
Political Science
Psychology
Sociology, Anthropology, and Criminology

ART

John E. Van Haren
Department Head
114 Ford Hall
487-1268

Christopher Bocklage
Coordinator of Advising
208 Ford Hall
487-3388

The Art department offers three programs leading to the master's degree: the Master of Fine Arts, the Master of Arts in art education, and the Master of Arts in studio art. The Master of Fine Arts program requires completion of a minimum of 60 semester hours beyond the bachelor's degree and has a residency requirement of full-time enrollment each semester. The Master of Arts programs require completion of a minimum of 30 semester hours beyond the bachelor's degree and allow part-time enrollment. Further information about all these master's programs may be obtained from the Art department.

MASTER OF FINE ARTS

ADMISSION REQUIREMENTS

As a prerequisite for admission, the Master of Fine Arts degree applicant must have an undergraduate degree, with a major in art, from an accredited institution, and must meet degree admission standards of the Graduate School.

An applicant for admission must do the following:

1. Send an application for admission, supported by official transcripts of all undergraduate and graduate credit at each institution attended, to Graduate School Admissions, Starkweather Hall, Eastern Michigan University.
2. Send an application for admission to the MFA program to the coordinator of the MFA program in the Art department.
3. Arrange to have three letters of recommendation sent to the program coordinator
4. Send a portfolio of 10-15 color slides and/or photographs of recent work, presented in a clear plastic holder, with each slide/picture individually labeled with name, title of work, medium or media, size, and date of completion (applicants in three-dimensional disciplines may submit multiple views of examples) to the Art department.

International students must have a score of 80 or above on the MELAB (Michigan English Language Assessment Battery) or 500 or above on the TOEFL (Test of English as a Foreign Language).

Applications received in the Art department by March 15 for fall semester and by November 1 for winter semester will be given priority. Late applications will be considered as studio space permits. Graduate School application deadlines are: March 15 for fall semester, September 15 for winter semester, February 15 for spring-summer sessions.

DEGREE REQUIREMENTS

The graduate adviser will meet with each student to construct a program of study. Students should follow closely the Graduate School requirements for "Application for Diploma." Students whose degree program includes a final exhibition of work must apply for gallery space one semester prior to the proposed exhibition.

Two years of residency (i.e., full-time enrollment) are required. At the end of the first year, the MFA Committee will review the work of each MFA student and either allow the student to continue or formally ask the student to withdraw from the program.

COURSE REQUIREMENTS

Required courses	43 hours
FA 630 Graduate Studio	9
FA 631 Graduate Studio	9
FA 695 Seminar in Contemporary Ideas	3
FA 696 Seminar in Contemporary Ideas	3
FA 732 Graduate Studio	9
FA 733 Graduate Thesis and Exhibition	8
FA 734 Oral Defense of MFA Exhibition	2
Electives	11 hours
Art Electives	5
Art History Electives	6
Cognates	6 hours
Courses selected from art or other areas, chosen in consultation with adviser	
Total	60

(Cognate and elective hours may be grouped to form a minor with prior approval of the adviser.)

MASTER OF ARTS (ART EDUCATION)

This degree is designed for persons currently teaching or who have fulfilled Art teaching certificate requirements. The program emphasizes the four components of discipline-based art education (DBAE): aesthetics, art history, art criticism, and art production.

ADMISSION REQUIREMENTS

Entry requirements are a minimum of 34 semester hours of art education and studio art with a minimum 2.8 grade point average in these classes. In addition, each applicant is expected to hold a teaching certificate for the teaching of art.

An applicant for admission must do the following:

1. Send an application for admission, supported by official transcripts of all undergraduate and graduate credit at each institution attended, to Graduate School Admissions, Starkweather Hall, Eastern Michigan University.
2. Send a letter of purpose outlining aspirations in graduate work to the Art Department.
3. Send a portfolio of 10-15 color slides and/or photographs of recent work, presented in a clear plastic holder, with each slide/picture individually labeled with name, title of work, medium or media, size, and date of completion (applicants in three-dimensional disciplines may submit multiple views of examples) to the Art department.

International students must have a score of 80 or above on the MELAB (Michigan English Language Assessment Battery) or 500 or above on the TOEFL (Test of English as a Foreign Language).

DEGREE REQUIREMENTS

The graduate adviser will meet with each student to construct a program of study. Students should follow closely the Graduate School requirements for "Application for Diploma." Students whose degree program includes a final exhibition of work must apply for gallery space one semester prior to the proposed exhibition.

Graduate credit in art education (theory and practice) earned more than six years prior to the date on which the degree was granted may not be applied to meet the graduate requirements.

After the student has completed six hours of course work in art education, the graduate coordinator or program advisor will evaluate for approval the selection of a thesis proposal or paper option in an appropriate art education area. A required thesis review will be conducted by a faculty committee.

COURSE REQUIREMENTS

Art Education courses (to be selected through advisement by art education faculty)	10 hours
<i>Six to eight hours from the following:</i>	
FA 504 Aesthetic Education (2)	
FA 505 Curriculum Development (Art Education) (2)	
*FA 506 ARTAG (Art for the Talented and Gifted) (2)	
*FA 507 Studio Connections in Art Education (2)	
*FA 508 Research in Art Education (2)	
*FA 591 Special Topics (2)	
FA 694 Seminar in Art Education (2)	
Other courses as they become available and approved by the adviser.	
<i>Two to four hours from the following:</i>	
*FA 691 Thesis (2)	
*FA 698 Independent Study (paper of publishable or distributable quality) (2)	
<i>*These courses may be repeated if appropriate.</i>	
Art Electives (Studio, Art History, Art Education)	14 hours
Students wishing to have an exhibition in conjunction with their art education studies are subject to a 10-hour review of their studio concentration.	
Cognates	6 hours
Selected from art or other areas in consultation with the adviser.	
Total	30

MASTER OF ARTS (STUDIO ART)

This degree is designed for persons seeking an advanced degree in studio art.

ADMISSION REQUIREMENTS

An undergraduate degree with a major in art is required for admission, with a minimum grade point average of 2.8 in art classes. A student may be required, after review by the MA Committee, to make up deficiencies at the undergraduate level.

An applicant for admission must do the following:

1. Send an application for admission, supported by official transcripts of all undergraduate and graduate credit at each institution attended, to Graduate School Admissions, Starkweather Hall, Eastern Michigan University.
2. Send a portfolio of 10-15 color slides and/or photographs of recent work, presented in a clear plastic holder, with each slide/picture individually labeled with name, title of work, medium or media, size, and date of completion (applicants in three-dimensional disciplines may submit multiple views of examples) to the Art department.

International students must have a score of 80 or above on the MELAB (Michigan English Language Assessment Battery) or 500 or above on the TOEFL (Test of English as a Foreign Language).

DEGREE REQUIREMENTS

The graduate adviser will meet with each student to construct a program of study. Students should follow closely the Graduate School requirements for "Application for Diploma." Students whose degree program includes a final exhibition of work must apply for gallery space one semester prior to the proposed exhibition.

COURSE REQUIREMENTS

Fine arts concentration (major)	14 hours
The Art department offers concentrations in drawing, graphic design, painting, printmaking, photography, sculpture, ceramics, jewelry, textiles, multimedia, and watercolor.	

Art Electives	10 hours
Select from courses outside the major area (courses may be grouped to form a minor with adviser's approval).	
Cognate courses	6 hours
Selected from art and/or other areas in consultation with the adviser. Must include FA 428 Seminar: Modern Art for graduate credit or FA 691 Thesis with adviser's approval.	
Total	30

ART COURSES

FA 500 Photography.	2 hrs
Advanced studio courses in photography. Based on background and need of students. Designed for graduate students not majoring in photography.	
<i>Prereq: Department permission.</i>	
FA 501 Art Education.	2 hrs
This course is primarily designed for the classroom teacher. A variety of media, applicable to classroom utilization, will be employed with an emphasis on innovative selections such as film making, batik, weaving, and other three-dimensional activities. Special problems and independent research may be arranged within the format of the class. <i>Not open to students who have a major in art.</i>	
FA 504 Aesthetic Education.	2 hrs
This course provides an opportunity to explore and research the four components of discipline-based art education. Emphasis will be placed on aesthetics, its connections with art education, and its relationship to general education.	
FA 505 Curriculum Development (Art Education).	2 hrs
Fundamentals of curriculum development and an interdisciplinary approach for developing and implementing the four components of discipline-based art education into school art programs.	
FA 506 ARTAG (Art for the Talented and Gifted).	2 hrs
A workshop course involving interaction of students as teachers with elementary and junior high students from area schools. Focus will be on a unit of study in art using discipline-based art education.	
FA 507 Studio Connections in Art Education.	2 hrs
A course designed to help students strengthen their skills in developing units of study for both two-dimensional and three-dimensional art areas using the components of discipline-based art education.	
FA 508 Research in Art Education.	2 hrs
A course used by students for individual research to further their studies in art education and to share this information with their peers.	
FA 510 Ceramics.	2 hrs
Studio course in ceramics. <i>Art majors only.</i>	
FA 520 Drawing.	2 hrs
Advanced studio course in drawing. <i>Art majors only.</i>	
FA 530 Art History.	2 hrs
Advanced course in art history. <i>Art majors only.</i>	
FA 540 Jewelry.	2 hrs
Advanced studio course in jewelry. <i>Art majors only.</i>	
FA 550 Printmaking.	2 hrs
Advanced studio course in graphics. <i>Art majors only.</i>	
FA 555 Textiles.	2 hrs
Advanced studio course in textiles. <i>Art majors only.</i>	

- FA 560 Watercolor.** 2 hrs
Advanced studio course in watercolor. *Art majors only.*
- FA 570 Sculpture.** 2 hrs
Advanced studio course in sculpture. *Art majors only.*
- FA 580 Painting.** 2 hrs
Advanced studio course in oil painting. *Art majors only.*
- FA 590/591/592 Special Topics.** 1/2/3 hrs
A graduate-level course in a specific area of art, to be determined by the field of specialization of the instructor and the interest of the student.
Prereq: Department permission.
- FA 595 Workshop in Art.** 2 hrs
A workshop in art history focusing on personal observation of the visual arts of a particular area.
Prereq: Department permission.
- FA 596 Workshop in Art Education.** 3 hrs
A workshop in art education and/or art history focusing on personal observation of the visual arts of a particular area.
Prereq: Department permission.
- FA 600 Photography I.** 1 hr
Advanced studio course in photography. Based on background and need of students.
Prereq: Department permission.
- FA 601 Photography II.** 2 hrs
Advanced studio course in photography. Based on background and need of students. This course allows the student a more intense photographic experience than FA 600.
Prereq: Department permission.
- FA 602 Photography III.** 3 hrs
Advanced studio course in photography. Based on background and need of students. This course allows the student a more intense photographic experience than FA 601.
Prereq: Department permission.
- FA 603 Photography IV.** 4 hrs
Advanced studio course in photography. Based on background and need of students. This course allows the student a more intense photographic experience than FA 602.
Prereq: Department permission.
- FA 604 Photography V.** 4 hrs
Advanced studio course in photography. Based on background and need of students. This course allows the student a more intense photographic experience than FA 603.
Prereq: Department permission.
- FA 610/611/612 Ceramics.** 1/2/3 hrs
Advanced studio courses in ceramics. Based on background and need of the student. *Graduate majors only.*
- FA 620/621/622 Drawing.** 1/2/3 hrs
Advanced studio courses in drawing. Based on background and need of the student. *Graduate majors only.*
- FA 630 Graduate Studio.** 9 hrs
The first of the four graduate studio courses leading to the MFA degree. Course is conducted on a one-to-one basis. Instructor is selected for the student for this first course upon his/her acceptance into the program by the Graduate Acceptance Committee. *MFA candidates only.*
Prereq: Department permission.
- FA 631 Graduate Studio.** 9 hrs
The second of the four graduate studio courses leading to the MFA degree. Instructor to be selected by the student from the MFA faculty. *MFA candidates only.*
Prereq: Department permission.
- FA 640/641/642 Jewelry.** 1/2/3 hrs
Advanced studio courses in jewelry. Based on background and need of the student. *Graduate majors only.*
- FA 650/651/652 Printmaking.** 1/2/3 hrs
Advanced studio courses in graphics. Based on background and need of the student. *Graduate majors only.*
- FA 655/656/657 Textiles.** 1/2/3 hrs
Advanced studio courses in textiles. Based on background and need of the student. *Graduate majors only.*
- FA 660/661/662 Watercolor.** 1/2/3 hrs
Advanced studio courses in watercolor. Based on background and need of the student. *Graduate majors only.*
- FA 665/666/667/668 Painting.** 1/2/3/4 hrs
Advanced studio courses in oil painting. Based on background and need of the student. *Graduate majors only.*
- FA 670/671/672 Sculpture.** 1/2/3 hrs
Advanced studio courses in sculpture. Based on background and need of the student. *Graduate majors only.*
- FA 679/680/681 Special Topics.** 1/2/3 hrs
A graduate-level course in a specific area of art, to be determined by the field of specialization of the instructor and the interest of the student.
Prereq: Department permission.
- FA 690/691/692 Thesis.** 1/2/3 hrs
Completion of research problem, writing thesis, and defense of thesis. *Credit/no credit.*
Prereq: Department permission.
- FA 694 Seminar in Art Education.** 2 hrs
Art education seminar involving research to enhance the class lectures and discussion concerning the subject of art's relativity to art education.
- FA 695/696 Seminar in Contemporary Ideas.** 3 hrs each
A two semester seminar sequence for all master of fine arts degree candidates dealing with in-depth questions and problems in 20th-century art. Discussions will be supplemented with slides, films and the presentation of papers. *MFA candidates only.*
Prereq: Department permission.
- FA 697/698/699 Independent Study.** 1/2/3 hrs
Advanced study on an individual basis in areas not covered, or not covered in depth, in formal coursework.
Prereq: Department permission.
- FA 732 Graduate Studio.** 9 hrs
The third of the four graduate studio courses leading to the MFA degree. Instructor to be selected by the student from the MFA faculty. *MFA candidates only.*
Prereq: Department permission.
- FA 733 Graduate Thesis and Exhibition.** 8 hrs
A culmination of the three sequential graduate studio courses. The ideas developed in these courses result in a body of work that comprises the graduate exhibition. A written thesis is optional. An oral defense of the ideas presented in the exhibition is required. The University reserves the right to retain work from the graduate exhibition to be added to the EMU collection. A set of 35mm

slides of all the works in the exhibition will be taken by the MFA candidate and will become part of the Art Department files. *Must be taken concurrently with FA 734. MFA candidates only.*
Prereq: Department permission.

FA 734 Oral Defense of MFA Exhibition. 2 hrs
 A course conducted by the adviser in each area of concentration. Individual conferences, reading assignments and slides increase understanding of the art context of the candidate's work. *Must be taken concurrently with FA 732 and FA 733. MFA candidates only.*
Prereq: Department permission.

OTHER COURSES

These upper division undergraduate courses may also be taken for graduate credit and applied on the department's degree program. *A maximum of nine hours in approved 400-level courses may be permitted in the earning of any graduate degree.* See the undergraduate catalog for course descriptions.

If you intend to enroll in any of the following undergraduate courses for graduate credit, you must come to the Graduate School for written permission before enrolling in the course; otherwise, you will receive undergraduate credit.

- FA 406 Printmaking (3)
- FA 408 Ceramics (3)
- FA 409 Advanced Photographic Imagery (3)
- FA 410 Metal Casting Techniques (3)
- FA 412 Sculpture (3)
- FA 413 Painting (3)
- FA 414 Painting—Watercolor II (3)
- FA 419 Life Drawing (3)
- FA 421 History of Oriental Art (3)
- FA 422 Chinese and Japanese Art History (3)
- FA 423 Painting—Watercolor III (3)
- FA 424 Painting—Watercolor IV (3)
- FA 428 Seminar: Modern Art (2)
- FA 429 History of American Architecture (3)
- FA 432 Drawing III (3)
- FA 436 Women in Art (3)
- FA 439 Life Drawing (3)
- FA 440 History of Contemporary Art II (3)
- FA 441 Studies in Clay and Glazes (3)
- FA 443 Jewelry (3)
- FA 455 Textiles (3)
- FA 460 Advanced Graphic Design (3)
- FA 462 Advanced Illustration (3)
- FA 464 Corporate Identity and Graphic Systems (3)
- FA 480 Painting (3)
- FA 481 Painting (3)
- FA 487 Cooperative Education (3)

BIOLOGY

Douglas Y. Shapiro
 Department Head
 316 Mark Jefferson
 487-4242

Merlyn Minick
 Coordinator of Advising
 316 Mark Jefferson
 487-0441

The Biology department offers a Master of Science degree program with concentrations in general biology, ecosystem biology (aquatic and terrestrial), molecular/cellular biology, physiology, and community college biology teaching.

Graduate assistantships are usually available. All applicants for admission to the biology Master of Science program are encouraged to apply for an assistantship. The department believes that the experience in teaching and research gained as a graduate assistant is a valuable part of the graduate program in biology for those who can be accommodated in these positions.

The Master of Science in general science administered by the Physics department includes some work in biology. For information, see the Physics department listing.

The Biology department shares the Mark Jefferson Science Building with the departments of Chemistry and Psychology. This building provides modern teaching laboratories and classrooms and such specialized facilities as an electron microscopy and photo-micrography suite, controlled environment chambers, a walk-in cold room, aquarium rooms, animal rooms, photographic darkrooms, space for work in radiation biology, a radio frequency screened area, herbarium and teaching museums with plant and animal collections, and a vertebrate skull collection. The department's on-campus resources also include a greenhouse and the Loesell Field Laboratory. The adjacent Huron River and nearby state game and recreation areas as well as the Kresge Environmental Education Center at Lapeer, Michigan, are also available for field work. Vans and boats are available for class and research use.

MASTER OF SCIENCE IN BIOLOGY

The Master of Science in biology program is designed to provide all students with a broad background of knowledge, scientific skills and attitudes.

ADMISSION REQUIREMENTS

All concentrations in the biology master's program share the same general admission requirements:

1. bachelor's degree;
2. a minimum of 20 (normally 30) semester hours in biology to include coursework in genetics and physiology with at least seven hours each in botany and zoology;
3. one year of college chemistry;
4. an academic record of "B" (3.0) or better during the junior and senior years;
5. meet Graduate School degree admission requirements;
6. submit to the biology department a completed departmental admission form and two recommendations.
7. As of the 1994 fall semester, students applying for admission must submit scores from the Graduate Record Examination (GRE) general and biology subject tests to the Graduate School.

Students deficient in one or more of the above admission requirements may be granted conditional admission subject to re-

moving deficiencies while beginning a graduate program. Hours earned in deficiency courses may not apply toward degree requirements. Special admission requirements in some areas of concentration are cited under that area of concentration.

DEGREE REQUIREMENTS

A minimum of 30-34 credit hours of graduate work is required on the various programs, including at least 24-25 hours of course work in the Biology department and typically five to six hours of cognate credits to be taken outside the department. Courses on the program must be distributed to ensure that the student's combined undergraduate and graduate experiences include a minimum of 12 hours in biology, 10 hours in zoology and 10 hours in botany. Microbiology courses may be substituted for some of the botany hours in meeting this requirement. Two credit hours in the biology department seminar courses are required on all programs.

To accommodate such diverse needs as research experience, internships and specialized course work, each student is required, by the end of the first semester after admission to the degree program, to develop a personalized program of studies in consultation with the student's own faculty Guidance Committee. This must be approved and kept on file by the graduate coordinator. Requests for changes to the approved program must be submitted to the graduate coordinator with the written approval of the student's Guidance Committee.

In addition to satisfying the common requirements outlined above, students in all concentrations except Community College Biology Teaching will complete the degree by following one of two alternative plans: Plan A, with thesis; or Plan B, with a practical research/methodology oriented culminating experience.

Plan A: Candidates must successfully complete an original investigation with approval of, and supervision by, their Guidance (Thesis) Committee. This research must be of a quality suitable for publication and submitted in writing in thesis form as outlined by the Graduate School. The student must successfully defend this thesis in an oral examination. A maximum of four credit hours may be earned for thesis research.

Plan B: Candidates must successfully complete three hours of credit in either a practicum (BIO 686/687/688) or an approved equivalent and three hours of credit in independent study (BIO/BOT/MIC/ZOO 697/698/699). They must prepare a written research report and report orally on their own findings or contributions in an approved biology seminar setting.

ADVISING

At the time of their admission to the biology program, students will receive temporary advising from the graduate coordinator or the principal adviser in their selected area of concentration or from the Graduate Committee. Courses approved for the first semester during the initial advising period will count in the student's permanent program.

Students are responsible for forming a permanent Guidance Committee and developing a permanent program approved by that committee before registering for their second semester. Beyond the first semester, if no approved program of study is on file, courses taken, whether initially approved or not, are not binding on the Guidance Committee for inclusion on the student's final permanent program.

The Graduate Committee serves as the Guidance Committee for Plan B students in the general biology and the community college biology teaching concentrations and for students who do not indicate an area of specialization when first admitted. They may also serve initially to advise Plan A students, establishing a tentative program of study until the student establishes a permanent Guidance (Thesis) Committee.

The Guidance Committee for Plan A students will include at least three biology department graduate faculty members. The chair is usually selected by the student; the other two members are then chosen by the chair in consultation with the student. Additional members may be added from inside or outside the department by agreement between the chair and the student.

The Guidance Committee for Plan B students will consist of the principal graduate adviser for the selected concentration and the graduate coordinator. The graduate adviser, in consultation with the student, will prepare the student's program; the graduate coordinator must also sign and approve the program. The student may select a third member of the Guidance Committee from the biology department graduate faculty.

COMMUNITY COLLEGE BIOLOGY TEACHING CONCENTRATION

This program is designed to prepare students for the professional teaching of biology at the community college level. It requires a minimum of 30 graduate credit hours. Principal adviser: *Professor Paul W. Milske.*

COURSE REQUIREMENTS

Required Courses	2 hours
BIO/BOT/MIC/ZOO 693/BIO 696 Seminar: Laboratory Instruction (1/1/1)	2
Restricted Electives	4 hours
BIO 686 Practicum.....	1
BIO 689 Internship.....	3
Electives	18-22 hours
To include one course in zoology and one course in botany or microbiology	
The student's combined undergraduate and graduate course work must include: botany and zoology (or equivalents), genetics, general physiology, a botany field course, a zoology field course, human anatomy and physiology, general microbiology and microbiology techniques, one additional techniques course from BIO 413/415/516, ecology, biometry (or a computer course)	
Cognates	2-6 hours
Total	30 hours

ECOSYSTEM BIOLOGY CONCENTRATION

This program is intended to prepare students to pursue research and teaching careers in ecosystem biology. The program is also designed to provide background for students entering doctoral programs in diverse areas of ecology and to prepare research personnel for careers with government agencies or private companies concerned with the protection or management of aquatic and terrestrial ecosystems. Emphasis is placed on the development of research skills, taxonomic expertise, field and laboratory methods, and their application to applied and theoretical ecology. Students may choose to emphasize either aquatic or terrestrial ecosystems in their individual programs.

The concentration requires a minimum of 32 semester hours, 26 in the biology department and at least five to six hours of cognates; however, students without credit for a course in general ecology as an undergraduate must complete a 36 semester hours program, including BIO 524 General Ecology. Principal advisers: *Dr. Gary L. Hannan and Dr. Robert K. Neely.*

COURSE REQUIREMENTS

Required Courses	2-6 hours
BIO/BOT/MIC/ZOO 693/BIO 696 Seminar: Laboratory Instruction (1/1/1) (both seminars must be in ecosystem biology)	

BIO 524 General Ecology (4) (if no undergraduate credit for a course in general ecology)

Restricted Electives	6 hours
Plan A students must select BIO 690/691/692 Thesis (1/2/3)	4
and BIO/BOT/MIC/ZOO 697/698/699 Independent Study (1/2/3)	2
Plan B students must select BIO 686/687/688 Practicum (1/2/3) or BIO 587 Cooperative Education (3) or equivalent	3
and BIO/BOT/MIC/ZOO 697/698/699 Independent Study (1/2/3)	3
The practicum must be in ecosystem biology and be accompanied by at least one hour of independent study.	
Electives	18-19 hours
The student's combined undergraduate and graduate course work must include botany, zoology or equivalent, physiology, general ecology, biometry, genetics, three taxonomic field courses (one botanical, one zoological, and the third in either botany or zoology), and at least three courses from among approved advanced courses in ecology.	
Cognates	5-6 hours
Total	32-36 hours

GENERAL BIOLOGY CONCENTRATION

This program is designed to provide the additional background in biology appropriate for secondary teachers, and for students entering a variety of doctoral programs in biology. It requires a minimum of 30 credit hours of graduate work, including at least 24-25 hours of course work in the biology department and typically 5-6 hours of cognates to be taken outside the department. Principal adviser: *the graduate coordinator and the Graduate Committee.*

COURSE REQUIREMENTS

Required Courses	2 hours
BIO/BOT/MIC/ZOO 693/BIO 696 Seminar: Laboratory Instruction (1/1/1)	2
Restricted Electives	4-6 hours
<i>Select either a. or b.</i>	
a. BIO 690/691/692 Thesis (1/2/3)	4
b. BIO 686/687/688 Practicum (1/2/3) or equivalent and BIO/BOT/MIC/ZOO 697/698/699 Independent Study (1/2/3)	6
Electives	22-23 hours
The student's combined undergraduate and graduate course work must include genetics, physiology, ecology, structural and/or developmental biology, evolution, and microbiology.	
Cognates	2-6 hours
Total	30-34 hours

MOLECULAR/CELLULAR BIOLOGY CONCENTRATION

This program is designed to prepare students to pursue research and teaching careers in molecular and cellular biology. In addition to the general requirements stated above, this concentration has the following additional admission requirements:

- one year of general biology or equivalent (replaces seven credit hours each in botany and zoology);
- a structural or developmental biology course;
- a course in biochemistry with laboratory;
- a full year of physics;
- two semesters of calculus or equivalent;

- a statistics course;

A course in physical chemistry and a course in microbiology are highly recommended. Principal advisers: *Dr. James L. VandenBosch and Dr. Glenn Walker.*

COURSE REQUIREMENTS

Required Courses	18 hours
BIO/BOT/MIC/ZOO 693/BIO 696 Seminar: Laboratory Instruction (1/1/1)	2
Plan A students must select BIO 690/691/692 Thesis (1/2/3) or BIO 690/691 Thesis (1/2) and BIO/BOT/MIC/ZOO 697/698 Independent Study (1/2)	3
Plan B students must select BIO/BOT/MIC/ZOO 697/698 Independent Study (1/2)	3
(a minimum of 2 hours must be experimental)	
Select 13 hours from approved list (see adviser)	13
(Students must select two research methodology courses as approved by adviser.)	
Restricted Electives	9-11 hours
Select 9-11 hours from approved list (see adviser) ...	9-11
Cognates	5-10 hours
(restricted, see adviser)	
Total	34 hours

PHYSIOLOGY CONCENTRATION

This program is designed to prepare students for technical, teaching, clinical, or research careers in physiology. Individually prepared programs of study are designed to provide, in conjunction with the undergraduate background, a balance of physiological concepts and analytical methods at both the cellular and organismal levels as demonstrated in at least two of the following areas: vertebrate physiology; invertebrate physiology; plant physiology; and microbial physiology. Principal adviser: *Dr. Merlyn C. Minick.*

Additional admission requirement: one year of college physics.

COURSE REQUIREMENTS

Required Courses	2 hours
BIO/BOT/MIC/ZOO 693/BIO 696 Seminar: Laboratory Instruction (1/1/1)	2
Restricted Electives	16-18 hours
Select 12 hours from the following:	12
BIO 540 Cell Biology (3)	
BOT 640 Plant Cell Physiology (2)	
ZOO 536 Vertebrate Tissues: Structure and Function (3)	
ZOO 548 Functional Biology of the Invertebrates (3)	
ZOO 671 Comparative Vertebrate Physiology (4)	
ZOO 672 Endocrinology (4)	
ZOO 673 Membrane Physiology (2)	
ZOO 674 Animal Cell Physiology Laboratory (1)	
Plan A students must select BIO 690/691/692 Thesis (1/2/3)	4
Plan B students must select courses in biological research techniques or instrumentation, or equivalent	3
and BIO/BOT/MIC/ZOO 697/698/699 Independent Study (1/2/3)	3
Electives	8-12 hours
The student's combined undergraduate and graduate course work must include one year of physics, botany, zoology or equivalent, general or cell physiology, and two of the following: vertebrate physiology, plant physiology, microbial physiology, invertebrate physiology (others approved by physiology adviser).	
Cognates	5-6 hours
Total	30-34 hours

BIOLOGY COURSES

BIO 508 Evolution: Fact and Theory. 2 hrs
Evidence bearing on the origin and evolution of life and the processes involved is critically examined in this lecture and discussion course. Original term paper on an aspect of recent advances in evolutionary theory required.

Prereq: Background in biology, anthropology, geology or biochemistry and department permission.

BIO 509 Biometry. 3 hrs
A general course designed to study statistical methodology and the practical application of such statistics in biology.

Prereq: A course in college algebra, 15 hours in biology.

BIO 510 Light and Electron Microscopy, Theory, and Applications. 1 hr*

A lecture/demonstration course covering principles and methodologies of light and electron microscopy.

Prereq: Twenty semester hours of biology.

BIO 511 Biological Aspects of Aging. 2 hrs

A survey of aging changes at the cellular, tissue, and organismal level in plants and animals from protozoa to the human. The major theories of aging will be considered. *Not open to students with credit in BIO 239 Biology of Aging.*

Prereq: One college level course in biology. A course in chemistry is recommended.

BIO 512 Biological Photography. 1 hr*

A laboratory course on the fundamentals of micro- and macro-photography of biological specimens; includes image exposure, development, and printing.

Prereq: BIO 415 Basic Histological Techniques, BIO 510, or department permission.

BIO 516 Advanced Histological Techniques. 1 hr*

A laboratory, lecture, and demonstration techniques mini-course giving practice and theory in animal tissue slide preparation for clinical/research purposes such as fluorescence microscopy, phase/contact microscopy, histochemical staining, cryostat sectioning, and metallic impregnation staining.

Prereq: BIO 415 Basic Histological Techniques.

BIO 518 History of Biology. 2 hrs

Development of major concepts in biology from the Greek natural philosophers to the present.

Prereq: At least two courses in biology.

BIO 522 Limnology. 3 hrs

A lecture, laboratory, and field course dealing with physicochemical and biological interrelationships in standing waters.

Prereq: BIO 420/524 General Ecology and one taxonomic field course or department permission.

BIO 524 General Ecology. 4 hrs

A field and laboratory course introducing the concepts involved in the study of terrestrial and aquatic communities, their physical environment, and their integration into ecosystems. Emphasis will be on properties at the ecosystem, community, and population levels. An individual student problem will be required.

Prereq: BOT 221 General Botany, ZOO 222 General Zoology and one taxonomic field course or department permission.

BIO 525 Conservation. 2 hrs

A survey of the natural resources of Michigan; its land, water, minerals, forests, grasslands, wildlife, and human resources. Some of the current problems in conservation peculiar to Michigan on the basis of its history, its present resource utilization and its future possibilities. *Not open to students with credit in BIO 224 Principles of Conservation.*

BIO 526 Immunobiology. 3 hrs

Cellular and molecular responses to immunogens; primary and peripheral immune organs; T-cells and B-cells in cell-mediated and humoral immunity; immune regulation and mechanisms; hypersensitivity; immunity against microbial infectious agents; antigen-antibody reactions in vitro used in research and diagnostics.

Prereq: MIC 329 General Microbiology; biochemistry desirable.

BIO 527 Immunobiological Methods. 1 hr*

An individualized laboratory course on antibody production with available antigens; immuno-diffusional and immuno-electrophoretic analysis of antigens and their components with available sera; immuno-biological research projects of student's choice. Must be taken concurrently with BIO 526.

Prereq: MIC 329 General Microbiology, BIO 301 Genetics; biochemistry desirable.

BIO 528 Tropical Ecology. 3 hrs

Important biotic communities of the tropics. Investigation in both marine and terrestrial environments; lectures, laboratory, and field work. Field course. Offered only on demand and when appropriate arrangements can be made for visiting tropical laboratories and/or field stations.

Prereq: Botany, zoology, some concept of ecological principles and some familiarity with use of taxonomic keys.

BIO 529 Water Pollution Biology. 3 hrs

A study of the physiological and ecological consequences of water pollution as bases for defining water quality criteria and setting water quality standards.

Prereq: A taxonomic field course or department permission.

BIO 533 Stream Ecology. 3 hrs

A field biology course that includes the study of physiochemical and biological aspects of stream ecosystems. Includes a study of laboratory and field methods.

Prereq: BIO 420/524 General Ecology, a taxonomic field course, or department permission.

BIO 534 Systems Ecology. 3 hrs

The study of whole ecosystems including modeling and simulation methods and a survey of ecological models.

Prereq: BIO 420/524 General Ecology, MTH 104 Intermediate Algebra or one and one-half to two years high school algebra, computer programming (CSC 137 Introduction to FORTRAN Programming or CSC 237 Computer Programming and Numeric Methods or ORI 215 End-User Computing).

BIO 535 Wetland Ecosystems. 3 hrs

Advanced field ecology course in the theory and methods of study of wetland ecosystems.

Prereq: BIO 420/524 General Ecology and one taxonomic field course, or department permission.

BIO 536 Terrestrial Ecosystems. 3 hrs

Advanced field ecology course in the theory and methods of study of the structure and dynamics of terrestrial ecosystems.

Prereq: BIO 420/524 General Ecology and one taxonomic field course, or department permission.

BIO 540 Cell Biology. 3 hrs

A lecture course covering the structure and function of the nuclear and cytoplasmic components of the cell.

Prereq: Twenty hours of biology including: BOT 221 General Botany, ZOO 222 General Zoology, CHM 270 Organic Chemistry, and a course in physiology.

BIO 542 Molecular Genetics. 3 hrs
A follow-up to introductory genetics. Concentrates on the molecular aspects of the subject. The properties of genetical material at the molecular level.

Prereq: Twelve hours of biology, including BIO 301 Genetics.

BIO 543 Developmental Biology. 3 hrs
A course on the molecular aspects of early development, cytodifferentiation, cell communication, morphogenesis, pattern formation and developmental genetics.

Prereq: ZOO 323 Animal Embryology; CHM 451-452 Biochemistry I-II or department permission.

BIO 544 Tissue Culture Techniques and Methods. 2 hrs*
A course on the techniques and methodologies employed in plant and animal cell culture. An introduction to theory and practice which facilitates students' ability to develop and use in vitro systems.

Prereq: Twenty hours of biology and department permission.

BIO 587 Cooperative Education. 3 hrs
Four to six months of full-time employment at an industrial firm or laboratory specially chosen for imparting a practical educational experience in biology or technology. The program consists of work experience alternated with full-time attendance at the University. *Admittance to program by application only. Offered on credit/no credit basis.*

Prereq: Department permission.

BIO 590/591/592 Special Topics. 1/2/3 hrs
An experimental course for subject matter not provided in other department offerings. The content will change from semester to semester. Students may elect this course several times as long as different topics are studied. *Not more than six hours of special topics may be used on a degree program.*

Prereq: Department permission.

BIO 594/595/596 Workshop. 1/2/3 hrs
Workshops will be offered dealing with selected areas. Workshops emphasize student participation and are designed to offer practical experience and training, and theoretical study. Topics to be announced. (See current campus and Continuing Education bulletins)

BIO 610 Cytogenetics. 4 hrs*
The structure and behavior of cells with emphasis on their nuclear components. Implications for genetics and evolution; some opportunity in the laboratory for individual investigation and for demonstration of techniques in cytological study.

Prereq: Fifteen hours of biology, including at least one course in genetics.

BIO 621 Electron Microscopy Laboratory. 3 hrs*
A specialized course in techniques of electron microscopy including preparation of various tissues, use of electron microscope and its application to the study of biological problems. Darkroom technique is also covered. Potential candidates for electron microscopy should sign up and interview with the instructor early in the preceding semester. Recitation required.

Prereq: Twenty hours of biology and department permission.

BIO 679/680/681 Special Topics. 1/2/3 hrs
An experimental course for subject matter not provided in other department offerings. The content will change from semester to semester. Students may elect this course several times as long as different topics are studied. *Not more than six hours of special topics may be used on a degree program.*

Prereq: Department permission.

BIO 682/683/684 Workshop. 1/2/3 hrs
Workshops will be offered dealing with selected areas. Workshops emphasize student participation and are designed to offer practical experience and training, and theoretical study. Topics to be announced. (See current campus and Continuing Education bulletins)

BIO 686/687/688 Practicum. 1/2/3 hrs
Practical experience in a particular field study, with each student responsible for the experimental design and the collection, analysis, and interpretation of field data for a specific area within a broader problem under group investigation.

Prereq: Department permission.

BIO 689 Internship. 3 hrs
An intensive internship experience consisting of supervised participation in teaching biology at the community college level. The intern will participate in all department and professional activities at a community college and will conduct specific courses. *Credit/no credit.*

Prereq: Department permission.

BIO 690/691/692 Thesis. 1/2/3 hrs
Intensive research into a biological problem, under the guidance and supervision of a graduate faculty member in the Biology department, and the preparation of a thesis consistent in substance and form with the standards of the discipline. *Offered on credit/no credit basis.*

Prereq: Department permission.

BIO 693 Seminar. 1 hr
Presentation of special reports and group discussions of selected topics. *Offered on a credit/no credit basis.*

Prereq: Twenty hours of credit in biology, including botany and zoology and department permission.

BIO 696 Seminar: Laboratory Instruction. 1 hr
Analysis and discussion of the special problems of laboratory instruction in biology in college. *Offered on credit/no credit basis.*

Prereq: Appointment to a graduate assistantship.

BIO 697/698/699 Independent Study. 1/2/3 hrs
An intensive study of a problem or group of problems under the direction of a University faculty member.

Prereq: Department permission.

BOTANY COURSES

BOT 530 Plant Products in Industry. 2 hrs
The various ways in which plants and plant products are utilized in modern industry; plants and the source of technical raw materials; the dependence of man upon the plant kingdom. *Not open to students who have credit in BOT 215 Economic Botany.*

BOT 540 Plant Morphology of Algae and Fungi. 4 hrs
A lecture and laboratory course on comparative morphology of the algae (freshwater and marine) and the fungi. A study of the structure and life cycles of representative organisms with emphasis on the relationship of morphology to reproduction, environmental adjustment, classification and evolution.

Prereq: Fifteen hours of biology including BOT 221 General Botany.

BOT 541 Morphology of Mosses through the Vascular Plants. 4 hrs
A lecture and laboratory course on comparative morphology of the mosses, liverworts, ferns and other vascular plants. A study of the structure and life cycles of representative forms with emphasis on the relationship of morphology to reproduction, environmental adjustment, classification and evolution.

Prereq: Fifteen hours of biology, including BOT 221 General Botany.

BOT 543 Plant Pathology. 3 hrs
A study of plant diseases caused by fungi, bacteria, viruses, nematodes, phanerogams and environmental stress, with emphasis on the biology of the causal organisms, principles of pathogenesis, practical techniques of applied plant pathology and disease control.

Prereq: BOT 442 Plant Physiology desirable.

BOT 550 Systematic Botany. 3 hrs
A lecture, laboratory and field course addressing the principles of plant systematics and taxonomy and techniques of obtaining and analyzing data used in systematics. Major plant groups will be studied by collection, preservation and identification of specimens. *Counts as a taxonomic field course. Not open to students who hold credit in BOT 455 Systematic Botany.*
Prereq: BOT 221 General Botany.

BOT 551 Freshwater Algae. 3 hrs
A survey of the freshwater algal divisions; their morphology, taxonomy, ecology and economic importances. Lectures will emphasize an evolutionary approach. Laboratory work will stress the identification of representative algal taxa. A class field study will be required. *Counts as a taxonomic field course.*
Prereq: BOT 221 General Botany.

BOT 552 Aquatic Tracheophyta. 3 hrs
Identification in the laboratory and field of herbaceous and shrubby vascular plants growing in aquatic habitats and in both vegetative and reproductive phases. *Counts as a taxonomic field course.*
Prereq: BOT 221 General Botany.

BOT 553 Taxonomy and Ecology of Diatoms. 3 hrs
A taxonomic field course on the collection, preservation and identification of freshwater diatoms; includes familiarity with the more significant world literature. Collection required. *Counts as a taxonomic field course.*
Prereq: BOT 551 or department permission.

BOT 554 Trees and Shrubs. 3 hrs
A taxonomic field course on identification of native trees and shrubs in winter and spring condition. *Counts as a taxonomic field course.*
Prereq: BOT 221 General Botany or BIO 205 Field Biology.

BOT 590/591/592 Special Topics. 1/2/3 hrs
An experimental course for subject matter not provided in other departmental offerings. The content will change from semester to semester. Students may elect this course several times as long as different topics are studied. *Not more than six hours of special topics may be used on a degree program.*
Prereq: Department permission.

BOT 594/595/596 Workshop. 1/2/3 hrs
Workshops will be offered dealing with selected areas. Workshops emphasize student participation and are designed to offer practical experience and training, and theoretical study. Topics to be announced. (See current campus and Continuing Education bulletins)

BOT 640 Plant Cell Physiology. 2 hrs
Selected topics on recent advances in molecular botany.
Prereq: BOT 221 General Botany, laboratory physiology (general, cell, plant, or animal) and organic chemistry.

BOT 679/680/681 Special Topics. 1/2/3 hrs
An experimental course for subject matter not provided in other department offerings. The content will change from semester to semester. Students may elect this course several times as long as

different topics are studied. *Not more than six hours of special topics may be used on a degree program.*

Prereq: Department permission.

BOT 693 Seminar. 1 hr
Presentation of special reports and group discussions on selected topics. *Offered on credit/no credit basis.*

Prereq: Twenty hours of credit in biology, including botany and zoology.

BOT 697/698/699 Independent Study. 1/2/3 hrs
An intensive study of a problem or group of problems under the direction of a University faculty member.

Prereq: Department permission.

MICROBIOLOGY COURSES

MIC 541 Microbial Genetics. 4 hrs
A lecture and laboratory course on the hereditary mechanisms employed by microbes, both procaryote and eucaryote. Methods of genetic manipulation of microbes for human benefit will be considered.

Prereq: MIC 329 General Microbiology, or two semesters of biochemistry and department permission.

MIC 555 Determinative Microbiology. 4 hrs
A lecture and laboratory course on the biochemical characteristics, isolation and growth of selected groups of micro-organisms. Identification characterization, numerical taxonomy techniques and independent laboratory work will be emphasized.
Prereq: MIC 444 Microbial Physiology, a biochemistry course and 15 hours of biology.

MIC 587 Cooperative Education. 3 hrs
Four or six months of full-time employment at an industrial firm or laboratory specially chosen for imparting a practical educational experience in microbiology or technology. The program consists of work experience alternated with full-time attendance at the University. Admittance to program by application only. *Offered on credit/no credit basis.*

Prereq: Department permission.

MIC 590/591/592 Special Topics. 1/2/3 hrs
An experimental course for subject matter not provided in other departmental offerings. The content will change from semester to semester. Students may elect this course several times as long as different topics are studied. *Not more than six hours of special topics may be used on a degree program.*
Prereq: Department permission.

MIC 620 General Virology. 3 hrs
Molecular virology dealing with biophysical, biochemical and biological properties of viruses; cultivation in vitro for vaccine production; infection cycles; molecular patterns of replication; and control mechanisms.
Prereq: Fifteen hours of credit in biology including microbiology and biochemistry.

MIC 693 Seminar. 1 hr
Presentation of special reports and group discussions of selected topics. *Offered on a credit/no credit basis.*
Prereq: Twenty hours of biology, including botany and zoology.

ZOOLOGY COURSES

ZOO 536 Vertebrate Tissues: Structure and Function. 3 hrs
Vertebrate tissue structure and function are examined in a lecture, discussion, laboratory course. An original term paper is required. To be offered once a year.

Prereq: Twenty semester hours of biology including ZOO 222 General Zoology.

- ZOO 548 Functional Biology of the Invertebrates.** 3 hrs
A lecture/laboratory discussion course to contrast various invertebrate functional approaches to common environmentally posed problems of survival. This will include participation in a discussion group, a team research project and report, and a term paper. *Prereq: Twenty semester hours college biology including ZOO 222 General Zoology and BIO 320 Introduction to Cell Physiology (ZOO 430 Invertebrate Zoology recommended).*
- ZOO 570 Natural History of Invertebrates.** 3 hrs
A field course in the recognition, collection, identification, and preservation of common invertebrates of Michigan, exclusive of the insects; natural history, ecology, and economic importance. *Counts as a taxonomic field course.*
Prereq: ZOO 222 General Zoology.
- ZOO 571 Natural History of Vertebrates.** 3 hrs
Vertebrates, their adaptations, and natural history; the taxonomic classification, identification, and distribution of local and other forms. Field work, sometimes under adverse weather conditions and at night; accurate original data on local species. *Counts as a taxonomic field course.*
Prereq: ZOO 222 General Zoology.
- ZOO 572 Ichthyology.** 3 hrs
A study of some aspects of the biology, classification, distribution, and evolution of fishes. Attention is given to the morphology, physiology, behavior, natural history, and ecology of fishes through work in lecture, laboratory, and in the field. Specific experience in the identification of the freshwater fishes of the Great Lakes region is provided in addition to a general survey of some marine fish families. *Counts as a taxonomic field course.*
Prereq: ZOO 222 General Zoology.
- ZOO 574 Herpetology.** 3 hrs
Amphibian/reptilian biology; taxonomy, evolution, adaptations, anatomy, behavior, ecology, zoogeography. Field trips: some nocturnal, rainy, and two Saturdays. Dissections: salamander, lizard. Study living/preserved representatives, extant families, and American species. Field or library research project required. *Counts as a taxonomic field course.*
Prereq: ZOO 222 General Zoology and one of the following: ZOO 310 Natural History of Vertebrates or ZOO 431 Comparative Anatomy of Vertebrates or BIO 420 Ecology.
- ZOO 575 Ornithology.** 3 hrs
Bird biology for the secondary teacher and for students with an advanced interest in biology; field identification and census methods of summer and fall bird populations, behavior and ecology. A survey in the laboratory of major North American bird families. A student field project is required. *Counts as taxonomic field course.*
Prereq: ZOO 222 General Zoology or department permission.
- ZOO 580 Advanced Field Ornithology.** 2 hrs
Field study and identification of all migratory birds and the spring migration as a biological phenomenon. *Counts as a taxonomic field course.*
Prereq: ZOO 575, or some experience in field identification of birds and department permission.
- ZOO 582 Aquatic Entomology.** 3 hrs
Aquatic insect families and some common genera; ecology, including adaptations to the aquatic environment, life histories, and taxonomy. A collection of the common insect families of this area is required. *Counts as a taxonomic field course.*
Prereq: ZOO 421/585 Entomology recommended.
- ZOO 583 Field Parasitology.** 3 hrs
The helminth, protozoan, and arthropod parasites of animals, both vertebrate and invertebrate; collection, preparation, and identification of parasites of local animals.
Prereq: ZOO 222 General Zoology; ZOO 462 Parasitology; ZOO 430 Invertebrate Zoology or ZOO 300/570 Natural History of Invertebrates; and ZOO 310/571 Natural History of Vertebrates or ZOO 431 Comparative Anatomy of Vertebrates. Department permission.
- ZOO 584 Protozoology.** 3 hrs
Survey of the protozoa, both free living and parasitic; their life cycles, morphology, and ecology. Techniques of collecting, culturing and preserving protozoans and their identification. *Counts as a taxonomic field course.*
Prereq: ZOO 222 General Zoology.
- ZOO 585 Entomology.** 3 hrs
A survey of the world of insects, their structure, function, behavior, and ecology; identification and classification of local insects. A field project is required. *Counts as a taxonomic field course.*
Prereq: ZOO 222 General Zoology.
- ZOO 586 Mammalogy.** 3 hrs
Some aspects of the biology of mammals; origin and evolution, anatomy, classification, adaptations, and zoogeography. Natural history and ecology are studied in the field, including behavior and population dynamics. A collection of five or more museum study specimens of different species is required of each student. *Counts as a taxonomic field course.*
Prereq: ZOO 222 General Zoology and ZOO 310/571 Natural History of Vertebrates or BIO 420/524 General Ecology or ZOO 431 Comparative Anatomy of Vertebrates.
- ZOO 590/591/592 Special Topics.** 1/2/3 hrs
An experimental course for subject matter not provided in other departmental offerings. The content will change from semester to semester. Students may elect this course several times as long as different topics are studied. *Not more than six hours of special topics may be used on a degree program.*
Prereq: Department permission.
- ZOO 594/595/596 Workshop.** 1/2/3 hrs
Workshops will be offered dealing with selected areas. Workshops emphasize student participation and are designed to offer practical experience and training, and theoretical study. Topics to be announced. (See current campus and Continuing Education bulletins)
- ZOO 670 Animal Behavior.** 2 hrs
The behavior of both vertebrates and invertebrates; instinct, learning, sociality, communication, and breeding behavior, with emphasis on the ontogenic and adaptive significance of behavior patterns.
Prereq: Two courses in zoology.
- ZOO 671 Comparative Vertebrate Physiology.** 4 hrs
A study of physiological and biochemical control systems utilized to maintain endogenous homeostasis in a series of vertebrate animals. Lab required.
Prereq: Organic chemistry, vertebrate physiology, or department permission.
- ZOO 672 Endocrinology.** 4 hrs
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. Lab required.
Prereq: Organic chemistry and vertebrate physiology, or department permission.

ZOO 673 Membrane Physiology. 2 hrs
A molecular study of animal membrane phenomena including receptor-ligand kinetics, effector protein responses and their interactions, and other events which are responsible for cell irritability, conductivity, respiration, and metabolism.
Prereq: Six hours of laboratory physiology, organic chemistry and CHM 451 Biochemistry I or biochemistry major. One year of physics is required.

ZOO 674 Animal Cell Physiology Laboratory. 1 hr
A lab course on animal cell physiology. Laboratory study of the physicochemical relationships responsible for the properties of cell irritability, conductivity, contractility, metabolism, respiration, excretion, growth, and reproduction.
Prereq or coreq: ZOO 673.

ZOO 679/680/681 Special Topics. 1/2/3 hrs
An experimental course for subject matter not provided in other department offerings. The content will change from semester to semester. Students may elect this course several times as long as different topics are studied. *Not more than six hours of special topics may be used on a degree program.*
Prereq: Department permission.

ZOO 693 Seminar. 1 hr
Presentation of special reports and group discussions on selected topics. *Offered on credit/no credit basis.*
Prereq: Twenty semester hours in biology, including botany and zoology.

ZOO 697/698/699 Independent Study. 1/2/3 hrs
An intensive study of a problem or group of problems under the direction of a University faculty member.
Prereq: Department permission.

COURSES DESIGNED FOR TEACHERS

BIO 506 Methods in Teaching Biology. 2 hrs
Salient techniques and methodology in presenting biological principles; text analysis, test construction, course content, planning and equipping a modern high school biology laboratory. *Not open to students who hold credit in BIO 403 Methods and Materials for Teaching Biology.*

BIO 521 Outdoor Science and Land Laboratories. 4 hrs
Using the outdoors effectively in instruction; recognition of instructional resources on school sites and other land laboratories. Basic ecological factors affecting associations of organisms; correlations between physical and social science. Field trips.

BOT 507 Experimental Plant Physiology for Teachers. 2 hrs
Lecture and laboratory course concentrating on selected experimental physiological studies of seed plants. *Offered during the summer session only. Not open to students who have had plant physiology.*
Prereq: Fifteen hours in biology.

ESC 505 Science in the Elementary School. 2 hrs
A survey of subject matter and process skills utilizing current science texts and courses of study; readings in current literature; the construction and use of science materials; supply and equipment needs for elementary science. *Not open to students who hold credit in ESC 302 Elementary School Science or ESC 303 Science for the Elementary Teacher.*

ESC 590/591/592 Special Topics. 1/2/3 hrs
An experimental course for subject matter not provided in other department offerings. The content will change from semester to semester. Students may elect this course several times as long as different topics are studied. *Not more than six hours of special topics may be used on a degree program.*
Prereq: Department permission.

ESC 594/595/596 Workshop. 1/2/3 hrs
Workshops will be offered dealing with selected areas. Workshops emphasize student participation and are designed to offer practical experience and training, and theoretical study. Topics to be announced. (See current campus and Continuing Education bulletins)

ESC 679/680/681 Special Topics. 1/2/3 hrs
An experimental course for subject matter not provided in other department offerings. The content will change from semester to semester. Students may elect this course several times as long as different topics are studied. *Not more than six hours of special topics may be used on a degree program.*
Prereq: Department permission.

ESC 693/694 Seminar. 1/2 hrs
Presentation of special reports and group discussions on selected topics. *Offered on credit/no credit basis.*
Prereq: Twenty semester hours in biology, including botany and zoology.

COURSES FOR NON-SPECIALIZING STUDENTS

The following courses are made available for graduate students who have had little or no previous training in biology, or more specifically, have not had equivalent courses as undergraduates. These courses may be applicable as cognates for other departments within the University. Unless also listed in the preceding section, they are *not* open to students with an undergraduate major in biology and *cannot* be applied to the graduate degree program in biology. Since most require no prerequisites, they are especially suited to the general student who would like to become better informed about biology, either for general interest or for better preparation for science teaching in the elementary grades.

BIO 502 Biology of Man. 2 hrs
Man as a living organism in the world, emphasizing his/her place and relationships with the other organisms; the morphological, physiological, taxonomic, and ecological relationships of mankind. Lectures and laboratory experience.

BIO 513 Principles of Heredity. 2 hrs
The basic principles of heredity with emphasis on inheritance in man. *Not open to students who hold credit in BIO 301 Genetics.*
Prereq: BIO 105 Biology and the Human Species or BIO 502.

BIO 525 Conservation. 2 hrs
A survey of the natural resources of Michigan; its land, water, minerals, forests, grasslands, wildlife, and human influences. Some of the current problems in conservation peculiar to Michigan on the basis of its history, its present resource utilization, and its future possibilities. *Not open to students who hold credit in BIO 224 Principles of Conservation.*

BOT 500 Survey of the Plant Kingdom. 2 hrs
The major types of plants from algae to seed plants; emphasis on development of structure. *Not open to students who have credit in BIO 205 Field Biology or BOT 221 General Botany.*

BOT 503 Plants and Nature. 2 hrs
Plants in their natural environment; identification and classification of local flowering plants, use of hand-lens and plant manuals, and methods of collection and preservation. Major plant groups and their climatic and geographic significance.

BOT 530 Plant Products in Industry. 2 hrs
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. *Not open to students who hold credit in BOT 215 Economic Botany.*

ZOO 501 Survey of the Animal Kingdom. 2 hrs
A survey of the major animal groups from protozoans to mammals. Structure function; the basis for classification and the evolutionary relationships of the several groups. *Not open to students who hold credit in BIO 205 Field Biology or ZOO 222 General Zoology.*

ZOO 504 Field Zoology. 2 hrs
Animals in their natural habitats; identification, behavior and environmental relations. Field study and observations in woods, fields, ponds and streams; collecting and displaying living and preserved material.

OTHER COURSES

These upper division undergraduate courses may also be taken for graduate credit. *A maximum of nine credit hours in approved 400-level courses may be applied on the department's degree program.* See the undergraduate catalog for course descriptions.

If you intend to enroll in any of the following undergraduate courses for graduate credit, you must come to the Graduate School for written permission before enrolling in the course; otherwise, you will received undergraduate credit.

Biology

- BIO 403 Methods and Materials for Teaching Biology (3)
- BIO 407 Advanced Hematology (3)
- BIO 412 Biogeography (2)
- BIO 413 Animal and Plant Preservation Techniques (1)*
- BIO 415 Basic Histological Techniques (1)*
- BIO 416 Biological Instrumentation—Theory and Practice (1)*
- BIO 434 Advanced Immunohematology (3)
- BIO 461 Oncology (3)
- BIO 480 Radiation Biology (3)

Botany

- BOT 404 Mycology (3)
- BOT 412 Plant Anatomy (3)
- BOT 442 Plant Physiology (3)
- BOT 446 Medical Mycology (4)

Microbiology

- MIC 432 Clinical Microbiology (4)
- MIC 442 Microbial Ecology (3)
- MIC 444 Microbial Physiology (3)
- MIC 445 Food Microbiology (3)
- MIC 454 Molecular Biology of Bacteria and Viruses (3)

Zoology

- ZOO 417 Neuroanatomy (3)
- ZOO 427 Vertebrate Physiology (3)
- ZOO 430 Invertebrate Zoology (4)
- ZOO 431 Comparative Anatomy of Vertebrates (4)
- ZOO 462 Parasitology (3)

CHEMISTRY

Judith T. Levy
Department Head
225 Mark Jefferson
487-0106

Krish Rengan
Coordinator of Advising
106-B Mark Jefferson
487-0106

MASTER OF SCIENCE IN CHEMISTRY

The purpose of this program is to provide advanced study of chemistry leading to the master of science degree for individuals (a) who are currently employed in chemistry-related industrial or governmental positions, or (b) who desire professional training before going into the job market or on to a doctoral program.

ADMISSION REQUIREMENTS

1. An undergraduate degree with either a major or a strong minor (approximately 25 semester hours) in chemistry.
2. Credit in advanced undergraduate courses corresponding to CHM 371-373 (Organic Chemistry I-II with lab), CHM 363-365 and CHM 464 (Physical Chemistry), and CHM 481 Instrumental Analysis, along with either CHM 432 Advanced Inorganic Chemistry or CHM 451-452 (Biochemistry I-II). Competency in any deficient areas may be established by examination. The graduate coordinator will use the results of these examinations to ascertain the need for remedial work. If deficiencies exist for which competency is not established by examination, a maximum of four semester hours of graduate credit will be allowed for courses taken to correct these deficiencies.
3. One year of calculus-based college physics (PHY 223 Mechanics, Sound, and Heat; PHY 224 Electricity and Light); linear algebra and calculus through differential equations.
4. An undergraduate record that meets the requirements specified by the Graduate School.
5. Submission of scores from the Graduate Record Examination is required. These should include the verbal, quantitative, analytical, and advanced chemistry test portions.

DEGREE REQUIREMENTS

Students on this program follow either the Thesis Plan or the Non-Thesis Plan. Requirements for each plan include a research seminar and a research experience, a course in chemical literature and three core courses, and additional courses to complete the stated minimum number of hours.

Thesis Plan. This plan is intended for most students and requires satisfactory completion of a minimum of 30 semester hours of graduate credit.

Non-Thesis Plan. This plan requires satisfactory completion of a minimum of 34 semester hours of graduate credit. It is intended for the part-time student whose professional experience constitutes a reasonable substitute (as determined by the graduate coordinator) for the laboratory research of the thesis plan.

COURSE REQUIREMENTS

Required Courses 2 hours
CHM 610 Information Retrieval in Chemistry (1) or equivalent
CHM 693 Seminar (1) and attendance at department seminars.

Core Courses 7-9 hours

Select three courses, with no more than one course from each of these five groups:

CHM 553 Enzymology (2) or CHM 555 Neurochemistry (3) or CHM 655 Advanced Biochemistry Topics (2)

CHM 561 Quantum Chemistry and Spectroscopy (2) or CHM 562 Statistical Mechanics and Chemical Kinetics (2)

CHM 571 Advanced Organic Chemistry (3)

CHM 632 Structural Inorganic Chemistry (3)

CHM 641 Advanced Analytical Chemistry (3)

A GPA of "B" or better is required in core courses.

Electives 11-25 hours

Select from among graduate courses at the 500 or 600 level or from the following undergraduate courses:

CHM 411, CHM 412, CHM 413, CHM 414, CHM 415, CHM 432, CHM 433, CHM 451, CHM 452, CHM 453, CHM 481, CHM 485, CHM 487, CHM 488, and CHM 489. No graduate credit is allowed for courses numbered below 400. A maximum of nine hours of approved 400-level coursework may be permitted in the earning of any graduate degree.

If you intend to enroll in any of the above undergraduate courses for graduate credit, you must come to the Graduate School for written permission before enrolling in the course; otherwise you will receive undergraduate credit.

Research Requirement 0-10 hours

Thesis Plan students will complete 6-10 hours in CHM 697/698/699 Research in Chemistry (1/2/3). An approved written thesis and an oral presentation of the research to the chemistry department or at a professional meeting is required.

Non-Thesis Plan students will satisfactorily complete a written report, in thesis style, on a project carried out in the student's job in the off-campus setting. The industrial research experience must be judged a reasonable substitute for a typical academic research project. This substitutability will be evaluated by the Graduate Committee and the department head. Students will also present a seminar to the chemistry faculty; this seminar must meet the standards described for the research seminar in the Department Graduate Student Handbook.

Cognates 0-6 hours

Select from courses outside the Chemistry Department. Cognates chosen from 400-level courses will be included in the 9 hour limit stated above.

Total Program Hours 30-34 hours**CHEMISTRY COURSES****CHM 510 Computer Applications in Chemistry.** 2 hrs

A course in computer programming designed for advanced undergraduates and graduate students. The emphasis is on the application of computer-based numerical methods to the solution of complex chemical problems.

Prereq: Senior or graduate standing in chemistry; no prior background in computer programming is necessary.

CHM 511 Introduction to Industrial Hygiene. 2 hrs

The course introduces the concepts, practices, standards, and legal requirements associated with the protection of workers from chemical hazards, radiation, noise stress, and heat stress in the work place.

Prereq: CHM 372 Organic Chemistry II required; CHM 281 Quantitative Analysis and CHM 411 Toxicology I recommended.

CHM 512 Industrial Hygiene Laboratory. 1 hr

This laboratory course instructs students in the methods used to analyze for the presence of hazardous chemicals in the air of factories.

Prereq: CHM 271 Organic Chemistry Laboratory; CHM 281 Quantitative Analysis; CHM 373 Organic Chemistry Laboratory. Prereq or Coreq: CHM 511.

CHM 515 Industrial and Environmental Chemistry. 3 hrs

A three-part course covering selected aspects of industrial organic chemistry, industrial inorganic chemistry, and environmental chemistry. Environmental problems most closely associated with the production aspects of industrial chemistry will be discussed.

Prereq: One year of organic chemistry; one course in inorganic chemistry; one course in physical chemistry.

CHM 553 Enzymology. 2 hrs

A lecture course covering the nomenclature, kinetics, mechanism, and regulation of enzymes.

Prereq: CHM 451 Biochemistry I.

CHM 555 Neurochemistry. 3 hrs

Discussion of the biochemistry of the nervous system covering the synthesis, distribution, mechanism of function, and degradation of compounds involved in neural function (including neurotransmitters, neurohormones, brain sphingolipids, steroids, and prostaglandins). Mental diseases with a known biochemical basis and the rationale for drug therapy are described.

Prereq: CHM 452 Biochemistry II.

CHM 561 Quantum Chemistry and Spectroscopy. 2 hrs

A study of atomic and molecular structure and spectroscopy based on quantum chemistry.

Prereq: CHM 464 Quantum Chemistry, MTH 325 Differential Equations, PHY 224 Electricity and Light.

CHM 562 Statistical Mechanics and Chemical Kinetics. 2 hrs

Introduction to the principles of statistical mechanics, the connection between the microscopic world and classical thermodynamics, and modern theories of chemical reaction rates.

Prereq: CHM 364 Chemical Kinetics, CHM 464 Quantum Chemistry, MTH 325 Differential Equations, PHY 224 Electricity and Light.

CHM 564 Physical-Chemical Characterization of Polymers. 2 hrs

Physical methods of polymer characterization, including molecular weight determination, size fractionation; thermal analysis, degradation, depolymerization, and reaction kinetics. Laboratory: six hours per week.

Prereq: CHM 365 Physical Chemistry Laboratory and CHM 475 Introduction to Polymer Chemistry.

CHM 565 Nuclear Chemistry. 3 hrs

The course will cover topics such as radioactive decay, decay systematics, nuclear models, and nuclear reactions. Applications of radioactivity to chemical problems will be discussed. Techniques of nuclear chemistry, nuclear processes as chemical probes and other such topics will be covered. A discussion of the preparation and properties of transplutonium elements will be included.

Prereq: One year of college chemistry; one course in physical chemistry or modern physics.

CHM 571 Advanced Organic Chemistry. 3 hrs

A lecture course devoted to developing a deeper understanding of the structure of organic compounds and the mechanism of organic reactions. The structural aspects of bonding, stereochemistry, and conformation will be extended beyond the introductory level prior to considering mechanistic studies on several fundamental reaction types.

Prereq: One year of organic chemistry.

CHM 572 Spectrometric Organic Structure Determination. 4 hrs

The use of infra-red, Raman, ultra-violet, mass, and nuclear magnetic resonance spectroscopy in organic structure determination will be discussed. Emphasizes problem-solving and practical applications.

Prereq: CHM 372 Organic Chemistry II.

CHM 574 Advanced Organic Chemistry Topics. 2 hrs

Two or three advanced topics are treated in depth. The topics selected will vary from offering to offering and could include such examples as: stereochemistry and conformational analysis, natural product chemistry, heterocyclic compounds, orbital symmetry rule and applications, and photochemistry.

Prereq: CHM 372 Organic Chemistry II.

CHM 590/591/592 Special Topics. 1/2/3 hrs

An in-depth study of a specialized area of chemistry. Not offered on a regular basis.

Prereq: Graduate standing.

CHM 610 Information Retrieval in Chemistry. 1 hr

A course designed primarily to provide MS candidates with a proficiency in locating chemical information by independent study. Exercises are relevant to research and involve both manual and computerized information retrieval.

Prereq: Graduate standing.

CHM 632 Structural Inorganic Chemistry. 3 hrs

Physical and chemical methods for determining structures of inorganic substances and the relationship between structure and descriptive chemistry will be discussed.

Prereq: One year of physical chemistry and one course in advanced inorganic chemistry.

CHM 641 Advanced Analytical Chemistry. 3 hrs

A course stressing modern methods of analysis, with special emphasis on trace determinations. Optical, X-ray, separation, and nuclear methods are examined in detail.

Prereq: CHM 481 Instrumental Analysis and one year of physical chemistry.

CHM 655 Advanced Biochemistry Topics. 2 hrs

Specialized areas of biochemistry are discussed in depth, with an emphasis on recent research developments.

Prereq: CHM 452 Biochemistry II.

CHM 665 Physical Chemistry of Polymers. 2 hrs

Thermodynamics and kinetics of step-growth and chain-growth polymerizations, the configuration and conformation of polymers, the properties of polymer solutions and phase equilibria, including crystallinity, and molecular weight determination.

Prereq: CHM 364 Chemical Kinetics and CHM 475 Introduction to Polymer Chemistry.

CHM 675 Advanced Organic Polymer Chemistry. 3 hrs

The reactions used to form specialty polymers including polyaromatic heterocycles and metal containing polymeric systems in semiconducting materials. The use of phosphazines and siloxanes and the development of new monomer systems. Composites and polymer blends in multi-phase systems. Polymers and polymeric materials in electronics and medicine.

Prereq: CHM 363 Chemical Thermodynamics, CHM 364 Chemical Kinetics, CHM 372 Organic Chemistry II, and CHM 373 Organic Chemistry Laboratory.

CHM 679/680/681 Special Topics. 1/2/3 hrs

An experimental course for subject matter not provided in other department offerings. The content will change from semester to semester. Students may elect this course several times as long as

different topics are studied. *Does not count toward MS in chemistry.*

Prereq: Department permission.

CHM 693 Seminar. 1 hr

Discussion of specific topics in chemistry by graduate students. Emphasis will be placed on the improvement of oral communication techniques for presentation of scientific material.

Prereq: Department permission.

CHM 697/698/699 Research in Chemistry. 1/2/3 hrs

The student performs original research under faculty direction. Repeat enrollment is allowed. Thesis is submitted after completion of six to 10 hours of research in chemistry. *Offered on credit/ no credit basis.*

Prereq: Department permission.

COMMUNICATION AND THEATRE ARTS

Dennis M. Beagen
Department Head
124 Quirk
487-3131

Patricia Moore Zimmer
Coordinator of Advising MFA
Drama/Theatre for the Young
104 Quirk
487-0031

Katherine Strand-Evans
Coordinator of Advising
Communication and Theatre Arts
121 Quirk
487-3032

The Communication and Theatre Arts department provides programs of graduate study leading to the degrees of Master of Fine Arts in drama/theatre for the young, Master of Arts in communication, Master of Arts in theatre, and Master of Arts in drama/theatre for the young. A detailed description of each of the master of arts programs may be obtained from the department or coordinator of advising. Objectives for the department's master's programs include:

Advancing students toward mastery of their creative areas of specialization.

Providing students opportunity to acquire and apply the tools essential to research.

Preparing students for careers and further study.

Each year the department awards a number of graduate assistantships to students possessing excellent backgrounds in communication and/or theatre arts and a minimum overall GPA of at least 3.0 in their undergraduate work. Such students assist with the teaching of sections of the department's fundamentals of speech course, or assist with one of the co-curricular programs in communication, drama/theatre for the young, interpretation/performance studies, or theatre arts.

MASTER OF FINE ARTS IN DRAMA/ THEATRE FOR THE YOUNG

This program is designed to prepare qualified students for a variety of careers involving drama/theatre for developmental purposes, as well as theatre arts for the young. It is built around required core courses, supplemented by elective and cognate courses, to achieve a concentration in developmental drama and theatre for and with the young.

ADMISSION REQUIREMENTS

Applicants for admission to this program must:

1. Be admitted to the Graduate School and be accepted into the program by the departmental Graduate Committee.
2. Have a minimum overall undergraduate GPA of 2.75, or 3.0 in the last half of the undergraduate program if the bachelor's degree was earned before 1975; an overall GPA of 3.0 is required if the bachelor's degree is more recent than 1975. Exceptions to this requirement can be made if at least 15 semester hours of graduate work have already been earned with a GPA of 3.0 or higher.
3. Send samples of previous work and have letters of recommendation sent.
4. Have an interview with at least one program faculty member.

5. Possess an appropriate foundation in undergraduate studies, considered along with relevant extra-academic experiences, for the special graduate focus chosen.

PROGRAM REQUIREMENTS

Students in this program must:

1. Early in their graduate work, prepare in consultation with an assigned graduate adviser and place on file in the Graduate School an official program of study.
2. Successfully meet all conditions stipulated upon entry into the program.
3. Satisfactorily complete, with an overall GPA of at least 3.0, a minimum of 60 semester hours of approved course work beyond the bachelor's degree or a minimum of 30 semester hours beyond an appropriate master's degree as identified in the official program of study.

COURSE REQUIREMENTS

Required courses	27-28 hours
CTA 429 History and Theory of Developmental Drama/ Theatre	3
CTA 501 Creative Drama and Role-Playing	2
CTA 504 Oral Interpretation of Literature and Language with the Young	2
CTA 522 TIE: Theatre-in-Education	2
CTA 565 Studies in Drama/Theatre for the Young	2
CTA 606 Colloquium	1
CTA 608 Colloquium	3
CTA 627 The Playwright and the Young Audience	3
CTA 657 Improvisation	3
CTA 658 Theatre for Children	3
CTA 684/685 Workshop	3/4
Required research courses	8 hours
CTA 677 Research Techniques in Communication and Theatre Arts	2
CTA 690 Examination	1
CTA 691/692 Thesis/Project	5
Elective courses	14-15 hours
Appropriate courses selected from within the department and from other departments with the consent of the adviser.	
Internship	10 hours
CTA 686/687/688/689 Cooperative Education	1/2/3/4
Total	60 hours

MASTER OF ARTS IN COMMUNICATION

This program is designed for students who have completed undergraduate degrees with majors or minors in communication or speech. It can prepare them for careers demanding sophisticated knowledge of the many aspects of human communication or for pursuing graduate work beyond the master's level. Primary program emphases are interpersonal, small group, organizational, intercultural, and speech communication. Students are encouraged to take a 6-hour cognate course of study as part of the required program.

ADMISSION REQUIREMENTS

Applicants for admission to the program must:

1. Be admitted to the Graduate School and be accepted into the program by the departmental Graduate Committee.
2. Have at least a minor or the equivalent in communication, theatre arts, or drama/theatre for the young.
3. Have a minimum overall undergraduate GPA of 3.0 (exceptions on recommendation of area faculty).

PROGRAM REQUIREMENTS

Students in the program must:

1. At the outset of their graduate work, prepare in consultation with an assigned graduate adviser and place on file in the Graduate School an official program of study.
2. Successfully meet all conditions stipulated upon entry into the program.
3. Satisfactorily complete, with an overall GPA of at least 3.0, a minimum of 30 hours of approved course work as identified in the official program of study.

COURSE REQUIREMENTS

Required courses	3-5 hours
CTA 677 Research Techniques	2
One of the following: CTA 690 Examination, CTA 691/692 Thesis, CTA 691/692 Project	1-3
Elective courses	19-27 hours
Appropriate courses selected from within the department with the consent of the adviser.	
Cognate courses	0-6 hours
Appropriate courses selected from other departments with the consent of the adviser.	
Total	30 hours

**CONCENTRATION IN INTERPRETATION/
PERFORMANCE STUDIES**

This specialized concentration within the MA in Communication program offers advanced study of the nature and interaction of performance, performance acts, texts and contexts situated in the human experience. Through performance and scholarship, I/PS addresses questions related to literary study and aesthetics, cultural diversity, and post-modern performance acts and critical perspectives.

MASTER OF ARTS IN THEATRE ARTS

This program is designed to prepare students with an undergraduate major or minor in theatre arts for careers in all levels of theatre or for further graduate study in the discipline.

ADMISSION REQUIREMENTS

Applicants for admission to the program must:

1. Be admitted to the Graduate School and be accepted into the program by the departmental Graduate Committee.
2. Have at least a minor or the equivalent in communication, theatre arts, or drama/theatre for the young.
3. Have a minimum overall undergraduate GPA of 2.5, or 2.75 in the last half of undergraduate work.

PROGRAM REQUIREMENTS

Students in the program must:

1. At the outset of their graduate work, prepare in consultation with an assigned graduate adviser and place on file in the Graduate School an official program of study.
2. Successfully meet all conditions stipulated upon entry into the program.
3. Satisfactorily complete, with an overall GPA of at least 3.0, a minimum of 30 hours of approved course work as identified in the official program of study.

COURSE REQUIREMENTS

Required courses	3-5 hours
CTA 677 Research Techniques	2
One of the following: CTA 690 Examination, CTA 691/692 Thesis, CTA 691/692 Project	1-3

Elective courses	19-27 hours
Appropriate courses selected from within the department with the consent of the adviser.	
Total	30 hours

**CONCENTRATION IN ARTS
ADMINISTRATION**

This specialized concentration within the MA in Theatre Arts program is designed for individuals with strong commitment to the arts and sincere interest in financial, marketing and information management. Persons entering the program should have an undergraduate degree in the arts or equivalent experience.

Arts administration students develop skills in accounting, advertising, labor relations, and other areas of business through studies in management and communication combined with specialized training in arts administration, law and public policy, and marketing. Because the arts administrator must maintain a high degree of sensitivity to aesthetics, the program provides for advanced study in theatre and the opportunity for professional internships.

This program is designed to prepare students to enter careers involving work in drama/theatre and communication with and for children, young people, and inter-generational groups.

ADMISSION REQUIREMENTS

Applicants for admission to the program must:

1. Be admitted to the Graduate School and be accepted into the program by the departmental Graduate Committee.
2. Have at least a minor or the equivalent in communication, theatre arts, or drama/theatre for the young.
3. Have a minimum overall undergraduate GPA of 2.5, or 2.75 in the last half of undergraduate work.

PROGRAM REQUIREMENTS

Students in the program must:

1. At the outset of their graduate work, prepare in consultation with an assigned graduate adviser and place on file in the Graduate School an official program of study.
2. Successfully meet all conditions stipulated upon entry into the program.
3. Satisfactorily complete, with an overall GPA of at least 3.0, a minimum of 30 hours of approved course work as identified in the official program of study.

COURSE REQUIREMENTS

Required courses	3-5 hours
CTA 677 Research Techniques	2
One of the following: CTA 690 Examination, CTA 691/692 Thesis, CTA 691/692 Project	1-3
Elective courses	19-27 hours
Appropriate courses selected from within the department with the consent of the adviser.	
Total	30 hours

COURSES OFFERED

The following list of courses is divided into two broad categories—General and Specialization—within which courses are grouped by program (e.g. Communication, Theatre Arts) rather than listed in consecutive numerical order. General courses are offered for the benefit of graduate students specializing in other departments who wish to take collateral or cognate work in the Communication and Theatre Arts department as well as for credit toward the department's degrees. Specialization courses are specifically designed for students seeking credit toward degrees within the Communication and Theatre Arts department. Courses in

either category, however, are open to any graduate students having the necessary prerequisites.

GENERAL COURSES

COMMUNICATION COURSES

CTA 506 Persuasion in the Modern World. 2 hrs
Emphasis is placed on the uses and applications of persuasion in such areas as politics, business, religion, and education.

CTA 507 Negotiation Skills for Professionals. 2 hrs
Practical applications of negotiation skills for counseling, education, and business professions.

CTA 508 Small Group Decision-Making. 2 hrs
The theory and practice of discussion and practice of communication in small group decision-making.

CTA 509 Communication for Leaders. 2 hrs
Theory and applications of communication in leadership roles. Deals with interviews, staff meetings, dyadic communication, communication in large and small organizations, and communication barriers with methods of evaluating and improving interpersonal, group, and public communication.

CTA 510 Listening Skills for Professionals. 2 hrs
Practical applications of listening skills for counseling education and business professions.

CTA 574 Directing Secondary Forensic Activities. 2 hrs
The philosophy, organization, and administration of forensic programs for those who direct or plan to direct such activities on the secondary level.

Prereq: Department permission.

CTA 583 Communication and Conflict Resolution. 3 hrs
A study of the theory and practice of communication strategies for conflict resolution for interpersonal, small group, and organizational applications.

Prereq: Fifteen hours of credit in communication and major/graduates.

THEATRE ARTS COURSES

CTA 554 Directing High School Dramatic Activities. 2 hrs
The philosophy, organization and administration of dramatic programs for those who direct or plan to direct such activities on the high school level.

Prereq: Department permission.

CTA 555 Play Production—Junior/Senior High School. 2 hrs
Principles and techniques of play production with emphasis on problems encountered in secondary schools. Dramatic structure, play selection, directing, scene design and construction, stage lighting, make-up, costuming, properties, and business management; improvement of effectiveness in both curricular and extra-curricular theatre.

Prereq: Non-major/graduates. Recitation required.

DRAMA/THEATRE FOR THE YOUNG COURSES

CTA 501 Creative Drama and Role-Playing. 2 hrs
An introduction to understanding the creative process, dramatic play, gaming, and involvement drama as developmental learning.

CTA 502 Introduction to Theatre for the Young. 2 hrs
An introductory consideration of the scope, purposes, forms, and materials of theatre for the young.

CTA 504 Oral Interpretation of Literature and Language with the Young. 2 hrs

Emphasis on the study of interpreting literature orally for and with the young, including developing competence and understanding in the adult and child in interpretive and improvised work emerging from literature and language.

CTA 522 TIE: Theatre-in-Education. 2 hrs
A study of the origin, principles, and forms of TIE: Theatre-in-Education. Students will have opportunities to plan and evaluate TIE sessions.

CTA 523 Puppetry: Catalyst in Human Development. 3 hrs
Consideration of puppetry as a medium for learning and creative expression. Experience in constructing puppets for purposeful work with people. Examination of the applications of puppetry to many disciplines.

CTA 524 Developmental Drama/Theatre with Handicapped Persons. 2 hrs

Study of principles, theories, and practices of developmental drama/theatre for handicapped persons. Applications to educational, recreational, and institutional settings will be stressed.

CTA 525 Developmental Drama/Theatre in Recreational Settings. 2 hrs

An exploration of the theory and practice of developmental drama/theatre in various recreational settings, such as camps, parks, community centers, Girl Scouts, 4-H.

CTA 528 Developmental Drama/Theatre in Religion. 2 hrs
Consideration of and experience in uses of developmental drama/theatre for various religious settings and purposes.

CTA 627 The Playwright and the Young Audience. 3 hrs
A study of dramatic literature for the young, from developmental as well as artistic viewpoints and in contexts of the main body of dramatic literature and children's literature, and the total educational experience of children and adolescents.

CTA 658 Theatre for Children. 3 hrs
An extensive study of the nature and range of theatre experiences for children and adolescents.

Prereq: Graduate student in communication and theatre arts.

CTA 686/687/688/689 Cooperative Education. 1/2/3/4 hrs
One term of supervised educational work in communication and theatre arts. An evaluation is required at the end of each employment period. *Offered on a credit/no credit basis.*

Prereq: Twenty hours of credit in communication and theatre arts; approval by Cooperative Education Office and the department.

TELECOMMUNICATIONS AND FILM COURSES

CTA 534 Directing High School Broadcasting, TV, and Film Activities. 2 hrs

The philosophy, organization, and administration of broadcasting, television, and film programs for those who direct or plan to direct such activities on the high school level.

Prereq: Department permission.

CTA 537 Mass Communications. 2 hrs
A comparative study of the mass media in the United States; their development, function and import. Special emphasis will be placed on the process and effects of mass communication with detailed study of radio and television.

CTA 538 Television Techniques for Classroom Teachers I. 2 hrs
Skills and techniques needed by classroom teachers for the effective presentation of educational materials through the medium of television. Theory and practice.

CTA 548 Television Techniques for Classroom Teachers II. 2 hrs
A continuation and intensification of the theoretical and practical experience in instructional television provided in CTA 538. Laboratory hours to be arranged.

SPECIALIZATION COURSES

Specialization courses in communication and theatre arts are courses specifically designed for students wishing credit toward the MA in communication and theatre arts. Such courses are open to other students, however, who have the necessary prerequisites.

COMMUNICATION COURSES

CTA 570 Teaching of College Speech. 1 hr
Theory and practice of teaching speech at the college level. *Offered on a credit/no credit basis.*
Prereq: Department permission.

CTA 573 Studies in Communication and Negotiation. 3 hrs
The theory and practice of negotiation for interpersonal, small group, and labor/management applications.

CTA 575 Studies in Listening Behavior. 3 hrs
A study of the practice of listening behavior for interpersonal, small group, and organizational applications.
Prereq: Fifteen hours in communication and major in communication and theatre arts.

CTA 576 Public Address. 3 hrs
Critical study of the significant speeches of leading speakers with reference to their dominant issues and their influence on social and political life.
Prereq: Fifteen hours of credit in communication.

CTA 577 Communication and Change. 3 hrs
An exploration of interpersonal, small group, organizational, public, and mass communication from the perspective of change theories.
Prereq: Graduate student in communication, qualified senior, or department permission.

CTA 578 Community Communication. 3 hrs
An exploration of such communication problems as communicator acceptability, social coordination, and outcome achievement from the perspective of the community context.
Prereq: Graduate student in communication, qualified senior, or department permission.

CTA 579 Studies in Intercultural Communication. 3 hrs
The study of theoretical perspectives and the development of analytical skills necessary for effective intercultural communication transactions.
Prereq: Graduate student and department permission.

CTA 581 Rhetorical Theory to 1900. 3 hrs
A study of selected rhetorical theories from the classical age to 1900. The course is designed to facilitate understanding of the transition from classical to modern rhetorical theory.
Prereq: Fifteen hours of credit in communication.

CTA 582 Modern Rhetorical Theory. 3 hrs
A study of selected rhetorical theories from 1900 to the present with a view of discovering the methods and objectives of modern rhetoricians and relating them to society and its problems.
Prereq: Fifteen hours of credit in communication.

CTA 584 Studies in Small Group Communications. 3 hrs
An examination of methods and research currently being conducted in discussion and small group studies.
Prereq: Fifteen hours of credit in communication.

CTA 585 Theories of Argument and Controversy. 3 hrs
Theoretical foundations of argument and controversy and a review of related research.
Prereq: Fifteen hours of credit in communication and major/graduate.

CTA 586 Theories of Persuasion. 3 hrs
A review of contemporary research and theory of persuasion.
Prereq: Fifteen hours of credit in communication and major/graduate.

CTA 587 Communication Theory. 3 hrs
A critical examination of fundamental processes and principles of communication behavior.
Prereq: Fifteen hours of credit in communication and major/graduate.

CTA 588 Research in Communication. 3 hrs
The examination of communication research methods with a major emphasis upon empirical research. Students will select and design a major research project.
Prereq: Fifteen hours of credit in communication and major/graduate.

CTA 590/591/592 Special Topics. 1/2/3 hrs
Students will investigate a particular topic that is approved by the Department of Communication and Theatre Arts.
Prereq: Graduate student or qualified senior in communication and theatre arts.

CTA 606/607/608 Colloquium. 1/2/3 hrs
Students will study a special topic area with resource persons from the community as well as members of the communication and theatre arts faculty. *Offered on a credit/no credit basis.*
Prereq: Graduate student in communication and theatre arts or a related field. Department permission.

CTA 645 Theories of Interpersonal Communication. 3 hrs
Study of the theoretical foundations of interpersonal communication and survey of related research.
Prereq: Fifteen credit hours in communication.

CTA 677 Research Techniques. 2 hrs
An introduction to the nature and value of research; the research problem; basic research tools; philosophical foundations of historical, descriptive and experimental research; professional writing. (Winter semesters)
Prereq: Fifteen hours of credit in communication and theatre arts and major/graduate.

CTA 679/680/681 Special Topics. 1/2/3 hrs
Students will investigate a particular topic that is approved by the Communication and Theatre Arts department.
Prereq: Graduate student in communication and theatre arts.

CTA 682/683/684/685 Workshop. 1/2/3/4 hrs
Students will be provided practical and theoretical study in a selected topic area. *Offered on a credit/no credit basis.*
Prereq: Graduate student in communication and theatre arts or a related field. Department permission.

CTA 686/687/688 Cooperative Education. 1/2/3 hrs
One term of supervised educational work in communication and theatre arts. An evaluation is required at the end of each employment period. *Offered on a credit/no credit basis.*
Prereq: Twenty hours of credit in communication and theatre arts; approval by Cooperative Education Office and the department.

CTA 690 Examination. 1 hr
An examination over the student's field of study conducted by a departmental faculty committee from assigned readings. *Offered on a credit/no credit basis.*
Prereq: Graduate student in communication and theatre arts and department permission.

CTA 690/691/692 Thesis. 1/2/3 hrs
A research-oriented study conducted under the supervision of a departmental faculty committee. *Offered on a credit/no credit basis.*
Prereq: Graduate student in communication and theatre arts and department permission.

CTA 690/691/692 Project. 1/2/3 hrs
A theory-application project conducted under the supervision of a departmental faculty committee. *Offered on a credit/no credit basis.*
Prereq: Graduate student in communication and theatre arts and department permission.

CTA 693/694/695 Seminar. 1/2/3 hrs
A research-oriented course for graduate majors in communication and theatre arts.
Prereq: Graduate student in communication and theatre arts and department permission.

CTA 697/698/699 Independent Study. 1/2/3 hrs
An intensive study of one or more problems under the direction of a University faculty member.
Prereq: Department permission.

INTERPRETATION/PERFORMANCE STUDIES

CTA 536 Screenplay Writing I. 3 hrs
Introduces students to a process that leads to the successful completion of a screenplay to mid-point; includes film structure, character and dialogue, writing for visual impact, screenplay format.

CTA 540 Personal Narrative/Oral History in Performance. 3 hrs
Explores nature and role of these texts in relationship to "other" and social-cultural-political perspectives. Focus on primary sources, including interviewing, transcribing, scripting, staging for solo-group performance, ethics.
Prereq: Six hours in interpretation/performance studies or department permission.

CTA 541 Performance, Text, and Context. 3 hrs
Exploration and experience in locating new texts and performances within the parameters of specific contexts. Emphasis on implications of cultural, socio-political and critical perspectives.
Prereq: Suggested six hours of interpretation/performance studies or related coursework; or department permission.

CTA 542 Adapting/Directing Narrative Theatre. 3 hrs
Analysis, adaptation, and direction of narrative, particularly prose fiction, for group performance and theatre; exploration of group performance as dramatic enactment, interrogation, cultural and critical expression; experimentation in emergent forms.
Prereq: Six hours in interpretation/performance studies coursework or equivalent; or department permission.

CTA 546 Screenplay Writing II. 3 hrs
Continues process initiated in CTA 536 to successful completion of screenplay and first major rewrite; concentration on visual telling, refining character, dialogue, narrative, subplot, metaphor and symbol, rhythm, pacing.
Prereq: CTA 536 and a screenplay completed to mid point, or permission of the department.

THEATRE ARTS COURSES

CTA 551 Theatre Planning. 2 hrs
A study of the steps and considerations appropriate to the design of theatre structures with emphasis on institutional and community playhouses.
Prereq: Nine hours credit in theatre arts or department permission.

CTA 556 Experimental Staging Techniques for the Director. 1 hr
Exploration and practical application of non-traditional staging possibilities.
Prereq: One course in directing or department permission.

CTA 557 Audition Techniques for the Actor. 1 hr
Review of the literature and personalized preparation of materials and techniques equipping the actor to better confront tryouts and auditions for the commercial and non-commercial theatre.
Prereq: One course in acting or department permission.

CTA 558 Directing Styles. 2 hrs
The theory and practice of directing selected periods of drama, with emphasis on Greek, Elizabethan, Restoration, modern, and non-Western presentational forms.
Prereq: One course in directing or department permission.

CTA 559 Acting Styles. 2 hrs
The theory and practice of acting within selected periods of Greek, Elizabethan, Restoration, modern, and non-Western presentational forms.
Prereq: One course in acting or department permission.

CTA 560 Ancient Dramatic Theory. 3 hrs
Study of the main theories regarding the nature and purpose of drama from ancient Greece to the end of the 17th century.
Prereq: CTA 450 History of the Theatre to 1642 and CTA 451 History of the Theatre: 1642 to the Present or department permission.

CTA 561 Modern Dramatic Theory. 3 hrs
The main theories regarding the nature and purpose of drama from the beginning of the 18th century to the present.
Prereq: CTA 450 History of the Theatre to 1642 and CTA 451 History of the Theatre: 1642 to the Present or department permission.

CTA 562 American Theatre History. 2 hrs
A tracing of the main currents in the history of the American theatre from its beginnings in the middle 1700s to the present day.
Prereq: CTA 450 History of the Theatre to 1642 and CTA 451 History of the Theatre: 1642 to the Present or department permission.

CTA 566 Studies in Theatre History. 2 hrs
This course will be concerned with a penetrating study of the theatrical activity and technology prevalent during a particular period in world history.
Prereq: CTA 450 History of the Theatre to 1642 and CTA 451 History of the Theatre: 1642 to the Present or department permission.

CTA 567 Problems in Design and Technical Theatre. 2 hrs
An intensive study of the organic theory of theatre production with emphasis on the contributions of Craig, Appia, Bakst, Reinhardt, Jones, Simonson, and BelGeddes.
Prereq: CTA 351 Scene Design, CTA 362 Stage Lighting, CTA 450 History of the Theatre to 1642, and CTA 451 History of the Theatre: 1642 to the Present or department permission.

CTA 568 Musical Theatre Performance Techniques. 2 hrs
The course is designed for knowledgeable actors who are beginning work with musical theatre literature. The emphasis is on workshop experience to develop techniques for performing songs.
Prereq: One course in acting or department permission.

CTA 569 Studies in Directing. 2 hrs
An in-depth study of the theories and practices of noted stage directors, past and present.
Prereq: One course in directing or department permission.

CTA 590/591/592 Special Topics. 1/2/3 hrs
Students will investigate a particular topic approved by the Communication and Theatre Arts department.
Prereq: Graduate student or qualified senior in communication and theatre arts.

CTA 606/607/608 Colloquium. 1/2/3 hrs
Students will study a special topic area with resource persons from the community as well as members of the communication and theatre arts faculty. *Offered on a credit/no credit basis.*
Prereq: Graduate student in communication and theatre arts or a related field. Department permission.

CTA 651 Design I. 2 hrs
Intermediate consideration of the theoretical and mechanical factors governing the design of scenery for the stage.
Prereq: Six hours of credit in theatre arts.

CTA 660 Playwriting I. 2 hrs
Intermediate study of the approaches to and the structural composition of dramatic writing.
Prereq: Six hours of credit in theatre arts.

CTA 661 Playwriting II. 2 hrs
A continuation of CTA 660.
Prereq: Graduate student in communication and theatre arts.

CTA 662 Lighting. 2 hrs
A continuation of CTA 362 Stage Lighting.
Prereq: Graduate student in communication and theatre arts.

CTA 663 Costume I. 2 hrs
Intermediate study of the approaches to and the historical sources for stage costuming.
Prereq: Six hours of credit in theatre arts.

CTA 664 Costume II. 2 hrs
Problems of construction and design of period costumes for the stage with emphasis on practical application culminating in a final design and construction project.
Prereq: CTA 363 Stage Costume: History and Theory or CTA 663, or department permission.

CTA 677 Research Techniques. 2 hrs
An introduction to the nature and value of research; the research problem; basic research tools; philosophical foundations of historical, descriptive, and experimental research; professional writing. (Winter semesters)
Prereq: Fifteen hours of credit in communication and theatre arts.

CTA 679/680/681 Special Topics. 1/2/3 hrs
Students will investigate a particular topic approved by the Communication and Theatre Arts department.
Prereq: Graduate student in communication and theatre arts.

CTA 682/683/684/685 Workshop. 1/2/3/4 hrs
Students will be provided practical and theoretical study in a selected topic area. *Offered on a credit/no credit basis.*
Prereq: Graduate student in communication and theatre arts or a related field. Department permission.

CTA 686/687/688 Cooperative Education. 1/2/3 hrs
One term of supervised educational work in communication and theatre arts. An evaluation is required at the end of each employment period. *Offered on a credit/no credit basis.*
Prereq: Twenty hours of credit in communication and theatre arts; approval by Cooperative Education Office and the department.

CTA 690 Examination. 1 hr
An examination over the student's field of study conducted by a departmental faculty committee from assigned readings. *Offered on a credit/no credit basis.*
Prereq: Graduate student in communication and theatre arts and department permission.

CTA 690/691/692 Thesis. 1/2/3 hrs
A research-oriented study conducted under the supervision of a departmental faculty committee. *Offered on a credit/no credit basis.*
Prereq: Graduate student in communication and theatre arts and department permission.

CTA 690/691/692 Project. 1/2/3 hrs
A theory-application project conducted under the supervision of a departmental faculty committee. *Offered on a credit/no credit basis.*
Prereq: Graduate student in communication and theatre arts and department permission.

CTA 693/694/695 Seminar. 1/2/3 hrs
A research-oriented course for graduate majors in communication and theatre arts.
Prereq: Graduate student in communication and theatre arts and department permission.

CTA 697/698/699 Independent Study. 1/2/3 hrs
An intensive study of one or more problems under the direction of a University faculty member.
Prereq: Department permission.

DRAMA/THEATRE FOR THE YOUNG COURSES

CTA 501 Creative Drama and Role-Playing. 2 hrs
An introduction to understanding the creative process, dramatic play, gaming, and involvement drama as developmental learning.

CTA 502 Introduction to Theatre for the Young. 2 hrs
An introductory consideration of the scope, purposes, forms, and materials of theatre for the young.

CTA 504 Oral Interpretation of Literature and Language with the Young. 2 hrs
Emphasis on the study of interpreting literature orally for and with the young, including developing competence and understanding in the adult and child in interpretive and improvised work emerging from literature and language.

CTA 522 TIE: Theatre-in-Education. 2 hrs
A study of the origin, principles, and forms of TIE: Theatre-in-Education. Students will have opportunities to plan and evaluate TIE sessions.

CTA 523 Puppetry: Catalyst in Human Development. 3 hrs
Consideration of puppetry as a medium for learning and creative expression. Experience in constructing puppets for purposeful work with people. Examination of the applications of puppetry to many disciplines.

CTA 524 Developmental Drama/Theatre with Handicapped Persons. 2 hrs

Study of principles, theories, and practices of developmental drama/theatre for handicapped persons. Applications to educational, recreational, and institutional settings will be stressed.

CTA 525 Developmental Drama/Theatre in Recreational Settings. 2 hrs

An exploration of the theory and practice of developmental drama/theatre in various recreational settings, such as camps, parks, community centers, Girl Scouts, 4-H.

CTA 528 Developmental Drama/Theatre in Religion. 2 hrs

Consideration of and experience in uses of developmental drama/theatre for various religious settings and purposes.

CTA 565 Studies in Drama/Theatre for the Young. 2 hrs

Studies in the history, theory, and techniques of drama and theatre for/with the young.
Prereq: CTA 323 Improvising and Role-Play or CTA 501 or CTA 657 and either CTA 322 Theatre for the Young or CTA 658.

CTA 590/591/592 Special Topics. 1/2/3 hrs

Students will investigate a particular topic approved by the Communication and Theatre Arts department.
Prereq: Graduate student or qualified senior in communication and theatre arts.

CTA 606/607/608 Colloquium. 1/2/3 hrs

Students will study a special topic area with resource persons from the community as well as members of the communication and theatre arts faculty. *Offered on a credit/no credit basis.*
Prereq: Graduate student in communication and theatre arts or a related field. Department permission required.

CTA 627 The Playwright and the Young Audience. 3 hrs

A study of dramatic literature for the young, from developmental as well as artistic viewpoints and in contexts of the main body of dramatic literature and children's literature, and the total educational experience of children and adolescents.

CTA 657 Improvisation. 3 hrs

A study of spontaneous dramatic play meant to develop deeper self discipline and freedom and to extend resources for teaching, directing and acting.
Prereq: Graduate student in communication and theatre arts.

CTA 658 Theatre for Children. 3 hrs

An extensive study of the nature and range of theatre experiences for children and adolescents.
Prereq: Graduate student in communication and theatre arts.

CTA 677: Research Techniques. 2 hrs

An introduction to the nature and value of research; the research problem; basic research tools; philosophical foundations of historical, descriptive and experimental research; professional writing. (Winter semesters)
Prereq: Fifteen hours of credit in communication and theatre arts.

CTA 679/680/681 Special Topics. 1/2/3 hrs

Students will investigate a particular topic approved by the Communication and Theatre Arts department.
Prereq: Graduate student in communication and theatre arts.

CTA 682/683/684/685 Workshop. 1/2/3/4 hrs

Students will be provided practical and theoretical study in a selected topic area. *Offered on a credit/no credit basis.*
Prereq: Graduate student in communication and theatre arts or a related field. Department permission.

CTA 686/687/688/689 Cooperative Education. 1/2/3/4 hrs

One term of supervised educational work in communication and theatre arts. An evaluation is required at the end of each employment period. *Offered on a credit/no credit basis.*
Prereq: Twenty hours of credit in communication and theatre arts; approval by Cooperative Education Office and the department.

CTA 690 Examination. 1 hr

An examination over the student's field of study conducted by a departmental faculty committee from assigned readings. *Offered on a credit/no credit basis.*
Prereq: Graduate student in communication and theatre arts and department permission.

CTA 690/691/692 Thesis. 1/2/3 hrs

A research-oriented study conducted under the supervision of a departmental faculty committee. *Offered on a credit/no credit basis.*
Prereq: Graduate student in communication and theatre arts and department permission.

CTA 690/691/692 Project. 1/2/3 hrs

A theory-application project conducted under the supervision of a departmental faculty committee. *Offered on a credit/no credit basis.*
Prereq: Graduate student in communication and theatre arts and department permission.

CTA 693/694/695 Seminar. 1/2/3 hrs

A research-oriented course for graduate majors in communication and theatre arts.
Prereq: Graduate major in communication and theatre arts and department permission.

CTA 697/698/699 Independent Study. 1/2/3 hrs

An intensive study of one or more problems under the direction of a University faculty member.
Prereq: Department permission.

OTHER COURSES FOR CREDIT TOWARD MASTER OF ARTS IN COMMUNICATION AND THEATRE ARTS

The following 400-level courses also are available to graduate students. *A maximum of nine hours of approved 400-level course work may be permitted in the earning of any graduate degree.* For descriptions of these courses, see the undergraduate catalog.

If you intend to enroll in any of the following undergraduate courses for graduate credit, you must come to the Graduate School for written permission before enrolling in the course; otherwise, you will receive undergraduate credit.

Communication

- CTA 440 Survey of Public Address (3)
- CTA 460 Theories of Speech Criticism (3)
- CTA 466 Forensics (1)
- CTA 475 Research in Speech Communication (3)
- CTA 485 Theories of Speech Communication Behavior (3)
- CTA 496 Seminar (2)

Theatre Arts

- CTA 450 History of the Theatre to 1642 (3)
- CTA 451 History of the Theatre: 1642 to the Present (3)
- CTA 452 Arts Management (3)
- CTA 453 Marketing the Arts (3)
- CTA 454 Law, Public Policy, and the Arts (3)
- CTA 456 Experimental Approaches to Directing (1)
- CTA 457 Tryouts and Auditions (1)
- CTA 458 Style for the Actor (3)
- CTA 459 Style for the Director (3)
- CTA 461 Musical Theatre Acting (2)
- CTA 462 Directors on Directing (2)

CTA 463 The American Musical Stage: 1900 to 1940 (2)
CTA 467 Theatre Practice (1)

Drama/Theatre for the Young

CTA 429 History and Theory of Developmental Drama/
Theatre (3)
CTA 468 Interpretation (1)

Interpretation/Performance Studies

CTA 410 Oral Interpretation of Shakespeare (3)
CTA 411 Advanced Problems in Interpretation (3)
CTA 412 Oral Interpretation of Poetry (3)
CTA 414 Development and Theory of Oral Interpretation (3)

Telecommunications and Film

CTA 431 Advanced Radio Production and Direction (3)
CTA 432 Advanced Television Production and Direction (3)
CTA 445 Film Theory and Criticism (3)
CTA 446 Contemporary Problems in Telecommunications (3)
CTA 447 Radio-Television Station Management (3)

Speech Improvement

CTA 400 Phonetics and Dialects of Spoken English (3)
CTA 404 Dynamic Speaking Skills (3)
CTA 405 Voice and Dialects (3)

Additional 400-level undergraduate courses also are available to graduate students under special circumstances. On this matter the student should have a clear understanding with the department and the Graduate School before expecting to use such courses toward a Master of Arts or a Master of Fine Arts in the Communication and Theatre Arts department.

COMPUTER SCIENCE

George E. Haynam
Department Head
511-A Pray-Harrold
487-1063

Ranjan Chaudhuri
Coordinator of Advising
512-A Pray-Harrold
487-3207, 487-1063

Mildred D. Lintner
Director, Computer Science Teacher Education
511-B Pray-Harrold
487-1104, 487-1063

William W. McMillan
Adviser, Artificial Intelligence Graduate Certificate
511-G Pray-Harrold
487-0110, 487-1063

The department of Computer Science offers as cognates a variety of graduate courses for computer science professionals, prospective high school teachers of computer science, and other graduate students. The purpose and the objectives of these course offerings are:

- to serve the needs of able and qualified students intent on increasing their knowledge, abilities, and stature in the field of computer science;
- to provide an environment conducive to research in computer science; and
- to address the needs of teachers who pursue certification in computer science.

The computer science department offers a broad range of graduate courses, including thesis supervision, in support of the master of arts in mathematics with a concentration in computer science, a program housed in the mathematics department.

SECONDARY TEACHER CERTIFICATION ENDORSEMENT

The graduate certification endorsement track addresses the needs of computer teachers already certified in other content areas of our secondary school system. Successful completion of the program leads to a certificate endorsement in computer science.

ADMISSION REQUIREMENTS

Students must satisfy requirements of the Graduate School and hold or be eligible for a currently valid Secondary Teaching Certificate issued by the State of Michigan Department of Education.

The Teacher Certification Endorsement Program requires 23 semester hours as follows:

- CSC 136 Computers for the Non-Specialist (3)
- CSC 138 Computer Science I (3)
- CSC 336 Programming Languages for Educators (3)
- CSC 340 Applications in Computer Science (3)
- CSC 504 Fundamentals of Computer Science I (4)
- CSC 505 Fundamentals of Computer Science II (4)
- CSC 546 Methods of Teaching Computer Science in the Secondary School (3)

GRADUATE CERTIFICATE IN ARTIFICIAL INTELLIGENCE

The Computer Science department also offers a graduate certificate in artificial intelligence, which is for students who have a bachelor's degree and are interested in graduate studies more specialized than a master's program.

ADMISSION REQUIREMENTS

Students must satisfy admission requirements of the Graduate School; have the equivalent of a minor in computer science; and have the following minimum grade point averages: 3.0 in computer science courses and 2.75 in either all mathematics courses taken or in the last six semester hours of mathematics taken. Students must be admitted to the graduate certificate program before enrolling in required course work.

PROGRAM REQUIREMENTS

1. Not more than one 400-level course may be used on the graduate certificate program.
2. A minimum grade point average of 3.0 ("B") must be achieved.
3. Credits earned for the graduate certificate may apply, subject to applicability, to a graduate degree.
4. All requirements must be completed within three years from the time of first enrollment.

COURSE REQUIREMENTS

Required courses	12
CSC 502 Programming in LISP	1
CSC 503 Programming in Prolog	1
CSC 531 Automata, Computability, and Formal Languages	3
CSC 532 Artificial Intelligence	3
CSC 632 Automated Reasoning	3
CSC 693 Seminar: Artificial Intelligence	1

COMPUTER SCIENCE COURSES

CSC 502 Programming in LISP. 1 hr
Introduction to the LISP language with emphasis on artificial intelligence applications. Pure LISP, built-in and user-defined functions, PROG feature, MAP-functionals, property lists.
Prereq: CSC 334 Data Structures, or CSC 504, or department permission.

CSC 503 Programming in Prolog. 1 hr
An introduction to one of the most widely used languages of artificial intelligence. Topics include Prolog's inference procedure, assertions of facts and rules, recursion, list structures, functors, the cut, numerical operations, and principles of good Prolog style.
Prereq: CSC 337 Programming Languages, CSC 502, and knowledge of predicate logic; or department permission.

CSC 504 Fundamentals of Computer Science I. 4 hrs
An accelerated course covering the content of CSC 238 Computer Science II and CSC 334 Data Structures. Includes structured programming in Pascal, recursion, topics in data structures, and an introduction to algorithm analysis. *No credit CSC 334 Data Structures or equivalent.*
Prereq: Graduate standing, CSC 137 Introduction to FORTRAN Programming or CSC 138 Computer Science I, or CSC 237 Computer Programming and Numeric Methods or equivalent, MTH 119 Mathematical Analysis for Social Sciences II or MTH 120 Calculus I.

CSC 505 Fundamentals of Computer Science II. 4 hrs
An accelerated treatment of topics from CSC 239 Assembly and Machine Language Programming and CSC 338 Computer Organization. Machine language and arithmetic. Assembly language programming. Implementation of high-level run time structures. Structure of assemblers, loaders, and command interpreters. Logic design and computer architecture. *No credit CSC 239 Assembly and Machine Language Programming, CSC 338 Computer Organization or equivalent.*
Prereq: Graduate standing; CSC 504 or department permission.

CSC 530 Formal Methods in Software Development. 3 hrs
Principles of logical reasoning and their application to the development of reliable software, propositional and predicate logic, mathematical induction, semantics of control, and data structures. Examples drawn from various applications areas. Emphasis on the use of formal methods as practical tools that aid the software development process.
Prereq: CSC 334 Data Structures or CSC 504, MTH 121 Calculus II and MTH 122 Elementary Linear Algebra.

CSC 531 Automata, Computability, and Formal Languages. 3 hrs
A survey of the principal mathematical models of computation and formal languages. Finite automata, regular languages and sets, the Chomsky hierarchy, context-free languages, computability and undecidable problems, computational complexity, and NP-completeness.
Prereq: CSC 330 Discrete Mathematical Structures and CSC 334 Data Structures or CSC 504.

CSC 532 Artificial Intelligence. 3 hrs
Introduces the student to basic concepts and techniques of artificial intelligence. Strategies for choosing representations, notational systems and structures; search strategies; control issues; examples of current systems in natural language processing, pattern recognition, problem solving, learning and information retrieval. Students with no prior knowledge of LISP should take CSC 502 concurrently.
Prereq: CSC 334 Data Structures or CSC 504, and previous LISP experience or CSC 502, or department permission.

CSC 533 Computer Communication Networks and Distributed Systems. 3 hrs
A study of networks of interacting computers. Principles of data communication, major national and international protocols. Models for network design and analysis. Local and long-haul networks. Distributed processing, distributed databases and network and distributed operating systems. A laboratory project involving a network of microcomputer systems.
Prereq: CSC 330 Discrete Mathematical Structures, CSC 433 Computer Operating Systems, MTH 121 Calculus II and MTH 122 Elementary Linear Algebra.

CSC 534 Database Management Systems Design. 3 hrs
File and data organization techniques. The hierarchical, network, and relational data models with examples. Query facilities. Data normalization. Security and integrity. Design and implementation of a simple DBMS system.
Prereq: CSC 334 Data Structures or CSC 504, and CSC 338 Computer Organization or CSC 505.

CSC 537 Advanced Computer Graphics. 3 hrs
Mathematics for 3D graphics. Polygon clipping; polygon filling; modeling methods; 3D transformations; parallel and perspective projections; hidden line and hidden surface removal algorithms; shading and color models.
Prereq: CSC 338 Computer Organization or CSC 505.

CSC 538 Advanced Computer Organization. 3 hrs
Processor design, fixed and floating point arithmetic processing, and non-arithmetic processing. Control design and microprogramming. Memory organization and input-output. System organization. Case studies will be drawn from computer systems designed to make special types of processing more efficient. Stack computers, pipelined processors, and vector computer multiprocessing.
Prereq: CSC 431 Systems Programming and CSC 433 Computer Operating Systems.

CSC 539 Software Design and Development. 3 hrs
Software engineering techniques for the organization, management, and development of a large software project. Specification, structured design, segmentation, documentation.
Prereq: CSC 334 Data Structures or CSC 504.

CSC 546 Methods of Teaching Computer Science in the Secondary School. 3 hrs
This course encompasses information and materials needed to prepare students for the teaching of computer science in grades seven through twelve. Topics include curricular development, course content, laboratory arrangement, pedagogical methods, security and maintenance of equipment, software selection and evaluation, and copyright considerations. In addition, the course presents approaches for dealing with diversity of student abilities and backgrounds, techniques and strategies for teaching problem-solving, algorithm development, and program debugging. Time will be spent fitting previous teaching experiences and backgrounds into the computer science class and laboratory environments.
Prereq: CSC 505 or equivalent.

CSC 590/591/592 Special Topics. 1/2/3 hrs
A graduate level course in a specific area of computer science, to be determined by the field of specialization of the instructor and the interest of the students.
Prereq: Graduate standing and consent of the instructor.

CSC 630 Advanced Compiler Construction. 3 hrs
An introduction to the major methods of compiler implementation. Lexical analysis, LL and LR parsing, semantic analysis and code generation, error detection and recovery, code optimization. Compiler engineering techniques including portability, validation and the use of automated compiler-writing tools. Course project will involve implementation of a compiler.
Prereq: CSC 430 Compiler Construction and CSC 531.

CSC 632 Automated Reasoning. 3 hrs
A theoretical and practical survey of different reasoning techniques, both classical and non-classical, and methods for implementing them as computer programs. Topics will include resolution proofs, fuzzy logic, non-monotonic reasoning, default reasoning and uncertainty measures. Applications will include expert systems.
Prereq: CSC 503 (may be taken concurrently), CSC 532.

CSC 633 Advanced Operating Systems. 3 hrs
Selected topics from areas such as concurrent processing, memory management, resource allocation and scheduling, multi-processing and multi-programming, protection, performance evaluation, and modeling will be covered in depth.
Prereq: CSC 433 Computer Operating Systems; CSC 330 Discrete Mathematics or MTH 546 or equivalent.

CSC 635 Real Time Processing. 3 hrs
An introduction to the problems, concepts and techniques involved in computer systems that must interface with external devices; computer characteristics needed for real time use, operating system considerations, analog signal processing and conversion, inter-computer communication. Students will be involved in

several laboratory projects involving a mini- or micro-computer system.
Prereq: CSC 433 Computer Operating Systems and CSC 538.

CSC 660 Software Engineering Practicum. 3 hrs
Working in a software project team, students will develop a large software system, carrying the project through from requirements analysis to acceptance testing. Teams will analyze "live" problems, that is, projects selected for their functionality to the user(s) involved. This is a laboratory course with formal class meetings for only the distribution of projects.
Prereq: CSC 443 Software Engineering Principles and CSC 539.

CSC 679/680/681 Special Topics. 1/2/3 hrs
A graduate level course in a specific area of computer science, to be determined by the field of specialization of the instructor and the interest of the students.
Prereq: Graduate standing and permission of the instructor.

CSC 690/691/692 Research Study. 1/2/3 hrs
Intensive research into a computer science problem and the preparation of a report consistent in substance and form with the standards of the discipline.
Prereq: Department permission.

CSC 693 Seminar. 1 hr
Presentation of special reports and group discussions on selected topics.

CSC 697/698/699 Independent Study. 1/2/3 hrs
An intensive study of a problem or implementation of a project under the direction of a member of the computer science graduate faculty.
Prereq: Six hours of graduate computer science courses and department permission.

OTHER COURSES FOR GRADUATE CREDIT

The following courses also may be elected for graduate credit; course descriptions may be found in the undergraduate catalog. *A maximum of nine hours of approved 400-level coursework may be permitted in the earning of any graduate degree.* Information about courses in computer science not listed may be obtained from the coordinator of advising, Dr. Ranjan Chaudhuri.

If you intend to enroll in any of the following undergraduate courses for graduate credit, you must come to the Graduate School for written permission before enrolling in the course; otherwise, you will receive undergraduate credit.

CSC 430 Compiler Construction (3)
CSC 431 Systems Programming (3)
CSC 433 Computer Operating Systems (3)
CSC 435 Introduction to Microprocessors (3)
CSC 437 Microcomputer Graphics (3)
CSC 441 Computing Network Principles (3)
CSC 442 Database Principles (3)
CSC 443 Software Engineering Principles (3)
CSC 490 Seminar and Project Design for Educators (3)

ECONOMICS

Young-Iob Chung
Department Head
703 Pray-Harrold
487-3395

Raouf S. Hanna
Coordinator of Advising
703-D Pray-Harrold
487-0003

The Economics department offers three Master of Arts degree programs: Master of Arts in economics; Master of Arts in applied economics; and Master of Arts in development, trade, and planning. These programs are designed to accommodate students with varied backgrounds and needs, and offer sufficient flexibility to meet the career objectives of students with various interests. The programs prepare students for careers in business, industry, and government service. They also provide training for students who intend to pursue the study of economics at more advanced levels.

Together the three programs can accommodate students with undergraduate backgrounds in fields ranging from mathematics and engineering, economics and business, to political science, public administration, and liberal arts.

GENERAL ADMISSION REQUIREMENTS

Admission to any of the department's programs is available in three ways.

1. Degree Admission

Degree admission to the graduate programs is available to those meeting the following requirements:

- hold a bachelor's degree from an accredited college or university;
- have an undergraduate grade point average of at least 2.5 ("A" = 4.0);
- satisfy the undergraduate and/or course requirements for the specific program, including the equivalent of ECO 201 Principles of Economics I, ECO 202 Principles of Economics II, ECO 301 Intermediate Macroeconomic Analysis, ECO 302 Intermediate Microeconomic Analysis, and ECO 310 Economic Statistics.

2. Conditional Admission

Conditional admission may be granted to those students not meeting the standards stated in 1.c. above but who show promise. Students who are conditionally admitted are required to overcome specified deficiencies existing at the time of admission. Such students must maintain an average grade of "B." A maximum of 12 hours earned as a conditionally admitted student may be applied toward the MA degree.

3. Non-Degree Student Status

Non-degree student status is available for those not qualified for degree or conditional admission, or for those who wish to take courses for self-improvement and are not interested in obtaining a degree.

MASTER OF ARTS IN ECONOMICS

The Master of Arts in economics provides a basic understanding of theoretical foundations and tools of economic analysis so that students gain competence in economic theory and its uses. The program exposes students to a variety of areas of economic study and enables them to concentrate in a particular field through course work, independent study, and research.

This program prepares students for positions in business, industry, and government service. Many of our former students are now active in banking, insurance, investment, consulting,

hospital administration, public utilities, and manufacturing. It also provides training for students who intend to pursue the study of economics at more advanced levels, and for those who plan to teach economics at a two-year community college. The program offers sufficient flexibility to meet the career objectives of students with various interests.

ADMISSION REQUIREMENTS

Applicants to this program must meet the department's general admission requirements and have as a minimum an undergraduate major in economics (20 credit hours).

DEGREE REQUIREMENTS

In addition to satisfying general Graduate School requirements, the student shall:

- complete a minimum of 30 hours of graduate credit in economics (up to six hours of cognates may be substituted upon approval) and demonstrate research ability by successfully completing either:
- a master's thesis; or
 - the graduate research seminar (ECO 604) and one supervised research paper approved by departmental faculty.

COURSE REQUIREMENTS

Required Courses 15-18 hours

ECO 415 Introduction to Econometrics 3

ECO 511 Mathematical Economics 3

ECO 601 Macroeconomic Analysis 3

ECO 602 Microeconomic Analysis 3

(the preceding four courses must be satisfactorily completed with a grade of "B-" or better)

One of the following:

a) six hours from ECO 690/691/692 Thesis (1/2/3)

b) ECO 604 Research Seminar in Economics (3) and one supervised research paper approved by department faculty

Electives 9-12 hours

Cognates 0-6 hours

(May be substituted for electives in economics upon approval)

Total 30 hours

MASTER OF ARTS IN APPLIED ECONOMICS

The need for economists capable of applying their special skills to real-life situations and problems has increased greatly during the past decade. This program provides an organized and carefully developed study of applied economics. While the program satisfies the general education requirements of the economics profession, the focus is specifically on filling the need for empirically oriented applied economists.

In addition to the sequence of core courses, the program emphasizes research opportunities and the utilization of quantitative approaches. Extensive use of computer techniques comprises an integral part of the program.

The program introduces students to the art of model building for the purpose of analyzing complex public policy issues, such as taxation, transportation, energy, environment, technology, education, demography, health care, and similar topics. The program also provides students with modern techniques of model estimation, assessment, simulation, and forecasting.

ADMISSION REQUIREMENTS

Applicants to this program must meet the department's general admission requirements and have a bachelor's or master's degree with a minor/major in mathematics or economics, or a

bachelor's degree in engineering, or a baccalaureate degree with adequate mathematics background.

DEGREE REQUIREMENTS

In addition to satisfying general Graduate School requirements, the student shall satisfactorily complete the following courses.

COURSE REQUIREMENTS

Required Courses	18-21 hours
ECO 415 Introduction to Econometrics	3
ECO 511 Mathematical Economics	3
ECO 601 Macroeconomic Analysis	3
ECO 602 Microeconomic Analysis	3
ECO 606 Applied Economics	3
<i>One of the following:</i>	
a) six hours from ECO 690/691/692 Thesis (1/2/3)	
b) ECO 604 Research Seminar in Economics (3) and one supervised research paper approved by department faculty	
Restricted Electives	6 hours
<i>Select two of the following:</i>	
ECO 510 Applied Economic Statistics (3)	
ECO 515 Econometrics: Theory and Applications (3)	
ECO 545 Economic Forecasting and Policy (3)	
Electives	3-6 hours
Total	30 hours

MASTER OF ARTS IN DEVELOPMENT, TRADE, AND PLANNING

The need for administrative personnel with backgrounds in economic development, trade, and planning has become more pressing during the past decade. This is the result of increased international interdependence and of growing demand for systematic planning in both private enterprise and government operations. Developing nations have a special need for professionals trained in this area. This program prepares students for careers as staff economists in government, business, and international organizations.

Students are provided with (a) an historical review of policy experience in various nations regarding planning and development issues; (b) an understanding of economic theory and its applications to planning and development; (c) training in the use of quantitative methods relevant to planning and development; (d) detailed knowledge of the theoretical and empirical aspects of international trade; and (e) the requisite skills to evaluate specific policy issues. The various segments are coordinated so that a logical progression in course work can be completed efficiently, and the interrelationship between different segments can be fully appreciated by students.

ADMISSION REQUIREMENTS

Applicants to this degree program must meet the department's general admission requirements and have a bachelor's degree in economics (major/minor), or a bachelor's or master's degree in business administration, or a baccalaureate degree in an equivalent or appropriate field.

DEGREE REQUIREMENTS

In addition to satisfying general Graduate School requirements, the student shall satisfactorily complete the following courses.

COURSE REQUIREMENTS

Required Courses	15-18 hours
ECO 415 Introduction to Econometrics	3
ECO 511 Mathematical Economics	3
ECO 601 Macroeconomic Analysis	3
ECO 602 Microeconomic Analysis	3
<i>One of the following:</i>	
a) six hours from ECO 690/691/692 Thesis (1/2/3)	
b) ECO 604 Research Seminar in Economics (3) and one supervised research paper approved by department faculty	
Restricted Electives	12-15 hours
<i>Choose from the following:</i>	
ECO 580 International Trade: Theory and Policy (3)	
ECO 581 The International Monetary System (3)	
ECO 585 Economic Growth and Development (3)	
ECO 586 Economic Planning (3)	
ECO 587 Case Studies in Economic Development (3)	
Total	30 hours

ECONOMICS COURSES BASIC COURSES FOR NON-MAJORS

ECO 500 Economics: Principles and Institutions. 3 hrs
Study of major economic institutions, the basic analytic tools of economic theory and their use. *Not open to students having had ECO 201 and ECO 202 Principles of Economics I and II, or equivalent.*

ECO 501 Macroeconomic Theory and Policy. 3 hrs
National income analysis, employment theory, monetary theory and practice and their application to economic policy. This course is designed for graduate students majoring in fields other than economics, primarily those in the College of Business. *Not open to students who have had ECO 301 Intermediate Macroeconomic Analysis. Prereq: One course in economics, MTH 104 Intermediate Algebra, or department permission.*

ECO 502 Microeconomic Theory and Policy. 3 hrs
Analysis of the economic behavior of individuals and firms under various market conditions, the determination of relative prices, the allocation of resources, and related problems. This course is designed for graduate students majoring in fields other than economics, primarily those in the College of Business. *Not open to students who have had ECO 302 Intermediate Microeconomic Analysis or equivalent. Prereq: One course in economics, MTH 104 Intermediate Algebra, or department permission.*

ECO 503 Contemporary Economic Problems. 3 hrs
Analysis of one or more current economic issues with a goal of better public understanding of the issue implications of policy solutions. *Not open to economics majors. Prereq: One course in economics or department permission.*

ECO 508 International Trade. 3 hrs
A study of the causes and economic effects of trade; commercial policies and their effects on trade; trade issues and conflicts; and international factor movements. *Prereq: ECO 501 and ECO 502 or equivalent, or department permission.*

ECO 509 International Monetary Economics. 3 hrs
A study of the foreign exchange market, exchange rate systems, the balance of payments, macroeconomic aspects of international trade, the institutions and problems of the international monetary system. *Prereq: ECO 501 and ECO 502.*

COURSES FOR DEGREE PROGRAMS

- ECO 506 Development of Economic Analysis.** 3 hrs
Review of major theories and concepts in the development of economics as a scientific discipline. Emphasis is directed toward changing methods and theories of economic analysis and their implications for economic policy, including pre-classical, classical and neoclassical, Keynesian and neo-Keynesian thought.
Prereq: ECO 301 Intermediate Macroeconomic Analysis and ECO 302 Intermediate Microeconomic Analysis or equivalent.
- ECO 510 Applied Economic Statistics.** 3 hrs
Application of statistics and quantitative analysis to economic problems using computer techniques.
Prereq: ECO 310 Economic Statistics or equivalent or department permission.
- ECO 511 Mathematical Economics.** 3 hrs
Study of economic models, matrix algebra and linear economic models, linear programming and game theory, optimization problems and calculus of variations.
Prereq: MTH 119 Mathematical Analysis for Social Science II or MTH 120 Calculus I and ECO 301 Intermediate Macroeconomic Analysis and ECO 302 Intermediate Microeconomic Analysis or equivalent.
- ECO 515 Econometrics: Theory and Applications.** 3 hrs
Development and analysis of econometric models using the tools of statistics for estimation. Analysis of the simultaneous-equation problems, including identification problems, indirect least squares, two stage least squares, limited-information methods, full-information methods and three stage least squares.
Prereq: ECO 415 Introduction to Econometrics or department permission.
- ECO 517 Economic Analysis of Law.** 3 hrs
Application of microeconomic theory to the analysis of laws and legal systems. Introduction to Game Theory within the context of property rights, contracts, and dispute settlements. Some comparison of American laws with those of Europe and Japan.
Prereq: ECO 301 Intermediate Macroeconomic Analysis, ECO 302 Intermediate Microeconomic Analysis, and ECO 310 Economic Statistics, or department permission.
- ECO 520 Analytic Labor Economics.** 3 hrs
Application of microeconomic theory in analyzing labor market behavior. Topics covered include labor supply, labor demand, investment in human capital, worker mobility and a critique of the microeconomic approach to labor economics.
Prereq: ECO 301 Intermediate Macroeconomic Analysis and ECO 302 Intermediate Microeconomic Analysis or equivalent.
- ECO 522 Collective Bargaining.** 3 hrs
Labor and management relations considered from the point of view of the two parties and the public welfare; labor contracts. Traditional and current areas of dispute and methods of settlement.
Prereq: Two courses in economics or department permission.
- ECO 524 White Collar and Public Employee Unionism.** 3 hrs
An analysis of the special characteristics of labor organizations and collective bargaining patterns in public employment and in selected white collar occupations of the private sector of the economy.
Prereq: Two courses in economics or department permission.
- ECO 526 Human Resources and Public Policy.** 3 hrs
An economic analysis of human resource development with an emphasis on labor market issues. Topics include public employment policy, labor market discrimination and the role of education in the labor market.
Prereq: ECO 301 Intermediate Macroeconomic Analysis and ECO 302 Intermediate Microeconomic Analysis or equivalent.
- ECO 534 Regional and Urban Economics.** 3 hrs
Examination of problems of economic adjustment and development of regions, including inner city and metropolitan areas. Mass transit, public finance, housing, economic base studies, race distribution, and poverty will be examined.
Prereq: Six hours of economics or department permission.
- ECO 540 Monetary Economics.** 3 hrs
The development of monetary and central banking theory; policy applications and limitations in the context of the relationships between money, prices, national income, and the balance of payments.
Prereq: ECO 301 Intermediate Macroeconomic Analysis or equivalent.
- ECO 545 Economic Forecasting and Policy.** 3 hrs
Examines the use of macroeconomic theory and forecasting techniques in the formulation and evaluation of economic stabilization policies.
Prereq: ECO 301 Intermediate Macroeconomic Analysis and ECO 310 Economic Statistics or equivalent.
- ECO 550 Public Finance: Analysis and Policy.** 3 hrs
Detailed, theoretical analysis of the problems of budgeting and budget techniques, methods to evaluate expenditures, efficiency, and equality considerations in tax policy, problems of stabilization policy and growth policy, evaluation of the impact and importance of national debt.
Prereq: ECO 301 Intermediate Macroeconomic Analysis and ECO 302 Intermediate Microeconomic Analysis or equivalent.
- ECO 551 State and Local Government Finance.** 3 hrs
Economic analysis of expenditures, revenues and debt management of state and local governments.
Prereq: ECO 301 Intermediate Macroeconomic Analysis and ECO 302 Intermediate Microeconomic Analysis or equivalent or department permission.
- ECO 560 Economics of Industrial Organization.** 3 hrs
The enterprise sector of a capitalist economy; incidence of competition and monopolistic techniques in various industries and markets, market structure, conduct and performance, mergers and concentration and public policies.
Prereq: ECO 301 Intermediate Macroeconomic Analysis and ECO 302 Intermediate Microeconomic Analysis or equivalent.
- ECO 561 Economics of Multinational Enterprise.** 3 hrs
Economics of international competition and monopoly. Analysis includes studies of direct foreign investment, national economic anti-trust policies, the multinational firm and its relation to trade and economic efficiency.
Prereq: ECO 480 International Economics or ECO 560 or department permission.
- ECO 562 Government and Business.** 3 hrs
The political and economic functions of government, business corporations and financial mergers, direct control of business, control versus governmental ownership of utilities, governmental controls of agriculture and natural resources, the responsibility of government in maintaining employment.
Prereq: ECO 301 Intermediate Macroeconomic Analysis and ECO 302 Intermediate Microeconomic Analysis or equivalent.

ECO 580 International Trade: Theory and Policy. 3 hrs
Study of the principle of comparative advantage, the determinants of the commodity composition of trade, international factor movements and commercial policies.
Prereq: ECO 301 Intermediate Macroeconomic Analysis and ECO 302 Intermediate Microeconomic Analysis or equivalent.

ECO 581 The International Monetary System. 3 hrs
Theoretical and empirical examination of international monetary issues including the balance of payments, fixed vs. flexible exchange rates, stabilization policies in an open economy, disturbance transmission mechanisms and interdependence, institutions.
Prereq: ECO 301 Intermediate Macroeconomic Analysis and ECO 302 Intermediate Microeconomic Analysis or equivalent.

ECO 585 Economic Growth and Development. 3 hrs
Conditions, courses, and consequences of growth and development, instruments of expansion and control and important theories and models of growth. Economic growth in both the United States and underdeveloped countries.
Prereq: ECO 301 Intermediate Macroeconomic Analysis and ECO 302 Intermediate Microeconomic Analysis or equivalent.

ECO 586 Economic Planning. 3 hrs
Study of the government's economic decision-making apparatus, the formulation of economic plans, the selection of optimal plans from among a feasible set, and the problems of transition from general to sectoral and decentralized plans.
Prereq: ECO 301 Intermediate Macroeconomic Analysis and ECO 302 Intermediate Microeconomic Analysis or equivalent.

ECO 587 Case Studies in Economic Development. 3 hrs
Survey of economic development in selected countries or regions with emphasis on development policies, theoretical applications, and economic structures of countries or regions surveyed.
Prereq: ECO 301 Intermediate Macroeconomic Analysis and ECO 302 Intermediate Microeconomic Analysis or equivalent.

ECO 590/591/592 Special Topics. 1/2/3 hrs
An advanced level course in a specific area of economics.
Prereq: ECO 301 Intermediate Macroeconomic Analysis and ECO 302 Intermediate Microeconomic Analysis or equivalent.

ECO 601 Macroeconomic Analysis. 3 hrs
National income accounting as a framework for economic analysis; determinants of consumption, investments and government expenditures; models of underemployment, and inflation.
Prereq: ECO 301 Intermediate Macroeconomic Analysis or equivalent or department permission.

ECO 602 Microeconomic Analysis. 3 hrs
Economic analysis of the behavior of individuals and firms, price determination in competitive and monopolistic markets, general static equilibrium, and the allocation of resources.
Prereq: ECO 302 Intermediate Microeconomic Analysis and ECO 511 or equivalent, or department permission.

ECO 604 Research Seminar in Economics. 3 hrs
Examines selected issues of research methodology, procedures and techniques. Students conduct individual research projects, present their findings in a seminar format and submit a research paper.
Prereq: ECO 415 Introduction to Econometrics or equivalent.

ECO 605 Managerial Economics. 3 hrs
Application of economic analysis to decision making and business management, focusing on the areas of production, costs, as

well as investment, pricing demand estimation and economic forecasting.
Prereq: ECO 501, ECO 502, and ECO 310 Economic Statistics or equivalent.

ECO 606 Applied Economics. 3 hrs
Integrates economic theory and quantitative methods, providing tools to formulate, estimate, and evaluate micro- and/or macro-economic topics. These may include: estimating demand functions for given periods, Engel curves, production cost, consumption, investment, and money demand functions.
Prereq: ECO 301 Intermediate Macroeconomic Analysis, ECO 302 Intermediate Microeconomic Analysis, and ECO 415 Introduction to Econometrics or equivalent.

ECO 679/680/681 Special Topics. 1/2/3 hrs
An experimental course for contemporary topics not provided in other departmental offerings. The content will change from semester to semester. *Not more than three hours of special topics courses may be used on a degree program.*
Prereq: Department permission.

ECO 690/691/692 Thesis. 1/2/3 hrs
Completion of research problems and writing thesis.
Prereq: Approved thesis proposal.

ECO 695 Seminar. 3 hrs
A seminar in advanced economic theory or policy open only to degree students of the department.
Prereq: Twelve hours toward MA degree.

ECO 697/698/699 Independent Study. 1/2/3 hrs
An intensive study of a problem or group of problems under the direction of a member of the economics faculty.
Prereq: Department permission.

OTHER COURSES

These upper division undergraduate courses may be taken for graduate credit and applied on the department's degree program providing prior approval has been given by the adviser and the Graduate School. *A maximum of nine hours of approved 400-level coursework may be permitted in the earning of any graduate degree.* See the undergraduate catalog for course descriptions.

If you intend to enroll in any of the following undergraduate courses for graduate credit, you must come to the Graduate School for written permission before enrolling in the course; otherwise, you will receive undergraduate credit.

- ECO 405 Economic Analysis for Business (3)
- ECO 415 Introduction to Econometrics (3)
- ECO 420 Comparative Labor Unionism (3)
- ECO 436 Health Economics (3)
- ECO 445 Economic Fluctuations and Forecasting (3)
- ECO 455 Cost-Benefit Analysis (3)
- ECO 471 Case Studies of Developing Economies (3)
- ECO 480 International Economics (3)

ENGLISH LANGUAGE AND LITERATURE

Marcia A. Dalbey
 Department Head
 612 Pray-Harrold
 487-4220

James A. Reynolds
 Director of Graduate Studies
 613-J Pray-Harrold
 487-1363

Students enrolling in the program for the Master of Arts in English may choose one of five concentrations:

- Literature
- Written Communication
- Children's Literature
- English Linguistics
- Creative Writing

Each of these concentrations is described on the following pages. Candidates for degrees in other departments may elect English department courses as cognates.

The director of graduate studies is Professor James A. Reynolds. Members of the department Graduate Committee are available during regular office hours for information or counseling.

MASTER OF ARTS IN ENGLISH

ADMISSION REQUIREMENTS

In addition to the Graduate School degree admission requirements set forth in the early pages of this catalog, the English Language and Literature department requires:

1. At least 24 hours of undergraduate English, excluding freshman composition, and a minimal undergraduate grade point average of 3.0. Applicants not meeting these standards may apply for conditional admission.
2. If the applicant's native language is not English, a TOEFL (Test of English as a Foreign Language) score of 570, or a score of 90 on the Michigan English Language Assessment Battery (MELAB) is required. These students also must pass the Test of Written English (TWE) with a minimum score of 5. Students with TWE scores below 5 will be denied admission; students with TOEFL scores lower than 570 can be considered for conditional admission, but must retake the exam and attain a score of 570 by the end of the first semester of enrollment.

DEGREE REQUIREMENTS

1. A minimum of 30 semester hours of graduate work in a program of study approved by the coordinator of graduate studies, with a grade point average of 3.0 or better.
2. A master's thesis is required in several concentrations, but optional in others. See individual concentration requirements below. The thesis or project topic and design are developed by the master's candidate with the advice of a departmental graduate faculty member. The thesis or project must be submitted for the approval of the directing committee.
3. Demonstrate an analytic sense of the nature of language as medium, subject, and investigative means, as well as an understanding of how language works beyond its "familiar" communications role in our culture by one of the following:
 - a. Complete two years of study of a foreign language at the undergraduate level, or give evidence of equivalent mastery; or,

- b. Complete six hours of graduate credit in linguistics or philologically oriented courses in early English language and literature.

(These may count towards the 30-hour degree requirement if they meet specific program requirements.)

The way each student meets the language requirement is to be specified on the individual program of study. Lists of appropriate courses, and definitions of equivalency for native speakers, non-native speakers, and culturally bilingual students, are presented in department guidelines.

NOTE: Advanced 400-level undergraduate courses are also available to graduate students. *A maximum of nine hours of approved 400-level coursework may be permitted in the earning of any graduate degree.*

If you intend to enroll in an advanced 400-level undergraduate course for graduate credit, you must come to the Graduate School for written permission before enrolling in the course; otherwise, you will receive undergraduate credit.

MASTER OF ARTS IN ENGLISH WITH CONCENTRATION IN LITERATURE

OBJECTIVES

The MA in English with a concentration in literature is designed to provide master's level competence in English and American literature.

The degree is an appropriate choice for candidates who anticipate teaching on the elementary, high school, or community college level. It prepares candidates who anticipate doctoral study in English or American literature. The degree provides a valuable educational background for professions where critical thinking and clear, accurate expression, combined with a knowledge of literature, are desired.

PROGRAM REQUIREMENTS

A candidate completes a major of 18 hours in the department's courses in English and American literature (excluding children's literature, for which there is a separate degree).

COURSE REQUIREMENTS

Required Courses	3 hours
LIT 511 Literary Criticism	3
Major Concentration	15 hours
Choose from courses in English and American literature, excluding children's literature	
Electives	6-12 hours
Cognates	0-6 hours
Total	30 hours

MA EXAMINATION

During the semester before graduation, a candidate is required to pass a written examination covering major works of English and American literature. A new list of works is posted each September.

COURSES FOR MASTER OF ARTS IN ENGLISH WITH CONCENTRATION IN LITERATURE

LIT 511 Literary Criticism. **3 hrs**
 A study of various approaches to literary criticism with application to specific works.
Prereq: Fifteen hours of credit in literature.

- LIT 512 Middle English Literature.** 3 hrs
A study of the genres of Middle English literature (chronicle, dialogue, exemplum, fable, romance, sermon, etc.).
Prereq: Fifteen hours of credit in literature.
- LIT 520 Old English Poetry.** 3 hrs
A study of old English prosodic conventions with a close reading of representative poems from various types and schools of Old English poetry.
Prereq: Three courses in literature.
- LIT 523 Realism and Naturalism in the American Novel.** 3 hrs
Realism and naturalism as theory and as practice in the late 19th and early 20th centuries, with emphasis on Howells, Twain, James, Crane, Norris, and Dreiser.
Prereq: Fifteen hours of credit in literature.
- LIT 525 Henry James.** 3 hrs
Major novels, shorter fiction, and literary criticism of Henry James.
Prereq: Fifteen hours of credit in literature.
- LIT 526 The Harlem Renaissance and Beyond.** 3 hrs
A study of African American literature since 1920 with special emphasis on the 1920s and the influence of this period upon more contemporary works. Parallels will be drawn between trends in African American literature and American literature as a whole and between the Harlem Renaissance and the literature of the last decade.
Prereq: Fifteen hours of credit in literature.
- LIT 530 Studies in Chaucer.** 3 hrs
Intensive reading of Chaucer's major works and supplementary reading in Chaucerean criticism.
Prereq: Fifteen hours of credit in literature.
- LIT 540 Elizabethan Drama.** 3 hrs
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."
Prereq: Fifteen hours of credit in literature.
- LIT 541 Studies in Shakespeare.** 3 hrs
Studies in the historical, biographical, textual, and critical scholarship relevant to two or three of Shakespeare's plays. Investigation, reports, papers.
Prereq: Fifteen hours of credit in literature, including one course in Shakespeare.
- LIT 545 Studies in Renaissance Literature.** 3 hrs
A specialized study of major non-dramatic poetry and prose of the English Renaissance (exclusive of the works of John Milton). Specific major authors to be studied may include Shakespeare, More, Sidney, Spenser, Marlowe, Bacon, Jonson, Donne, and Herbert.
Prereq: Fifteen hours of credit in literature.
- LIT 551 Studies in Milton.** 3 hrs
The complete poetry and selected prose of John Milton, with some attention to his intellectual milieu.
Prereq: Fifteen hours of credit in literature.
- LIT 561 Studies in 18th Century Literature.** 3 hrs
A specialized study of poetry and prose of a selected number of major authors of the Restoration and 18th century. Specific authors to be studied may include Dryden, Swift, Pope, Thomson, Collins, Gray, Johnson, Goldsmith, and Boswell.
Prereq: Fifteen hours of credit of literature.
- LIT 563 Studies in 18th Century Fiction.** 3 hrs
A specialized study of major authors, genres and themes of 18th century fiction. The fiction studied will include works by such authors as Defoe, Swift, Fielding, Richardson, Sterne, Goldsmith, Walpole, and Smollett.
Prereq: Fifteen hours of credit in literature.
- LIT 565 Studies in 19th Century British Fiction.** 3 hrs
Specialized study of selected English novelists of the 19th century. Novelists studied may include Austen, Scott, Disraeli, the Brontes, Gaskell, Thackeray, Dickens, Eliot, Trollope, Meredith, Hardy, and others.
Prereq: Fifteen hours of credit in literature.
- LIT 566 Studies in 20th Century British Fiction.** 3 hrs
Specialized study of the work of two or three major 20th century British novelists such as Conrad, Lawrence, Ford, Woolf, Forster, Huxley, Cary, Durrell, and Greene.
Prereq: Fifteen hours of credit in literature.
- LIT 567 Studies in 20th Century Irish Literature.** 3 hrs
Specialized study in prose, poetry, and drama of 20th century Irish literature with attention to such major figures as Yeats, Shaw, Joyce, Synge, O'Casey, O'Faolin, Beckett, Kavanagh.
Prereq: Fifteen hours of credit in literature.
- LIT 568 Whitman and Dickinson.** 3 hrs
The work of Whitman and Dickinson examined for its intrinsic value as poetry and as illustrative of the power of isolated poetic genius.
Prereq: Fifteen hours of credit in literature.
- LIT 569 The American Renaissance: 1830-1860.** 3 hrs
Specialized study of the work of three or four of the following writers: Cooper, Poe, Emerson, Thoreau, Hawthorne, Melville.
Prereq: Fifteen hours of credit in literature.
- LIT 570 Studies in Romantic Literature.** 3 hrs
An intensive study of the poetry and nonfictional prose of at least two of the poets and essayists from the Romantic period (e.g., Blake, Wordsworth, Coleridge, Keats, Byron, Shelley, Hazlitt, DeQuincey, Lamb).
Prereq: Fifteen hours of credit in literature.
- LIT 575 Studies in Victorian Literature.** 3 hrs
An intensive study of the poetry and nonfictional prose of at least two of the major writers from the Victorian period (e.g., Carlyle, Tennyson, the Brownings, Arnold, the Rossetts, Swinburne, Newman, Mill, Ruskin, Pater).
Prereq: Fifteen hours of credit in literature.
- LIT 576 Studies in 20th Century American Fiction.** 3 hrs
Specialized study of two or three 20th century American novelists, such as Hemingway, Fitzgerald, Faulkner, Nabokov, and Bellow.
Prereq: Fifteen hours of credit in literature.
- LIT 577 Studies in 20th Century American Poetry.** 3 hrs
Specialized study of the work of two or three major 20th century poets, such as Pound, Eliot, Stevens, Williams, Roethke, Robinson, Frost, e.e. cummings, Hart Crane, Robert Lowell.
Prereq: Fifteen hours of credit in literature.
- LIT 580 Studies in Contemporary Literary Trends.** 3 hrs
Specialized study of the nature of contemporary literary developments with some attention to other cultural parallels, past and present. The particular focus of the course (poetry, fiction, drama, or criticism) in a given semester will be announced in the class schedule bulletin.
Prereq: Fifteen hours of credit in literature.
- LIT 590/591/592 Special Topics.** 1/2/3 hrs
Topics will be announced from time to time. The following are examples of topics offered in recent years: Caribbean Literature, American Drama, Southern Gothic Fiction, Feminist Literary

Theory. *Not more than six hours of special topics courses may be applied towards the degree.*

Prereq: Fifteen hours of credit in literature. Further prerequisites may be required for some topics.

LIT 697/698/699 Independent Study. 1/2/3 hrs

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.

Prereq: Fifteen hours of credit in literature and permission of the Graduate Committee.

NOTE: Advanced 400-level undergraduate courses are available to graduate students. *A maximum of nine hours of approved 400-level coursework may be permitted in the earning of any graduate degree.*

If you intend to enroll in an advanced 400-level undergraduate course for graduate credit, you must come to the Graduate School for written permission before enrolling in the course; otherwise, you will receive undergraduate credit.

THE MASTER OF ARTS IN ENGLISH WITH CONCENTRATION IN WRITTEN COMMUNICATION

OBJECTIVES

The professional MA in English with a concentration in written communication prepares students for careers in technical and public relations writing, editing or publishing, or as teachers of writing at the elementary, secondary, or community college level. It also provides a thorough preparation for PhD studies in rhetoric and composition. Candidates study a combination of written communication theory and applied practices. A core consisting of rhetorical theory and research modes provides a conceptual and methodological framework. Practical skills relevant to career goals are achieved through restricted electives in either professional writing or the theory and practice of composition instruction. The individual student's skills and knowledge are supported through electives and cognates. The thesis or master's writing project consolidates the program's theoretical and practical elements through a directed research or professional writing project.

Applicants for admission in this concentration may combine academic and professional experience in support of their application.

COURSE REQUIREMENTS

Required Courses	12 hours
ENG 501 Writing and Rhetorical Theory I	3
ENG 502 Writing and Rhetorical Theory II	3
ENG 621 Research in Theory and Practice of Writing ...	3
ENG 692 Thesis or ENG 693 Master's Writing Project ...	3
Concentration (choose one of the following)	18 hours
I. Professional Writing Concentration	
<i>a. Required Courses</i>	<i>6 hours</i>
ENG 524 Advanced Technical Writing and Research (3)	
ENG 525 Advanced Public Relations Writing (3)	
<i>b. Electives and cognates</i>	<i>12 hours</i>
Select from among courses in writing, linguistics, literature, graphic design, communication theory, computer science, science and technology	
II. Teaching of Writing Concentration	
<i>a. Required Courses</i>	<i>9 hours</i>
ENG 514 Issues in Teaching Writing (3)	
ENG 515 Literacy and Written Literacy Instruction (3)	
ENG 516 Computers and Writing: Theory and Practice (3)	
<i>b. Electives and cognates</i>	<i>9 hours</i>

Select from among courses in writing, linguistics, literature, reading, teaching English as a second language, communication theory, computer science, measurement and evaluation, psychology, statistics

Total **30 hours**

COURSES FOR MASTER OF ARTS IN ENGLISH WITH CONCENTRATION IN WRITTEN COMMUNICATION

ENG 501 Writing and Rhetorical Theory I. 3 hrs
The reading, study and analysis of representative selections from rhetorical theorists from the Sophists through the Renaissance. Emphasis on how to evaluate, explore, and apply theory to writing and its teaching.

ENG 502 Writing and Rhetorical Theory II. 3 hrs
The reading, study and analysis of representative selections from rhetorical theorists since the Renaissance. Emphasis on how to evaluate, explore, and apply theory to writing and its teaching.

ENG 514 Issues in Teaching Writing. 3 hrs
A review of the research and theory in teaching writing, with focus on the dynamics of writing, learning, and their relationship to evaluation and assessment of writing.

ENG 515 Literacy and Written Literacy Instruction. 3 hrs
Graduate seminar on acquisition of written literacy. Emphasis on current theoretical approaches to written literacy and applications for teaching writing at secondary and postsecondary levels.

ENG 516 Computers and Writing: Theory and Practice. 3 hrs
A review of current theory for constructing computerized composition and for applying computers in teaching writing at secondary and postsecondary levels.

ENG 522 Writing Workshop. 3 hrs
An advanced workshop seminar in creative writing, with sections in fiction, poetry, or translation, as specified in the schedule. The course may be repeated.
Prereq: Department permission.

ENG 524 Advanced Technical Writing and Research. 3 hrs
This course continues ENG 424 Technical Writing and is designed to prepare students to write professionally in business and industry. Students will research appropriate information and prepare oral and written reports, proposals, brochures, and manuals.
Prereq: ENG 424 Technical Writing or equivalent.

ENG 525 Advanced Public Relations Writing. 3 hrs
Theory and practice of writing for public relations. Emphasis on writing to resolve real-world problems from corporate and agency public relations.

ENG 590/591/592/593/594 Special Topics. 1/2/3/4/5 hrs
An experimental course for subject matter not provided in other department offerings. The content will change from semester to semester. Students may elect this course more than once as long as different topics are covered. *Not more than six hours of special topics may be used on a degree program.*

ENG 596 Teaching Composition on the College Level. 3 hrs
A course in the methods of teaching English composition, with particular attention to beginning courses on the college and junior college level. Required of all graduate assistants and open to other interested MA candidates.

ENG 621 Research in Theory and Practice of Writing. 3 hrs
A course designed to introduce and prepare students in bibliography and methods of research on writing and writing instruction. Frequent projects requiring research and writing.
Prereq: Nine hours of composition program courses.

ENG 679/680/681 Special Topics. 1/2/3 hrs
An experimental course for subject matter not provided in other department offerings. The content will change from semester to semester. Students may elect this course more than once as long as different topics are covered. *Not more than six hours of special topics may be used on a degree program.*

ENG 692 Thesis. 3 hrs
Original research or critical study designed and completed by the student under the guidance of the thesis director and committee. *Prereq: ENG 621 and department permission.*

ENG 693 Master's Writing Project. 3 hrs
The culmination of the professional writing student's program. Students will produce a portfolio in the intended professional area, and design and complete a research project related to the portfolio. *Prereq: ENG 524; six hours of graduate credit in appropriate writing courses.*

ENG 697/698/699 Independent Study. 1/2/3 hrs
An intensive study of a problem or research area not covered in regular courses; under the direction of a faculty member. *Prereq: Candidate for the MA; permission of the Graduate Committee.*

NOTE: Advanced 400-level undergraduate courses are available to graduate students. *A maximum of nine hours of approved 400-level coursework may be permitted in the earning of any graduate degree.*

If you intend to enroll in an advanced 400-level undergraduate course for graduate credit, you must come to the Graduate School for written permission before enrolling in the course; otherwise, you will receive undergraduate credit.

THE MASTER OF ARTS IN ENGLISH WITH CONCENTRATION IN CHILDREN'S LITERATURE

OBJECTIVES

The MA in English with concentration in children's literature provides an opportunity for advanced studies in all major areas of children's literature, folklore, mythology, and writing for children.

Candidates usually begin with an introduction to the major genres of children's literature. Extensive reading, criticism and scholarship are emphasized. A second course is devoted to methods of teaching literature to children and is particularly recommended for prospective teachers. A third course traces the historical development of children's literature since the introduction of printing into England. In addition, there is a special topics course that varies from semester to semester and can be repeated for credit. A maximum of six hours of special topics courses may be used on a degree program.

This concentration is valuable not only for teachers of elementary, middle, or junior high schools, but also for librarians, special education teachers, reading specialists, recreation supervisors, editors and representatives in publishing houses specializing in children's books, writers of children's books, directors of religious education, youth workers in social service agencies, day care center directors, and bookstore managers. It also provides preparation for teachers of children's literature in two- and four-year colleges.

COURSE REQUIREMENTS

Restricted Electives 15 hours
Select five of the following courses:
LIT 516 Major Genres in Children's Literature (3)
LIT 517 Teaching of Children's Literature (3)
LIT 518 History of Children's Literature (3)

LIT 519 History of Children's Literature: Twentieth Century (3)
LIT 581 Critical Approaches to Mythology (3)
LIT 582 Wisdom of the People: Ballads, Legends, and Tales (3)
LIT 583 Literature for Early Childhood (3)
LIT 584 Literature for Adolescents (3)
LIT 592 Special Topics (3)

Electives 9-15 hours
Select additional children's literature courses from the above list or appropriate courses in literature, writing, or linguistics.

Cognates 0-6 hours
Total 30 hours

MA examination

During the semester before graduation, a candidate is required to pass a written examination. A list of comprehensive questions will be given the candidate well in advance of the proposed graduation date. Several of these questions will be discussed informally with the children's literature faculty and an appropriate certificate awarded.

COURSES FOR THE MASTER OF ARTS IN ENGLISH WITH CONCENTRATION IN CHILDREN'S LITERATURE

LIT 516 Major Genres in Children's Literature. 3 hrs
An intensive study of the major genres of children's literature with emphasis on important representative examples and related criticism. *Prereq: Fifteen hours of credit in literature or permission of instructor.*

LIT 517 Teaching of Children's Literature. 3 hrs
A course concentrating on the value of literature for children with discussion and demonstration of various techniques used in teaching it. Additional readings in selected genres will be required. Offered for anyone planning to work with children, preschool through grade nine. *Prereq: Fifteen hours of credit in literature or permission of instructor.*

LIT 518 History of Children's Literature. 3 hrs
An examination of books for children written before the present century. Emphasis will be placed on major authors and movements from 1744 to 1908 and on what these reveal about changing attitudes toward children and the corresponding changes in the literature written for them. *Prereq: Fifteen hours of credit in literature or permission of instructor.*

LIT 519 History of Children's Literature: Twentieth Century. 3 hrs
Major writers and movements from World War I to the present with emphasis upon what these reveal about changing attitudes toward children and young people and the literature written for them. *Prereq: Fifteen hours of credit in literature or permission of instructor.*

LIT 581 Critical Approaches to Mythology. 3 hrs
An investigation of myths from many cultures demonstrating individual responses to universal questions of human existence. Students will respond critically to the various theories of myth through their reading and analysis of myths as literature. *Prereq: Fifteen hours of credit in literature or permission of instructor.*

LIT 582 Wisdom of the People: Ballads, Legends and Tales. 3 hrs

Reading and analysis of printed tales, legends and ballads using the tools of folklore scholarship. Students also collect and analyze oral materials.

Prereq: Fifteen hours of credit in literature or permission of instructor.

LIT 583 Literature for Early Childhood. 3 hrs

Prose and poetry for preschool and early elementary children with emphasis on recent research in illustration and literature and its application in selecting, evaluating and using books with the young.

Prereq: Fifteen hours of credit in literature or permission of instructor.

LIT 584 Literature for Adolescents. 3 hrs

An examination of literature for adolescents, emphasizing criteria for selection and evaluation, along with consideration of audience, genre and censorship. Students will be expected to read and respond critically to historical and contemporary literature written for adolescents.

Prereq: Fifteen hours of credit in literature or permission of instructor.

LIT 592 Special Topics. 3 hrs

Topics will be announced each year. Some from the recent past include: Literature for Younger Children, Recent Fiction; Poetry for Children; The Golden Age of Children's Literature; Fantasy for Children and Young People. *Not more than six hours of special topics courses may be applied towards the degree.*

Prereq: Fifteen hours of credit in literature.

ENG 692 Thesis. 3 hrs

Original research or critical study designed and completed by the student under the guidance of the thesis director and committee.

Prereq: ENG 621 and department permission.

THE MASTER OF ARTS IN ENGLISH WITH CONCENTRATION IN ENGLISH LINGUISTICS

OBJECTIVES

Linguistics is the scientific study of language. It hopes to discover how languages are learned, processed, and used, how they are structured, why and how they change, and what status they have in social life. Briefly, linguists study human language with an eye to relating its structure to cognitive functions on the one hand and to social interaction on the other. The results are important to social and cognitive psychology, native and foreign language teaching at all levels, artificial intelligence and computer science, communications, sociology and anthropology, and historical accounts of human civilization, to name perhaps only the most obvious fields. Linguists find work in colleges and universities, in language education and educational planning, in the communications industries (including publishing), in translation services, and in cross-cultural agencies of both business and government.

PROGRAM REQUIREMENTS

Majors who enter with a limited background must complete those parts of the 401-420-425 sequence which were not a part of their undergraduate work. Graduate credit may be given for these courses. The usual prerequisite for any 500 level linguistics course (except 501, 502 and occasional special offerings) is 401; in addition, 525 (Advanced Syntax) and 534 (Advanced Phonology) require 425 and 420 respectively as specific prerequisites.

In addition, each candidate will complete a thesis (LIN 692) or sit for a comprehensive examination. The exam will include questions from general linguistics and specialized area(s) chosen by the candidate.

COURSE REQUIREMENTS

Restricted Electives 18 hours

Select six of the following courses:

LIN 501 Current Trends in Linguistics (3)

LIN 502 History of Linguistics (3)

LIN 510 Historical and Comparative Linguistics (3)

LIN 525 Advanced Syntax (3)

LIN 531 Semantics: The Study of Meaning (3)

LIN 532 Sociolinguistics (3)

LIN 533 General Psycholinguistics (3)

LIN 534 Advanced Phonology (3)

LIN 535 Discourse Analysis (3)

LIN 536 Typology and Universals of Language (3)

LIN 592 Special Topics (3) (with adviser's approval)

Electives 12 hours

Thesis plan students will take 3 of these hours in LIN 692 Thesis.

Suggested areas include anthropology, composition and rhetoric, linguistics courses not taken above, literature (particularly the early periods), mathematics and computer science, psychology, reading, sociology, speech and hearing science, and TESOL.

Total 30 hours

TESOL PROGRAM

Students interested in practical applications of English linguistics are also advised to consult the Master of Arts program in Teaching English to Speakers of Other Languages (TESOL) offered by the Department of Foreign Languages and Bilingual Studies.

COURSES FOR THE MASTER OF ARTS IN ENGLISH WITH CONCENTRATION IN ENGLISH LINGUISTICS

LIN 501 Current Trends in Linguistics. 3 hrs

A study of current trends in linguistic research as they bear on any number of practical and educational problems: reading, writing, language and public policy, language and professions, etc.

Prereq: LIN 401 Introduction to Linguistic Science.

LIN 502 History of Linguistics. 3 hrs

Grammatical analysis from Plato to Chomsky; the influence of various linguistic theories and analytical methods on the development of contemporary language models and the teaching of grammar.

Prereq: LIN 401 Introduction to Linguistic Science.

ENG 506 Introduction to Old English. 3 hrs

The reading of representative selections of prose and poetry in the original Old English, and an introduction to Old English grammar.

Prereq: LIN 421 The History of the English Language.

ENG 509 Old and Middle English Dialects. 3 hrs

A study of the dialectal difference of Old and Middle English exemplified in literary texts of the medieval period, with an investigation of their contributions to standard modern English.

Prereq: LIN 421 The History of the English Language.

LIN 510 Historical and Comparative Linguistics. 3 hrs

Introduction to comparative historical linguistics with special reference to the development of English from Germanic and Indo-European backgrounds.

Prereq: LIN 401 Introduction to Linguistic Science. Recommended: LIN 421 The History of the English Language.

LIN 525 Advanced Syntax. 3 hrs
An advanced course in syntactic analysis exploring recent research in transformation theory, semantic feature analysis, case grammar, and symbolic logic.
Prereq: LIN 425 Introduction to Syntax.

LIT 530 Studies in Chaucer. 3 hrs
Intensive reading of Chaucer's major works and supplementary reading in Chaucerean criticism.
Prereq: Fifteen hours of credit in literature.

LIN 531 Semantics: The Study of Meaning. 3 hrs
A brief study of the historical background of modern semantic analysis of English utterances. Traditional and generative approaches to semantic concepts will be examined.
Prereq: LIN 401 Introduction to Linguistic Science.

LIN 532 Sociolinguistics. 3 hrs
An analysis of the diversity in language caused by social factors and the correlative influence of these linguistic differences upon society and social status.
Prereq: LIN 401 Introduction to Linguistic Science.

LIN 533 General Psycholinguistics. 3 hrs
An introduction to psycholinguistics, the mental representation of a grammar, perception of language units, aphasia and other language abnormalities, first and second language acquisition, bilingualism, language, and thought. *Not open to students in speech-language pathology program.*
Prereq: LIN 401 Introduction to Linguistic Science.

LIN 534 Advanced Phonology. 3 hrs
Advanced theories in current phonology are presented and argued for, and contrasted with previous theories. Students do weekly analyses and submit an original final paper suitable for presentation at a conference.
Prereq: LIN 420 Introduction to Phonology.

LIN 535 Discourse Analysis. 3 hrs
An investigation of the grammar of texts; how units beyond the sentence are organized and how they may be analyzed.
Prereq: LIN 401 Introduction to Linguistic Science.

LIN 536 Typology and Universals of Language. 3 hrs
Seminar on description and explanation of structural patterns found recurrently across languages. Explores characteristics of the world's language families and areas. Special attention to processes of linguistic change.
Prereq: LIN 401 Introduction to Linguistic Science or equivalent.

LIN 592 Special Topics. 3 hrs
An experimental course for subject matter not provided in other department offerings. The content will change from semester to semester. Students may elect this course more than once as long as different topics are covered. *Not more than six hours of special topics may be used on a degree program.*

LIN 692 Thesis. 3 hrs
Original research or critical study designed and completed by the student under the guidance of the thesis director and committee.
Prereq: ENG 621 and department permission.

LIN 697/698/699 Independent Study. 1/2/3 hrs
An intensive study of a problem or research area not covered in regular courses; under the direction of a University faculty member.
Prereq: Department permission.

NOTE: Advanced 400-level undergraduate courses are also available to graduate students. *A maximum of nine hours of approved 400-level coursework may be permitted in the earning of any graduate degree.*

If you intend to enroll in an advanced 400-level undergraduate course for graduate credit, you must come to the Graduate School for written permission before enrolling in the course; otherwise, you will receive undergraduate credit.

THE MASTER OF ARTS IN ENGLISH WITH CONCENTRATION IN CREATIVE WRITING

OBJECTIVES

The MA in English with a concentration in creative writing provides an advanced, individualized program of work in creative writing and contemporary studies. Workshops, cognate requirements, and a double culminating experience — half creative, half critical and interdisciplinary in focus — emphasize the contemporary, creative context of a writer's work. The degree concentration provides a valuable framework for writers, by connecting their particular work with the arts and thought of their time, and by encouraging diverse, innovative writing.

The degree prepares writers for their continuing creative work. It is also useful for writers who may teach creative writing, English, humanities, or contemporary studies.

For admission to the concentration, candidates submit a portfolio of their creative writing. They will meet the general requirements for admission to the graduate program in English Language and Literature. The portfolio may serve in lieu of part of the 24 hours of undergraduate course work in English.

COURSE REQUIREMENTS

Required Courses	12 hours
ENG 522 Writing Workshop (sections offered in poetry, fiction, and translation; may be repeated for credit)	3
ENG 692 Thesis	3
ENG 693 Master's Writing Project	3
Restricted Electives	9 hours
<i>Select three of the following courses:</i>	
LIT 401 Modern British and American Poetry 1914 to Present (3)	
LIT 410 Modern American Literature (3)	
LIT 460 Recent Trends in British and American Literature (3)	
LIT 526 The Harlem Renaissance and Beyond (3)	
LIT 566 Studies in 20th Century British Fiction (3)	
LIT 567 Studies in 20th Century Irish Literature (3)	
LIT 576 Studies in 20th Century American Fiction (3)	
LIT 580 Studies in Contemporary Literary Trends (3)	
Others with permission of adviser	
Cognates	9 hours
Select courses from any area of contemporary studies—art, foreign language literature, music, history, philosophy, etc.—as approved by adviser.	
Total	30 hours

GENERAL COURSES

ENG 543 Language of, by, for, and about Women. 3 hrs
A study of women's language: how and why it differs from men's, how it affects writing style, what social effect it has and how it is changing.

FOREIGN LANGUAGES AND BILINGUAL STUDIES

Steven D. Kirby
Department Head
219 Alexander
487-0130

Phyllis Noda
Coordinator of Advising
Spanish (Bilingual-Bicultural Education)
219 Alexander
487-0370

William Cline
Coordinator of Advising
Language and International Trade and Spanish
219 Alexander
487-0130

JoAnn Aebersold
Coordinator of Advising
TESOL (Teaching English to Speakers of Other Languages)
219 Alexander
487-0130

J. Sanford Dugan
Coordinator of Advising
French
219 Alexander
487-0130

Sharon A. Robertson
Coordinator of Advising
German
219 Alexander
487-0130

The Foreign Languages and Bilingual Studies department offers a Master of Arts in Spanish (Bilingual-Bicultural Education), a Master of Arts in language and international trade, a Master of Arts in teaching English to speakers of other languages (TESOL), and a Master of Arts in foreign languages with concentrations in French, German, and Spanish. A major emphasis in French, German, or Spanish can also be developed through the Master of Arts in secondary school teaching or the Master of Arts in individualized studies.

MASTER OF ARTS IN SPANISH BILINGUAL-BICULTURAL EDUCATION

OBJECTIVES

Objectives of the program are to produce graduates with high-level competencies in the following areas:

Language

This area of competence includes demonstrated proficiency in both Spanish and English, demonstrated ability to teach both languages as subject matters and demonstrated ability to use both languages as media of instruction in other subject matter areas.

Culture

This area of competence requires students to demonstrate a number of specific abilities related to knowledge of Latino and other U.S. cultures and the diversity within each; awareness of and sensitivity to differences in socioeconomic, cultural and linguistic background; and skill in guiding students to acceptance and positive evaluation of cultural pluralism.

Methodology

This area of competence includes demonstrated ability to accommodate variations in cultural, linguistic and socio-economic background by individualizing instruction and utilizing appropriate evaluation instruments and procedures; demonstrated skill in classroom management, including team teaching and working with paraprofessionals; and demonstrated skill in organizing, planning, and teaching lessons which integrate the bilingual-bicultural curriculum into the standard local district curriculum.

ADMISSION REQUIREMENTS

1. Meet Graduate School degree admission requirements.
2. Sufficient skills in both Spanish and English to successfully participate in graduate courses and field work conducted in either language.
3. Experience with living and/or working in a multicultural setting.
4. Intent to pursue and promise of successful completion of a program leading to a graduate degree.
5. Conditional admission will not be granted.

PROGRAM REQUIREMENTS

In addition to completing the course requirements below, students on this program must fulfill the following degree requirements:

1. Demonstrate language proficiency, by examination, in both Spanish and English.
2. Possess or be eligible for a valid teaching certificate (not required for admission, however).
3. Complete three days of collateral field experience for each required and track course, except seminar, representing a total of 15 days of such experience.

COURSE REQUIREMENTS

Required Courses 9 hours
 BIL 622 Teaching Hispanic Culture and Language 3
 FLA 695 Seminar 3
 SPN 682 U.S. Dialects of Spanish 3

Concentration/Track Courses 9 hours
 Complete one of the following tracks:

Track I (for students with no prior course work in bilingual education)

TSL 410 TESOL Methods 3
 FLA 421 History and Theory of Bilingual Education 3
 SPN 471 Culture and Literature of the Hispanic
 Groups in the U.S. 3

Track II (for students with a bachelor's degree in bilingual education or a bilingual endorsement)

BIL 623 Bilingual Education Public Policy in the U.S. 3
 BIL 624 Bilingual Educational Theory 3
 BIL 625 Bilingual Education Teaching Techniques 3

Restricted Electives 6 hours

Choose six semester hours from the following courses:
 TSL 501 Theoretical Foundations of Second-Language
 Pedagogy (3)

TSL 520 Foreign Language Testing and Evaluation (2)
 TSL 679 Special Topics (1)

CUR 512 Enriching the Elementary Classroom Program (2)
 CUR 600 Trends and Issues in Early Childhood
 Education (2)

CUR 616 Issues in Elementary School Curriculum (2)
 CUR 630 Issues in Secondary School Curriculum (2)
 CUR 632 Individualizing Instruction in the Secondary
 School (2)

CUR 657 The Open Classroom (4)

EDP 631 Measurement and Evaluation (2)

RDG 518 Developmental Reading—Elementary (2)

- RDG 519 Programs in Language Arts (2)
- RDG 530 Developmental Reading—Secondary (2)
- RDG 554 Reading Problems of Learners with Special Needs (2)
- SFD 580 Sociology of Education (2)
- SFD 662 Cultural Determinants of Learning (2)
- SPN 519 Spanish Phonology (2)
- SPN 620 Spanish Grammar and Syntax (2)
- SPN 621 Graduate Spanish Conversation (2)

Cognates 6 hours
To be selected in consultation with graduate adviser.
Total 30 hours

**BILINGUAL ENDORSEMENT PROGRAM
FOR CERTIFIED TEACHERS
(NOT A DEGREE PROGRAM)**

In addition to completing the course requirements below, students on this program must fulfill the following requirements:

1. Demonstrate language proficiency, by examination, in both Spanish and English.
2. Possess or be eligible for a valid teaching certificate.
3. Complete three days of collateral field experience for each required course, except seminar, representing a total of 15 days of such experience.

Course Requirements 18 hours
BIL 622 Teaching Hispanic Culture and Language 3
TSL 410 TESOL Methods 3
FLA 421 History and Theory of Bilingual Education 3
FLA 695 Seminar 3
SPN 471 Culture and Literature of the Hispanic Groups in the U.S. 3
SPN 682 U.S. Dialects of Spanish 3

**MASTER OF ARTS IN LANGUAGE AND
INTERNATIONAL TRADE**

OBJECTIVES

Objectives of the program are to promote cultural awareness and sensitivity with reference to our own society as well as to societies of other world regions and to provide the skills and knowledge necessary for competent performance in an international business environment.

ADMISSION REQUIREMENTS

Applicants to the language and international trade master's degree program must:

1. Declare the foreign language to be used for the language area requirement on the application for admission to the Graduate School (e.g., language and international trade—French). Native speakers of a language may not elect that language without permission of the language section concerned.*
2. Possess a minimum overall undergraduate grade point average of 2.75.
3. Submit a statement of their reasons for pursuing this degree;
4. Have two of their former university professors complete the departmental recommendation forms and forward directly to the department.
5. Meet the background requirements stated below:
(In order to gain regular degree admission to the Master of Arts program in language and international trade, a student must have completed the following at the undergraduate level.)

- a. *Foreign Language*
Non-native speakers of French, German, or Spanish must possess at least a minor in that language with

a grade point average of 3.0, or the equivalent proficiency.

Non-native speakers of English must possess a minimum score of 80 on the MELAB or 520 on the TOEFL and a score of 5 on the TWE.

- b. *Economics*
A two-course sequence in macroeconomic theory and policy.
A two-course sequence in microeconomic theory and policy.

(Students not meeting the above requirements may be granted conditional admission and be required to complete either ECO 201 Principles of Economics I and ECO 301 Intermediate Macroeconomic Analysis or ECO 501 Macroeconomic Theory and Policy for macroeconomics; and either ECO 202 Principles of Economics II and ECO 302 Intermediate Microeconomic Analysis or ECO 502 Microeconomic Theory and Policy for microeconomics. Students must achieve an overall grade point average of 3.0 ("B") or better in deficiency courses.)

- c. *Business*
A course in the principles of accounting.
A course in basic computers in business.

(Students not meeting the above requirements may be granted conditional admission and required to complete either ACC 240 Principles of Accounting I and ACC 241 Principles of Accounting II or ACC 501 Accounting Principles for accounting; and MTH 118 Mathematical Analysis for Social Sciences I plus CSC 136 Computers for the Non-Specialist; or ORI 215 End User Computing or ORI 502 Business Information Systems for Basic Computers. Students must achieve an overall grade point average of 3.0 ("B") or better in deficiency courses.)

* Students applying to the ESL section of the Master of Arts in language and international trade should be sure their completed applications reach the Graduate School five months prior to the semester in which they wish to begin studying.

PROGRAM REQUIREMENTS

Students on this program must complete a minimum of 10 credit hours in a foreign language, 6 credit hours in economics, 12 credit hours in business, and a cooperative education assignment for 3-6 credit hours.

Cooperative Education

To complement their academic training and enhance their professional preparation and chances for future employment, all students are expected to complete a 15-week cooperative education assignment in the public or private sector, provided an appropriate position can be found. U.S. students may undertake this assignment either in the U.S. or in France, Germany or Spain, while ESL students may elect only the U.S. co-op. In all cases, students must satisfy the requirements of the co-op for which they are eligible.

- a. **U.S. Co-Op Placement**

To be eligible for this placement, a student must have achieved at least a 3.0 GPA and have completed at least 12 hours of graduate business and economics courses as well as half of the foreign language requirements. Students meeting these requirements should make an appointment with the language and international trade co-op adviser at least six months prior to the semester in which the student wishes to begin the co-op assignment; 219 Alexander, (313) 487-0310.

b. Overseas Co-Op Placement

To be eligible for an international cooperative education exchange placement, a student must have achieved at least a 3.25 GPA and have completed 18 hours of graduate business and economics courses as well as the foreign language requirement for the Master of Arts in language and international trade. The student must also pass an oral interview conducted by department faculty in the language being studied at least seven months before the date on which the student wishes to begin the international co-op assignment. Please see the language and international trade co-op adviser for further information; 219 Alexander, (313) 487-0310.

COURSE REQUIREMENTS**Required Courses**

Foreign Language	10 hours
If fulfilling foreign language requirement with English, complete ESL 642, 648 English as a Second Language for Special Purposes: Business (5, 5)	
If fulfilling foreign language requirement with French, German, or Spanish, complete ten hours, including courses 646, 647 (3, 3), in the chosen language	
Economics	6 hours
**ECO 508 International Trade	3
ECO 509 International Monetary Economics	3
Other credit hours can be selected from among 500-level economics courses with the aid and approval of the language and international trade graduate adviser.	
Business	12 hours
MKT 510 Marketing	3
***ORI 501 Introductory Probability and Statistics for Business	3
Other credit hours are to be selected from among 500-level business courses with the aid and approval of the language and international trade adviser. At least one of these shall be a business course with an international focus	
Cooperative Education	3-6 hours
FLA 688 Internship	3
Total	31-34 hours

****Prerequisites for this course are either ECO 201 Principles of Economics I and ECO 301 Intermediate Macroeconomic Analysis or ECO 202 Principles of Economics II and ECO 302 Intermediate Microeconomic Analysis or ECO 501 Macroeconomic Theory and Policy and ECO 502 Microeconomic Theory and Policy.**

*****Prerequisites for this course are MTH 118-119 Mathematical Analysis for Social Sciences I-II.**

MASTER OF ARTS IN TEACHING ENGLISH TO SPEAKERS OF OTHER LANGUAGES (TESOL)

OBJECTIVES

Objectives of the program are to produce teachers who possess a knowledge of English perceived as a foreign language, a knowledge of foreign language teaching and learning strategies, practical experience in applying theoretical knowledge and an awareness of the realities of the multicultural classroom.

ADMISSION REQUIREMENTS

1. Meet Graduate School degree admission requirements.

2. At least one year's college study of a foreign language, or the equivalent as determined by the Foreign Languages and Bilingual Studies department.
3. At least two letters of recommendation that give evidence of the applicant's promise of success in working with speakers of other languages and working in multicultural settings.
4. A brief statement of the applicant's reasons for pursuing this degree.
5. Non-native speakers of English must submit an official TOEFL score of 520 with a TWE score of 5 or a MELAB score of 80 or above.

Conditional admission may be granted to students who do not meet the above admission requirements. These students will be required to take deficiency courses to meet these requirements; this work will be in addition to regular program requirements.

The deadline for applications is five months prior to the semester in which the applicant wishes to begin. Because of the sequencing of core courses, starting the program in fall semester is recommended.

PROGRAM REQUIREMENTS

Non-native speakers of English must present an official score of 85 on the Michigan English Language Assessment Battery (MELAB) or 560 on the Test of English as a Foreign Language (TOEFL) as a requirement for graduation from the program.

COURSE REQUIREMENTS

Required Courses	20 hours
TSL 500 Observation and Analysis of ESL Programs ...	1
TSL 501 Theoretical Foundations of Second-Language Pedagogy	3
TSL 502 A Pedagogical Grammar and Phonology of ESL	3
TSL 520 Foreign Language Testing and Evaluation	2
TSL 530 TESOL Methods: Reading, Writing, and Grammar	2
TSL 532 TESOL Methods: Listening, Speaking, and Pronunciation	2
TSL 591 Special Topics	2
TSL 688 Practicum	3
TSL 694 Seminar	2
Restricted Electives	6 hours
A minimum of 6 hours in English language courses are required. The following are recommended:	
LIN 401 Introduction to Linguistic Science (3)	
LIN 402 Modern English Grammar (3)	
LIN 420 Introduction to Phonology (3)	
LIN 421 The History of the English Language (3)	
ENG 424 Technical Writing (3)	
LIN 425 Introduction to Syntax (3)	
LIN 534 Advanced Phonology (3)	
LIN 525 Advanced Syntax (3)	
LIN 531 Semantics: The Study of Meaning (3)	
LIN 532 Sociolinguistics (3)	
LIN 533 General Psycholinguistics (3)	
LIN 534 Advanced Phonology (3)	
ENG 596 Teaching Composition on the College Level (3)	
SLI 508 Multicultural/Multilingual Communication Development and Disorders (3)	
Cognates	6 hours
A maximum of six semester hours supportive or complementary from other departments should be selected with the approval of the graduate adviser.	
Total	32 hours

Before enrolling in approved 400-level courses for graduate credit, students must obtain (a) recommendation of their adviser; and (b) written permission from the Graduate School, Starkweather Hall. *Not more than 9 hours of approved 400-level courses can be used on a graduate program.*

MASTER OF ARTS IN FOREIGN LANGUAGES

FRENCH, GERMAN, SPANISH

The goal of the Master of Arts program is to assist candidates in attaining the equivalent of a superior level of proficiency in the foreign language chosen as defined by the ETS/ACTFL scale, as well as a broad knowledge of the geography and cultures of the regions where the target language is spoken, and to improve overall teaching effectiveness.

OBJECTIVES

General objectives of the program include:

1. development of superior level skills in listening, speaking, reading, and writing in the chosen foreign language;
2. incorporation of current pedagogies into the candidates' personal teaching styles, and
3. analysis of current cultural patterns, literary material, and/or technical information.

ADMISSION REQUIREMENTS

The following requirements govern admission to the program:

1. candidates shall hold undergraduate majors or minors in the language of their specialization, with an overall undergraduate grade point average of 2.75 and a grade point average of 3.0 in courses taken in the target language;
2. candidates shall successfully complete an oral proficiency interview in the language of their specialization with a rating of "Advanced."
3. conditional admission shall be granted to candidates evidencing deficiencies in target language proficiency. Such candidates must successfully complete deficiency courses including, but not limited to, FRN 443 Advanced French Grammar and Composition and FRN 444 Advanced French Conversation; GER 443 German Syntax and Advanced Composition and GER 444 Advanced German Conversation; or SPN 443 Advanced Spanish Grammar and Composition and SPN 444 Advanced Spanish Conversation and Composition. Graduate credit will not be granted for these courses.
4. applications will be reviewed by the faculty of the language area of specialization.

PROGRAM REQUIREMENTS

Students in all concentrations are required to complete a cultural immersion experience of at least six weeks in a country using the target language as the principal language of communication. Students who believe they may have fulfilled this requirement through past residence or study may petition to have the requirement waived or reduced; if approved the candidate may substitute restricted electives totaling up to six hours. Students may satisfy this requirement through the intensive immersion experience offered in their language concentration area. Similar programs of study with corroborating documentation may be accepted upon approval of the faculty of the area of concentration. Students should select a study abroad program in consultation with a faculty adviser prior to enrollment in any such program.

Students will, in consultation with a faculty adviser, be required to complete a culminating experience such as a master's examination, a piece of data-based research, a thesis, or an external oral proficiency exam such as the Certificat des Professions

techniques et scientifiques de la Chambre de Commerce et de l'Industrie de Paris, Certificat or Diplôme de français scientifique et technique de la Chambre de Commerce et de l'Industrie de Paris, or the Mittelstufenprüfung and Diplom Wirtschafts-Deutsch.

COURSE REQUIREMENTS

Concentration Area 18 hours

Complete requirements for one of the following concentrations
French

FRN 523 Contemporary French Scene	3
FRN 610 Intensive French Abroad	6
FRN 620 French Grammar and Syntax	3
FRN 621 Advanced Conversation in French	3
Three additional credit hours in 500-600 level French or any of the following 400-level French courses*:	
FRN 431 Studies in French Theatre (3)	
FRN 432 Studies in French Poetry (3)	
FRN 433 Studies in French Prose (3)	
FRN 451/452 Readings in French (1/2)	
FRN 466 French Speaking Cultures of the World (3)	
FRN 477/478/479 Special Topics (1/2/3)	

German

GER 610 Intensive German in Europe	6
GER 620 Advanced German Syntax and Conversation ...	3
GER 621 Advanced Conversation in German	3
Six additional credit hours in 500-600 level German or any of the following 400-level German courses*:	
GER 425 German Literature from the Middle Ages to the Baroque (3)	
GER 426 German Literature from 1750-1850 (3)	
GER 427 German Literature from 1850-1945 (3)	
GER 428 German Literature from 1945 to the Present (3)	
GER 451/452 Readings in German (1/2)	
GER 466 German for International Affairs (3)	
GER 477/478/479 Special Topics (1/2/3)	
GER 490 Intensive German in Europe (3)	

Spanish

SPN 610 Intensive Summer Program in Spanish	6-12
SPN 620 Spanish Grammar and Syntax	2
SPN 621 Graduate Spanish Conversation	2
Two to eight additional credit hours in 500-600 level Spanish or any of the following 400-level Spanish courses*:	
SPN 445 Spanish-American Prose (3)	
SPN 448 Modern Drama (3)	
SPN 449 Romanticism (3)	
SPN 454 Modernism in Spanish America (3)	
SPN 455 The Generation of 1898 (3)	
SPN 463 Don Quixote (3)	
SPN 464 Drama of the Golden Age (3)	
SPN 465 Modern Novel (3)	
SPN 471 Culture and Literature of the Hispanic Groups in the U.S. (3)	

**A maximum of nine hours of undergraduate course work may be permitted in the earning of any graduate degree.*

Restricted Electives 6 hours

Choose six hours from the following:

TSL 501 Theoretical Foundations of Second-Language Pedagogy (3)	
TSL 520 Foreign Language Testing and Evaluation (2)	
FLA 611 Theory and Methods of Modern Language Teaching (3)	
FLA 612 The Proficiency-Based Curriculum (3)	

FLA 613 Using Technology in the Foreign Language Classroom (3)

Cognates 6 hours
A selection from courses in a related content area to be arranged in consultation with a faculty adviser.
Total 30 hours

FOREIGN LANGUAGE AND BILINGUAL STUDIES COURSES
IN ENGLISH

TSL 500 Observation and Analysis of ESL Programs. 1 hr
Observations of ESL classes in varied contexts and practice in using different types of observation instruments. Seminar topics focus on ESL classrooms noting differences for ESL classrooms.

TSL 501 Theoretical Foundations of Second-Language Pedagogy. 3 hrs
Overview of the principal theories of language description, language learning, and language use, with emphasis on those factors which affect second-language acquisition and learning.
Prereq: Department permission.

TSL 502 A Pedagogical Grammar and Phonology of ESL. 3 hrs
Examines the structure and sound systems of American English as it applies to the teaching and learning of English as a foreign language. Emphasizes practical aspects of usage.
Prereq: Department permission.

TSL 520 Foreign Language Testing and Evaluation. 2 hrs
Examines the role of testing; surveys types of tests; discusses the criteria of a good test; analyzes tasks that variously require listening, speaking, reading, writing and communicative competence; and provides practice in evaluating and constructing test items.
Prereq: TSL 501 and TSL 502.

TSL 530 TESOL Methods: Reading, Writing, and Grammar. 2 hrs
Examines content and methodology in teaching TESOL reading, writing and grammar to diverse groups of students. Students are expected to investigate different techniques, analyze them and research one area.
Prereq: TSL 500, TSL 501, and TSL 502.

TSL 532 TESOL Methods: Listening, Speaking, and Pronunciation. 2 hrs
Examines content and methodology in teaching TESOL listening, speaking and pronunciation to diverse groups of students. Students are expected to investigate different techniques, analyze them, and research one area.
Prereq: TSL 500, TSL 501, and TSL 502.

TSL 590/591/592 Special Topics. 1/2/3 hrs
An intensive study of a specific topic to be determined by the instructor, field of specialization and student interest. *Not more than six hours of special topics may be used on a degree program.*
Prereq: Department permission.

TSL 679/680/681 Special Topics. 1/2/3 hrs
An intensive study of a specific topic to be determined by the instructor, field of specialization and student interest. *Not more than six hours of special topics may be used on a degree program.*
Prereq: Department permission.

TSL 688 Practicum. 3 hrs
Supervised practical experience in TESOL appropriate to the student's intended teaching setting. With the guidance of a trained ESL teacher, the practicum student will select appropriate materi-

als and techniques to develop the necessary skills in the learners and will then apply them in the classroom situations.
Prereq: TSL 500, TSL 501, TSL 502, TSL 530, TSL 532, and have a 3.0 grade point average or better in all core course work.

TSL 694 Seminar. 2 hrs
Different topics are selected each semester for intensive study by advanced students. The course consists of review and discussion of contemporary issues in TESOL, based on research projects and review of the pertinent literature carried out by the student. Emphasis in seminar meetings on exchange of ideas and information developed in the research.
Prereq: Twelve hours of core requirements.

TSL 697/698/699 Independent Study. 1/2/3 hrs
Intensive study of an issue related to the teaching and learning of foreign/second language under the direction of a member of the graduate faculty.
Prereq: Department permission.

ESL 512 Academic Writing for Foreign Graduate Students. 2 hrs
This course addresses the particular need of foreign graduate students to be able to express their understanding of material in their academic disciplines.
Prereq: A score of 80 on the Michigan English Language Assessment Battery or 500 on the Test of English as a Foreign Language with a TWE of 4 or above; recommendation of academic adviser.

ESL 590/591/592 Special Topics. 1/2/3 hrs
An intensive study of a specific topic to be determined by the instructor, field of specialization and student interest. *Not more than six hours of special topics may be used on a degree program.*
Prereq: Department permission.

ESL 642/648 English as a Second Language for Special Purposes: Business. 5 hrs each
A course for non-native speakers of English to improve their command of the English language for use in business. Emphasizes both oral and written communication skills, as well as vocabulary, grammar, and pronunciation, in a business context.
Prereq: A score of 80 on the Michigan English Language Assessment Battery or 520 on the Test of English as a Foreign Language and completion of ESL 412 Academic English as a Second Language: Writing and/or ESL 416 Academic English as a Second Language: Speaking and Listening.

ESL 679/680/681 Special Topics. 1/2/3 hrs
An intensive study of a specific topic to be determined by the instructor, field of specialization and student interest. *Not more than six hours of special topics may be used on a degree program.*
Prereq: Department permission.

ESL 697/698/699 Independent Study. 1/2/3 hrs
Intensive study of a language-related problem for students of English as a second language under the direction of a member of the graduate faculty.
Prereq: Department permission.

FLA 590/591/592 Special Topics. 1/2/3 hrs
An intensive study of a specific topic to be determined by the instructor's field of specialization and student interest. *Special topics courses may be repeated for credit. Not more than six hours of special topics may be used on a degree program.*
Prereq: Department permission.

FLA 611 Theory and Methods of Modern Language Teaching. 3 hrs

The history, theory, and techniques of modern language teaching.
Prereq: Major or minor in foreign language or department permission.

FLA 612 The Proficiency-Based Curriculum. 3 hrs

This course focuses on the content of instruction, or curriculum, as re-defined by the ACTFL/ETS Proficiency Guidelines and as reorganized in terms of communication tasks and language functions rather than grammatical principles.

Prereq: FLA 611 or department permission.

FLA 613 Using Technology in the Foreign Language Classroom. 3 hrs

This course focuses on the review, development and integration of audio, computer-assisted, and video-interactive video technologies in the foreign language classroom.

Prereq: FLA 611 or department permission.

FLA 679/680/681 Special Topics. 1/2/3 hrs

An intensive study of specific areas of foreign language or literature, to be determined by the instructor's field of specialization and student interest. *This course may be repeated for credit with departmental permission. Not more than six hours of special topics may be used on a degree program.*

Prereq: Department permission.

FLA 688 Internship. 3 hrs

Provides an opportunity for the graduate student to extend theoretical classroom learning through working experience in an appropriate setting. The Foreign Languages and Bilingual Studies department in cooperation with the College of Business will arrange and supervise suitable assignments in firms conducting international business. A minimum of 10 hours per week in the field will be supplemented by regular meetings with the faculty supervisors. *Credit/No credit.*

Prereq: Department permission.

FLA 695 Seminar. 3 hrs

Each semester different topics are selected for intensive study by advanced students. The course consists of a review and discussion of contemporary issues in bilingual-bicultural education, following which students select areas for research. Emphasis in seminar meeting on exchange of ideas and information developed through the research. *Taught in Spanish/English.*

Prereq: Department permission.

FLA 697/698/699 Independent Study. 1/2/3 hrs

Intensive study of a problem under the direction of a member of the graduate faculty.

Prereq: Department permission.

IN FRENCH**FRN 523 Contemporary French Scene.** 3 hrs

An intensive disciplinary approach to French language, culture, and literature. Material to be read in the original and to serve as a basis for class discussion in French. Assigned reading and oral reports.

Prereq: FRN 444 Advanced French Conversation or equivalent.

FRN 590/591/592 Special Topics. 1/2/3 hrs

An intensive study of a specific area of French language or literature, to be determined by the instructor's field of specialization and student interest. *This course may be repeated for credit with departmental permission. Not more than six hours of special topics may be used on a degree program.*

Prereq: Department permission.

FRN 610 Intensive French Abroad. 6 hrs

An intensive summer course offered in a French-speaking environment. Instruction emphasizes improvement of listening comprehension and speaking skill. Various levels of instruction suited to student needs. *May be repeated for credit.*

FRN 616 French (Four Skills) for Non-Majors. 3 hrs

Introduction to and practice in four skills (listening, speaking, reading, writing) of French.

FRN 617 French (Four Skills) for Non-Majors. 3 hrs

Introduction of and practice in four skills (listening, speaking, reading, writing) of French.

Prereq: FRN 616 or equivalent.

FRN 620 French Grammar and Syntax. 3 hrs

An advanced course in grammar and syntax. Intended to give a solid basis for oral and written expression and for teaching of French.

Prereq: FRN 443 Advanced French Grammar and Composition or equivalent.

FRN 621 Advanced Conversation in French. 3 hrs

A continuation of advanced conversation with emphasis on attaining fluency at all levels pertinent to professional and cultural needs. Discussions and oral reports on periodical literature. This course may be repeated for credit.

Prereq: FRN 444 Advanced French Conversation or department permission.

FRN 646 French Economy and Business Practices I. 3 hrs

Advanced course in business communications, translation techniques and French business practices. Study of French economy, energy, industry, commerce, agriculture and services. Demographic and political trends. *In French.*

Prereq: FRN 620 and FRN 621, or department permission.

FRN 647 French Economy and Business Practices II. 3 hrs

Continuation of FRN 646. Study of French economy as it relates to the European economic community, the U.S., the East, the developing countries, and the francophone countries. Upon completion of this course, students are eligible to take language proficiency examinations, leading to the CCIF Diplomas. *In French.*

Prereq: FRN 646 or department permission.

FRN 656 French for Science and Technology I. 3 hrs

A study of the language and technology of manufacturing processes, goods and services offered in three scientific and technical fields by French-based multinationals. Topics covered may include food industry, automobile, mass transportation, or energy. *In French.*

Prereq: Bachelor's degree or equivalent with a major/minor in French or department permission.

FRN 657 French for Science and Technology II. 3 hrs

Continuation of the study of the language and terminology of manufacturing processes, goods and/or services offered by French-based multinationals. Topics may include electronics, computers, glass, or robotics. *In French.*

Prereq: Bachelor's degree or equivalent with a major/minor in French or department permission.

FRN 679/680/681 Special Topics. 1/2/3 hrs

An intensive study of a specific area of French language or literature, to be determined by the instructor's field of specialization and student interest. *This course may be repeated for credit with permission. Not more than six hours of special topics may be used on a degree program.*

Prereq: Department permission.

FRN 692 Research Paper. 3 hrs
An intensive research into a specific area of French language or literature, to be determined by the instructor's field of specialization and student interest. *This course may be repeated for credit with permission.*
Prereq: Department permission.

FRN 697/698/699 Independent Study. 1/2/3 hrs
Intensive study of a problem under the direction of a member of the graduate faculty.
Prereq: Department permission.

IN GERMAN

GER 590/591/592 Special Topics. 1/2/3 hrs
An intensive study of a specific area of German language or literature, to be determined by the instructor's field of specialization and student interest. *This course may be repeated for credit with permission. Not more than six hours of special topics may be used on a degree program.*
Prereq: Department permission.

GER 610 Intensive German in Europe. 6 hrs
An intensive summer course offered in Europe. Instruction emphasizes improvement of listening comprehension and speaking skill. Various levels of instruction suited to student needs. *May be repeated for credit.*

GER 620 Advanced German Syntax and Conversation. 3 hrs
An advanced course in grammar, syntax and composition. Intended to give a solid basis for oral and written expression.
Prereq: GER 443 German Syntax and Advanced Composition or equivalent or department permission.

GER 621 Advanced Conversation in German. 3 hrs
A continuation of advanced conversation with emphasis on attaining fluency at all levels pertinent to professional needs. *The course may be repeated for supplementary credit.*
Prereq: GER 444 Advanced German Conversation or equivalent or department permission.

GER 646/647 German Business Practices. 3 hrs each
The course teaches the correct usage of German economic and financial vocabulary and trains the students in the reading, writing and translating of German business communications of varying types. German language periodicals and journals are used.
Prereq: GER 443 German Syntax and Advanced Composition and GER 444 Advanced German Conversation.

GER 656 German for Science and Technology I. 3 hrs
Study of specialized vocabulary and jargon used in selected fields of technology. The intent is to familiarize students with basic technical concepts and vocabulary that they may encounter in German industry.
Prereq: Undergraduate major/minor in German or department permission.

GER 657 German for Science and Technology II. 3 hrs
Study of specialized vocabulary and jargon used in selected fields of technology. The intent is to familiarize students with basic technical concepts and vocabulary that they may encounter in German industry.
Prereq: GER 656 or department permission.

GER 679/680/681 Special Topics. 1/2/3 hrs
An intensive study of a specific area of German language or literature, to be determined by the instructor's field of specialization and student interest. *This course may be repeated for credit with permission. Not more than six hours of special topics may be used on a degree program.*
Prereq: Department permission.

GER 697/698/699 Independent Study. 1/2/3 hrs
Intensive study of a problem under the direction of a member of the graduate faculty.
Prereq: Department permission.

IN SPANISH

BIL 590/591/592 Special Topics. 1/2/3 hrs
In-depth study of special areas in bilingual education of interest to practitioners and researchers. Subject matter will change from semester to semester. *May be repeated for credit. Not more than six hours of special topics may be used on a degree program.*
Prereq: Department permission.

BIL 622 Teaching Hispanic Culture and Language. 3 hrs
The techniques and materials for teaching the language and culture of Hispanic groups within the bilingual classroom. Not open to students on academic probation.
Prereq: A minimum of 24 hours of field experience in a bilingual classroom required.

BIL 623 Bilingual Education Public Policy in the U.S. 3 hrs
Study of the principal factors that influence bilingual education public policy formulation in the U.S., including federal and state legislation, federal court decisions, and the role of the mass media and bilingual communities.

BIL 624 Bilingual Educational Theory. 3 hrs
Study of the principal theories that influence the design and implementation of bilingual instruction programs, with special emphasis on language, culture, neurolinguistics, and pedagogy.

BIL 625 Bilingual Education Teaching Techniques. 3 hrs
This course will acquaint the student with and provide practice in the use of teaching techniques utilized in the teaching of content areas in bilingual classrooms.
Prereq: A minimum of 24 hours of field work required.

BIL 679/680/681 Special Topics. 1/2/3 hrs
In-depth study of special areas in bilingual education of interest to practitioners and researchers. Subject matter will change from semester to semester. *May be repeated for credit. Not more than six hours of special topics may be used on a degree program.*
Prereq: Department permission.

SPN 519 Spanish Phonology. 2 hrs
A study of the articulatory basis of the sounds in Spanish. Drills on rhythm and intonation patterns, with practice and recordings in the laboratory.
Prereq: SPN 444 Advanced Spanish Conversation and Composition or equivalent.

SPN 522 Stylistics. 2 hrs
The manner in which literary Spanish makes use of the means of expression available in the language.
Prereq: SPN 443 Advanced Spanish Grammar and Composition.

SPN 524 The Spanish Language in the New World. 2 hrs
Acquainting the students with the Spanish language as it is used in several language areas of the American continent.
Prereq: SPN 620.

SPN 590/591/592 Special Topics. 1/2/3 hrs
An intensive study of a specific area of Spanish language or literature, to be determined by the instructor's field of specialization and student interest. *This course may be repeated for credit with permission. Not more than six hours of special topics may be used on a degree program.*
Prereq: Department permission.

SPN 610 Intensive Summer Program in Spanish. 6 hrs
Intensive summer course offered in Mexico. Small-group (four to five students) language instruction, with many different instructional levels available. Students advance according to individual progress. Students live with Mexican families. *May be repeated for credit.*

SPN 620 Spanish Grammar and Syntax. 2 hrs
The morphological and syntactical structure of Spanish.
Prereq: SPN 443 Advanced Spanish Grammar and Composition or equivalent.

SPN 621 Graduate Spanish Conversation. 2 hrs
A continuation of advanced conversation with emphasis on matters of diction and style. *This course may be repeated for supplementary credit.*
Prereq: SPN 444 Advanced Spanish Conversation and Composition or equivalent.

SPN 646/647 Spanish for Business Practices. 3 hrs each
These courses teach the correct usage of Hispanic business and financial vocabulary, train the students in the reading, writing and translation of Spanish commercial documents, and familiarize students with relevant bibliographical resources. *Cannot be taken for credit by students who received credit for SPN 446, 447 Business Spanish.*
Prereq: SPN 443 Advanced Spanish Grammar and Composition, SPN 444 Advanced Spanish Conversation and Composition or department permission.

SPN 656 Spanish for Science and Technology I. 3 hrs
Study of Spanish used in scientific and technical fields. In-depth study of two to three topics per semester. Topics may include automation, automobile components, data processing, nutrition, etc. *In Spanish.*
Prereq: Bachelor's degree or equivalent with a major/minor in Spanish or department permission.

SPN 657 Spanish for Science and Technology II. 3 hrs
Study of Spanish used in scientific and technical fields. In-depth study of two to three topics per semester. Topics may include automation, automobile components, data processing, nutrition, etc. *In Spanish.*
Prereq: Bachelor's degree or equivalent with a major/minor in Spanish or department permission.

SPN 679/680/681 Special Topics. 1/2/3 hrs
An intensive study of a specific area of Spanish language or literature, to be determined by the instructor's field of specialization and student interest. *This course may be repeated for credit with permission. Not more than six hours of special topics may be used on a degree program.*
Prereq: Department permission.

SPN 682 U.S. Dialects of Spanish. 3 hrs
A study of the dialects of Spanish spoken in the U.S., including their historical background and their modification through contact with English. A minimum of 24 hours of field experience will be required.
Prereq: An introductory course in linguistics.

SPN 697/698/699 Independent Study. 1/2/3 hrs
Intensive study of a problem under the direction of a member of the graduate faculty.
Prereq: Department permission.

OTHER COURSES

These upper division undergraduate courses may also be taken for graduate credit in consultation with graduate adviser. *A maximum of nine hours of approved 400-level coursework may be permitted in the earning of any graduate degree.*

If you intend to enroll in any of the following undergraduate courses for graduate credit, you must come to the Graduate School for written permission before enrolling in the course; otherwise, you will receive undergraduate credit.

TSL 410 TESOL Methods (3)
FLA 421 History and Theory of Bilingual Education (3)
FLA 423 Bilingual Multicultural Methods K-12 (3)
FLA 490 Internship (3)
FRN 431 Studies in French Theatre (3)
FRN 432 Studies in French Poetry (3)
FRN 433 Studies in French Prose (3)
FRN 441/442 Nineteenth Century French Literature (3/3)
FRN 443 Advanced French Grammar and Composition (3)
FRN 444 Advanced French Conversation and Composition (3)
FRN 446/447 Business French I/II (3/3)
FRN 451/452 Readings in French (1/2)
FRN 456, 457 Scientific and Technical French I and II (3 each)
GER 425 German Literature from the Middle Ages to the Baroque (3)
GER 426 German Literature from 1750-1850 (3)
GER 427 German Literature from 1850-1945 (3)
GER 428 German Literature from 1945 to the Present (3)
GER 443 German Syntax and Advanced Composition (3)
GER 444 Advanced German Conversation (3)
GER 451/452 Readings in German (1/2)
GER 456/457 Technical German I and II (3/3)
SPN 443 Advanced Spanish Grammar and Composition (3)
SPN 444 Advanced Spanish Conversation and Composition (3)
SPN 445 Spanish-American Prose (3)
SPN 448 Modern Drama (3)
SPN 449 Romanticism (3)
SPN 451/452/453 Readings in Spanish (1/2/3)
SPN 454 Modernism in Spanish America (3)
SPN 455 The Generation of 1898 (3)
SPN 456/457 Scientific and Technical Spanish I/II (3/3)
SPN 463 Don Quixote (3)
SPN 464 Drama and the Golden Age (3)
SPN 465 Modern Novel (3)
SPN 471 Culture and Literature of the Hispanic Groups in the U.S. (3)
SPN 482 Language of the Hispanic Groups in the U.S. (3)
LIN 425 Second Language Acquisition (3)

GEOGRAPHY AND GEOLOGY

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The department offers programs leading to the degrees of Master of Arts and Master of Science in geography. Students whose programs emphasize cultural geography receive the degree of master of arts; those whose programs stress physical geography, cartography and remote sensing, urban and regional planning and other aspects of environmental studies receive the master of science degree. A Master of Science degree in historic preservation is also offered by the department.

The department awards several graduate assistantships each year. These assistantships provide cash stipends and full tuition for 18 credit hours for each fiscal year of the assistantship, as well as registration, student government and health service fees. Fellowships are also awarded to qualified students with high grade point averages who are not receiving other financial assistance.

MASTER OF ARTS OR MASTER OF SCIENCE IN GEOGRAPHY

OBJECTIVES

The master's program in geography seeks to educate individuals in the systematic, regional, and technical aspects of the discipline and offers opportunities for candidates to experience and participate in geographic research and its application to human and environmental needs. Students completing the master's degree may pursue advanced graduate studies, teach in elementary and secondary schools or community colleges, or apply geographic methods to various professional research and development occupations in public and private agencies.

ADMISSION REQUIREMENTS

Applicants for admission to the master's degree program in geography must:

1. have a bachelor's degree from an accredited institution
2. meet Graduate School degree admission requirements
3. have attained at least a 2.75 grade point average in the major field or in the equivalent of a geography minor during the last two undergraduate years or have scored at least 1000 on the aptitude test of the Graduate Record Examination.

Students without an undergraduate geography major may be admitted to the program but must satisfactorily complete a minimum of 36 semester hours of undergraduate and graduate work in geography for the master's degree.

DEGREE REQUIREMENTS

The master's degree in geography requires satisfactory completion of a minimum of 30 credit hours, including one of the three options discussed below. After completing 12 hours of graduate work in geography, the student must formally declare to the graduate coordinator the option to be pursued. The student's selection of an option, or change from one option to another, is subject to approval by the graduate coordinator.

All candidates for the master's degree must complete, within the total of their undergraduate and graduate study, at least the following:

- two physical geography courses
- two cultural (i.e., historical, human or urban) geography courses
- one regional geography course (not including GEO 110 World Regions)
- two courses from among cartography, quantitative methods and geographic field methods, or other technique courses.

GEO 500 Resources and Nations, GEO 501 and 502 Earth Science I and II may not ordinarily be counted for credit toward a master's degree in geography. Graduate credit earned more than six years prior to the date on which the degree is to be granted may not be applied to meet graduate requirements unless validated in accordance with Graduate School procedures.

All candidates must also pass a comprehensive oral examination, conducted by a committee of the graduate faculty. The examination will cover the field of geography and will emphasize the student's special field of interest.

DEGREE PROGRAM OPTIONS

I. Thesis Option. This option enables students to pursue research activity by enrolling in GEO 690, 691, or 692 Thesis for a total of six semester hours credit. The thesis topic and design are developed by the student with the advice of a departmental graduate faculty member. Completion of a thesis is especially recommended for students intending to pursue advanced degrees, but is also useful for those seeking employment with organizations that perform research functions.

II. Internship Option. This option allows students to gain practical experience in an off campus internship under the supervision of a departmental graduate faculty member who evaluates the student's performance. Credit for these supervised experiences may be earned by enrolling in GEO 687, 688, or 689 Internship, with approval of the graduate coordinator. This option also requires successful completion, while in residence at EMU, of two hours credit earned for composition of a paper of publishable quality. Graduate faculty in the department must be consulted in the initiation, design, and development of the paper; one graduate faculty member will evaluate the completed paper.

III. Teaching Option. This option permits practicing or prospective elementary and secondary teachers to develop teaching units under the supervision of three different faculty members. Each unit, worth two credit hours, shall be taken under GEO 671, 672, or 673 Geography Teaching Projects.

COURSE REQUIREMENTS

Courses in Geography	18-24 hours
Cognates	0-6 hours
Culminating Experience	2-6 hours
Select one of the following:	
GEO 589/590 Special Topics or GEO 697/698 Independent Study (2)	
GEO 671, 672, 673 Geography Teaching Projects (6)	
GEO 690, 691, 692 Thesis (6)	
Total	30 hours

MASTER OF SCIENCE IN HISTORIC PRESERVATION

The interdepartmental Master of Science program in historic preservation administered by the department requires satisfactory completion of a minimum of 36 semester hours. Students in the program may elect a general curriculum in historic preservation or may pursue one of the following concentrations: preservation planning, historic administration, or heritage interpretation and tourism. The student must formally declare this choice to the program coordinator before completing 20 hours of graduate work in historic preservation.

OBJECTIVES

The master's curriculum emphasizes preparation for careers in historic preservation in a planning, administrative, historic museum or consulting and heritage tourism capacity. It provides practical experience through work study, internship, cooperative education and field study opportunities.

ADMISSION REQUIREMENTS

Applicants for admission to the master's degree program in historic preservation must:

1. have a bachelor's degree from an accredited institution
2. meet Graduate School degree admission requirements
3. have attained at least a 2.75 grade point average in the major field during the last two undergraduate years.

In addition to applying to the Graduate School, the applicant must obtain program application forms from the historic preservation coordinator and follow the application procedures they prescribe.

For students who show promise but do not meet Graduate School or departmental undergraduate grade point average requirements, non-degree admission (status 1: academic deficiencies) may be granted. (See Non-Degree Admission Status) Students who successfully meet the probationary requirements of non-degree admission may be granted regular admission.

DEGREE REQUIREMENTS

1. Select, in consultation with the program coordinator, a general course of study in historic preservation or a concentration in either historic preservation planning, historic administration, or heritage interpretation and tourism.
2. Complete 36 hours of approved graduate-level course work beyond the bachelor's degree as described below under course requirements.
3. Complete up to 17 credit hours of prerequisite courses. The number of hours and the specific courses will be selected by the program coordinator from the following list and will depend upon the student's prior course work and the concentration pursued.

All concentrations

FA 429 History of American Architecture
GEO 333 Settlement Geography
GHP 377 Special Topics: Architectural Nomenclature

Heritage interpretation and historic administration concentrations

GEO 446 Heritage Interpretation and Tourism
Two courses in American history

Preservation planning concentration

GES 401 Cartography
GEO 332 Urban Geography or GEO 435 History of Urban Form and Function
One course in American history

COURSE REQUIREMENTS

Required Courses	18-20 hours
GEO 531 American Cultural Landscapes	2
GEO 548 American Folk Architecture	2
GHP 530 Introduction to Historic Preservation	2
GHP 547 Problems in Architectural Interpretation	3
GHP 630 Documenting Historical Buildings	2
GHP 690/691/692 Historic Preservation Project	1/2/3
PLS 520 Land Use and Preservation Law	3
HIS 505 Historical Method or HIS 533 Studies and Techniques in Local History	3
(exemptions possible for students who have written a senior paper in history or a master's thesis)	
Electives	16-18 hours
May include 12 hours in one of these three concentrations: heritage interpretation and tourism, historic administration, preservation planning	
Total	36 hours

GRADUATE CERTIFICATE IN HISTORIC PRESERVATION

A five-course curriculum granting a certificate of completion and satisfactory academic performance is available for non-degree students. This curriculum is designed primarily for already employed planners, historic district commissioners and others desiring to expand their understanding of the preservation field.

Certificate curriculum applicants must have a bachelor's degree from an accredited institution and meet Graduate School non-degree student status requirements.

PROGRAM REQUIREMENTS

Following admission, the student should consult with the historicpreservation coordinator regarding completion of the course requirements.

COURSE REQUIREMENTS

Required Courses	5 hours
FA 429 History of American Architecture	3
GHP 530 Introduction to Historic Preservation	2
Restricted Electives	6-9 hours
Select three courses from the following:	
GEO 435 History of Urban Form and Function (3)	
GEO 531 American Cultural Landscapes (2)	
GEO 548 American Folk Architecture (2)	
GEO 570 Rural Planning and Preservation (2)	
HIS 505 Historical Method (3)	
HIS 533 Studies and Techniques in Local History (3)	
Any other 500-600 level GHP courses except the following: GHP 587, GHP 637, GHP 687/688/689, GHP 690/691/692, GHP 697/698/699	
Total	11-14 hours

GEOGRAPHY COURSES

GEOGRAPHY COURSES FOR NON-SPECIALIZING STUDENTS

GEO 500 Resources and Nations. 2 hrs
Patterns of distribution, production, consumption and adequacy of physical and cultural resources; different management characteristics and roles which resources play in the development of nations. *Applicable to the master's degree by petition only.*

GEO 501 Earth Science I. 2 hrs
An introduction to the structure and composition of the earth, including volcanism, earthquakes and land-forming processes. *Applicable to the master's degree by petition only.*

GEO 502 Earth Science II. 2 hrs
Weather and climate and related phenomena such as natural vegetation and soils. *Applicable to the master's degree by petition only.*

REGIONAL GEOGRAPHY

GEO 510 The American Midwest. 2 hrs
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.
Prereq: A course in the geography of the U.S. or North America or department permission.

GEO 512 Middle America and the Caribbean World. 2 hrs
A regional study of Mexico, Central America and the islands of the Caribbean. Conditions leading to the present political upheavals in the area; an effort is made to chart future trends.
Prereq: A course in geography of Latin America or department permission.

GEO 513 South American Lands. 2 hrs
A regional study of the countries of South America; resources, people and national cultures are stressed.
Prereq: A course in the geography of Latin America or department permission.

GEO 515 Environmental Problems and Strategies in Europe. 2 hrs
Causes and consequences of environmental degradation in Europe. Human landscape modification, dense population, and political fragmentation as factors in creating serious pollution problems. European efforts to preserve and restore the environment.
Prereq: GEO 319 Geography of Europe or equivalent, or department permission.

GEO 516 Problems in Soviet Geography. 2 hrs
Individual and group research in selected problems in the geography of the Soviet Union.
Prereq: A course in Soviet geography or department permission.

GEO 518 Problems of Sub-Saharan Africa. 2 hrs
Individual research in selected problems in geography in Sub-Saharan Africa.
Prereq: A course in the geography of Africa or department permission.

HISTORICAL GEOGRAPHY

GEO 531 American Cultural Landscapes. 2 hrs
The diversity of the human geography of the United States will be explored in terms of representative cultural landscapes of selected regions. Historic characteristics of urban and rural landscapes in America will be analyzed by means of readings, audiovisual presentations and discussions.

GEO 532 Historical Geography of Michigan. 2 hrs
Geographical changes and developments in Michigan from pre-colonial times to the present. The geography of the state in each of the important stages of its history.
Prereq: One geography course and one American history course or department permission.

GEO 541 Material Cultures: A Disciplinary Overview. 3 hrs
Introduces and examines material culture from the perspective of six or seven academic disciplines that make use of objects in their analysis of culture. Major emphasis is given to American material culture.

HUMAN GEOGRAPHY

GEO 544 Problems in Economic Geography. 2 hrs
Research problems and techniques dealing with the production, distribution and consumption aspects of economic geography.
Prereq: A course in economic geography or department permission.

GEO 545 Studies in Political Geography. 2 hrs
Study and comparison of the factors important in the political geographies of several countries.
Prereq: A course in the geography of Europe or department permission.

GEO 546 Problems in Population Geography. 2 hrs
Readings, discussion, and research of selected problems in population geography.
Prereq: GEO 361 Geography of Population or department permission.

GEO 548 American Folk Architecture. 2 hrs
Folk structures such as rural houses, barns, fences and covered bridges are analyzed as aspects of material culture and cultural landscape contributing to regional personality within the United States. Attention is given to old world antecedents, colonial development, and diffusion of regional forms from their colonial hearths.
Prereq: GEO 531 or department permission.

GEO 549 Cultural Landscape Interpretation. 2 hrs
Principles of cultural landscape interpretation as well as the development of local interpretation keys are investigated. Analysis of cultural landscapes is carried out in lectures, field practice, discussion sessions, and some student reports.

URBAN AND REGIONAL PLANNING

GEO 550 Problems in Urban Geography. 2 hrs
Selected geographic problems: urban sprawl, deterioration of the urban environment, changing urban functions, and others. Acquisition of analytical techniques and geographical insights.
Prereq: A course in urban geography or department permission.

GEO 552 Processes of Suburban Development. 2 hrs
The evolution of suburbs, the evaluation of the suburban environment, land use change in proximity to cities and land use planning factors associated with suburban growth.
Prereq: An urban or regional planning course or department permission.

GEO 553 Urban and Regional Planning. 2 hrs
Philosophy, history, legal aspects, and techniques of the planning process. Case studies illustrate the impact of planning on economic, social, and political activities.
Prereq: An urban or regional planning course or department permission.

GEO 554 Urban and Regional Planning in Europe. 2 hrs
Historical background, current problems, and future strategies of urban and regional planning efforts in Europe. Political, economic, and cultural aspects of the planning process are considered.
Prereq: GEO 319 Geography of Europe, or equivalent, or department permission.

GEO 555 Comprehensive Planning. 2 hrs
An integration of planning tools, data sources, forecasting, and standards to produce a comprehensive plan that contains components on land use, transportation, and capital improvements.
Prereq: GEO 215 Introduction to Urban and Regional Planning or equivalent.

GEO 556 Zoning. 2 hrs
This course will prepare students to understand, interpret and critique a zoning ordinance and to become familiar with planned unit development and site plan review.
Prereq: GEO 215 Introduction to Urban and Regional Planning or equivalent or department permission.

GEO 557 Community Development and Downtown Revitalization. 3 hrs

Explores current approaches to community development in the context of downtown commercial revitalization. Particular emphasis is given to the use of historic preservation planning as a strategy for downtown revitalization. Components of a downtown preservation plan to be reviewed include history, urban design, architecture, economics, implementation and preservation law, and public policy.

Prereq: GEO 553 or GHP 530.

PHYSICAL GEOGRAPHY**GEO 560 Processes of Landform Development. 2 hrs**

Interrelations of climate, microclimate, vegetation, near-surface materials, soil formation and types of landform in Michigan, emphasizing observation in the field and aerial photographs.

GEO 561 Physical Landscapes. 2 hrs

An examination of the processes involved in creating and modifying the earth's surface and the theoretical approaches used in examining the problems of selected landscapes.

Prereq: One course in physical geography or geology, or department permission.

GEO 562 Weather. 2 hrs

Aims at understanding the atmospheric processes which generate all weather, applies observations of weather elements to analysis of weather phenomena, concludes with experimental forecasting. One hour lecture and two hours laboratory per week. *Not open to students with credit in GES 324 Weather.*

GEO 563 Climate. 2 hrs

Regional climates are assessed in terms of characteristic types and frequencies of weather, with emphasis on geographic and atmospheric causes of differences and variations. Data in a number of statistical and graphical forms are interpreted in evaluating and classifying climates. One hour lecture and two hours laboratory per week. *Prereq: GES 324 Weather or GEO 562.*

GEO 564 Common Rocks and Minerals. 2 hrs

Materials and processes in the formation and distribution of important minerals and rocks. *Not open to students with credit in GLG 229 Rocks of Michigan.*

GEO 565 Principles of Earth History. 2 hrs

Relationship of geologic processes to the rock record of the earth, its relationship to the solar system, time, earth change, and the succession of life. *Not open to students with credit in GLG 161 Historical Geology.*

GEO 566 The New Earth Science. 2 hrs

Study of planet Earth—its interior and surface—emphasizing the new theories of continental drift and sea floor spreading.

Prereq: GES 108 Earth Science or GES 202 Science for Elementary Teachers or GEO 501, or department permission.

GEO 567 Introduction to Coastal Environments. 2 hrs

Description and analysis of the physical and biogeographical processes of the coastal ocean, Great Lakes, and inland lakes. Distribution and origin of the coastal environments, natural and human modification of beach, river valley, estuary, marsh, delta, and coral reef environments. Classroom demonstrations and field trips.

Prereq: Department permission.

GEO 568 Biogeographical Resources. 3 hrs

Natural ecological function and management of soils and agricultural areas, natural vegetation and timber harvest regions, as well as wildlife habitats. Worldwide trends in resource use. Resource allocation models.

GEO 569 Principles of Physical Hydrology. 2 hrs

An examination of the physical aspects of water in the environment. Hydrologic cycles, water balances, flood plain evaluation, drainage basin analysis, and ground water characteristics are highlighted.

Prereq: One course in physical geography or department permission.

GEO 570 Rural Planning and Preservation. 2 hrs

This course informs students how to develop a rural plan and evaluate implementation alternatives.

Prereq: GEO 215 Introduction to Urban and Regional Planning, GHP 335 Historic Preservation, GHP 530 or department permission.

GEOGRAPHICAL METHODS**GEO 571 Teaching of Social Studies. 2 hrs**

Subjects included: selecting, securing, organizing, presenting, and evaluating materials. *Not open to students who hold credit in GEO 348 Teaching Social Studies in Elementary Schools.*

GEO 575 Interpretation of Aerial Photography. 3 hrs

Interpretation of black and white, color, and color infrared photographs. Emphasis on photo interpretation, measurements, and mapping. Class project and optional field trip. *Not open to students with credit in GES 305 Aerial Photograph Interpretation.*

Prereq: Graduate standing and MTH 105 College Algebra or MTH 107 Plane Trigonometry.

GEO 576 Photogeology. 2 hrs

An interpretation and analysis of geological and geometric features of the earth. Aerial photos and remote sensing images will be utilized to detect aggradational and degradational processes in nature.

Prereq: GEO 575 or two courses in geology/physical geography.

GEO 577 Geographical Literature. 2 hrs

An evaluation of journals, abstracts, and government publications. Visits to local specialized resource centers to investigate maps and documents. Preparation of bibliographies and assessment of literature on selected topics in geography.

GEO 578 Advanced Computer Mapping. 2 hrs

Students will modify existing programs and operate computers, digitizers, plotters, and printers in direct mode to produce thematic and geographic information system maps. Four laboratory hours each week.

Prereq: GES 475 Computer Mapping and a course in basic programming or department permission.

GEO 579 Geographic Information Systems. 2 hrs

Use of computers for storing, displaying, and manipulating spatial information. Principles of geocoding, data capture, and data analysis. Applications include land capability, facilities management, and locational analysis for land planning, environmental assessment, and historic preservation.

Prereq: A course in cartography or computer mapping.

GEO 580 Urban Environmental Management. 2 hrs

Survey and evaluation of geologic, topographic, geomorphologic, hydrologic, and atmospheric factors which potentially and actually have impact on urban development and environmental management.

Prereq: An urban or regional planning course or department permission.

GEO 581 Advanced Environmental Assessment. 3 hrs
Preparation and critique of environmental assessments and site plans. Emphasis on current environmental problems, regulations, data interpretation, and impact mitigation. Optional field trips.
Prereq: GES 495 Environmental Assessment and Planning or graduate standing.

GEO 582 Remote Sensing of Earth Resources. 3 hrs
Manual interpretation and microcomputer processing of various types of remote sensing imagery. Application of this technology to land use planning, environmental assessment, information systems, and Third World development.
Prereq: An undergraduate course in aerial photo interpretation or remote sensing.

GEO 583 Cartographic Design. 3 hrs
Emphasis is on developing map-making skills using a variety of instruments and techniques. Quality work is stressed to prepare for professional employment. *Not open to students with credit in GES 401 Cartography or GES 402 Advanced Cartography.*

GEO 587 Cooperative Education. 3 hrs
A semester equivalent or full-time employment at a private firm, public agency or non-profit institution which provides an applied experience for the graduate student. Participating students must be recommended to the Cooperative Education Office by a departmental faculty member. A written report is required at the end of the employment period. *Credit on the geography and geology programs is subject to departmental approval. Offered on credit/no credit basis.*
Prereq: Graduate student status and enrollment in one of the department's graduate programs. Admittance by application only.

GEO 590/591/592 Special Topics. 1/2/3 hrs
An experimental course for subject matter not provided in other departmental offerings. The content will change from semester to semester. *Students may elect this course several times as long as different topics are covered. Not more than six hours of special topics courses may be used on a degree program.*

GEOGRAPHY COURSES FOR ADVANCED GRADUATE STUDY

GEO 671/672/673 Geography Teaching Projects. 2 hrs each
Development of three teaching units for geographic classes under supervision of one, two, or three faculty members.
Prereq: Department permission.

GEO 674 Internship Report. 2 hrs
A paper of publishable quality or a major professional report related to an internship experience will be written by the student and approved by two members of the graduate faculty.
Prereq: Department permission.

GEO 675 History of Geographic Thought. 2 hrs
The main themes of geographic thought from ancient times to the present day; the evolution of ideas fundamental to modern American geography. Significant geographical journals and other basic information sources are identified and discussed.
Prereq: Department permission.

GEO 676 Area Analysis. 2 hrs
Advanced geography field research. A philosophy of field geography; selected problems concerned with industry, recreation, agriculture, and commerce.
Prereq: Fifteen hours of credit in geography, including GES 303 Field Geography or department permission.

GEO 677 Seminar in Methods and Research. 2 hrs
Basic research techniques applicable to geography. Location and identification of source materials, statement and analysis of problems and preparation and presentation of results of research.
Prereq: Department permission.

GEO 679/680/681 Special Topics. 1/2/3 hrs
An experimental course for subject matter not provided in other departmental offerings. The content will change from semester to semester. Information on content can be obtained at department office. *Students may elect this course several times as long as different topics are studied. Not more than six hours of special topics may be used on a degree program.*
Prereq: Department permission.

GEO 683 Field Studies in Michigan. 2 hrs
The geographic and geologic environment: on-campus sessions and field trips include both subject matter and methodological concerns. Write department for information on content. Offered as a two-week workshop in the summer session.

GEO 685 Geography Field Trips. 4 hrs
Representative geographic regions in the area are 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.

GEO 687/688/689 Internship in Geography/Geology. 4/5/6 hrs
Supervised internship in some aspect of geography or geology which is of mutual interest to the student and the public or private agency that would "employ" the student. This experience is designed to integrate academic training with practical application. *This course may be taken only once.*
Prereq: Department permission.

GEO 690/691/692 Thesis. 1/2/3 hrs
An intensive study of a problem or problems under the direction of a faculty member.
Prereq: Department permission.

GEO 694 Seminar. 2 hrs
Research, reports, and group discussions emphasizing the distinctive concerns and methodology of geography. The particular topic that is examined will vary from semester to semester. Information regarding the content of a particular seminar may be obtained at the department office. *Students may elect this seminar several times as long as the topic studies are different. Not more than six hours of seminar courses may be used on a degree program.*
Prereq: Department permission.

GEO 697/698/699 Independent Study. 1/2/3 hrs
An intensive study of a problem or group of problems under the direction of a University faculty member.
Prereq: Department permission.

HISTORIC PRESERVATION COURSES

GHP 530 Introduction to Historic Preservation. 2 hrs
Survey of the growth of historic preservation in the United States. Identification of preservation techniques, and federal, state, and private preservation agencies and legislation; value and objectives of preservation.

GHP 533 Introduction to Historic Administration. 3 hrs
A general introduction to the field of historical administration with emphasis on historical museums. Also, attention is paid to the operational concerns, problems, and training requirements in a variety of other historical agencies.

GHP 534 Community Interpretation and Appropriate Tourism. 3 hrs

Traces the origin and development of the community interpretation process and outlines its emerging role in the creation of appropriate tourism programs. The empowerment of local hosts to interpret their area's heritage, visitor behavior, operational issues, and the range of potential heritage interpretation experiences will be discussed.

Prereq: GEO 446 Heritage Interpretation and Tourism, or department permission.

GHP 535 Heritage Interpretation Planning. 3 hrs

Extensive practice in the systematic planning of heritage interpretation programs, including analysis of heritage resources; target guest groups; intended programs, goals, and objectives; themes and sub-themes; desired emotional/sensory experiences; factual concepts; chosen delivery methods; and evaluation scheme.

Prereq: GHP 534.

GHP 536 Heritage Interpretation Delivery. 3 hrs

A survey and capabilities analysis of traditional and innovative heritage interpretation delivery methods. Extensive practice in the preparation, delivery, and evaluation of quality personal and non-personal interpretive experiences for selected guest groups in selected settings.

Prereq: GHP 534

GHP 537 Interpretive Programming for Organizations. 3 hrs

A survey of the existent interpretive programming of selected corporations, institutions, and agencies. Practice in the development and proposal of comprehensive interpretive programs for organizations.

Prereq: GHP 534, and either GHP 535, GHP 536, or department permission.

GHP 547 Problems in Architectural Interpretation. 3 hrs

The course deals with problems in dating historic structures. Analysis is based on style, construction methods, and detailing. Students learn through slide lectures, field trips, and term projects how to evaluate buildings for architectural significance.

Prereq: FA 429 History of American Architecture.

GHP 557 Community Development and Downtown Revitalization. 3 hrs

Explores current approaches to community development in the context of downtown commercial revitalization. Particular emphasis is given to the use of historic preservation planning as a strategy for downtown revitalization. Components of a downtown preservation plan to be reviewed include history, urban design, architecture, economics, implementation and preservation law, and public policy.

Prereq: GHP 530 or GEO 553.

GHP 572 Funding Preservation Projects. 3 hrs

Student is exposed to planning, implementation, and follow-up documentation of various types of historic preservation grants. Course also includes discussions on endowments, wills, bequests and financial planning, and development for historical agencies.

Prereq: GHP 530 or GHP 533 or department permission.

GHP 587 Cooperative Education. 3 hrs

A semester equivalent of full-time employment at a private firm, public agency or non-profit institution selected to provide the student with a paid work experience in historic preservation. Participating students must be recommended to the Cooperative Education Office by a departmental faculty member. A written report is required at the end of the employment period. Credit on

the historic preservation program is subject to departmental approval. *Offered on credit/no credit basis.*

Prereq: Graduate student status and enrollment in the historic preservation program. Admittance by application only.

GHP 590/591/592 Special Topics. 1/2/3 hrs

An experimental course for subject material not provided in other departmental offerings. The content will change from semester to semester. *Students may elect this course several times as long as different topics are covered. Not more than six hours of special topics courses may be used on a degree program.*

GHP 630 Documenting Historical Buildings. 2 hrs

Lecture and practical experience in documenting the built environment. Techniques of architectural survey, researching the history and former occupants of a building and preparation of a National Register nomination. Student projects and possible field trips.

Prereq: GHP 530 and FA 429 History of American Architecture or department permission.

GHP 631 Preservation Administration and Planning. 2 hrs

Study of cultural resource management objectives, strategies and techniques, including specific practice in the preparation of various types of National Register nominations, Department of Interior tax certifications and a local historic district ordinance.

Prereq: GHP 530 and GHP 547.

GHP 634 Heritage Interpretation Theory. 2 hrs

Examines the theoretical basis for heritage interpretation, including inter-related subsets of community, site-based, thematic, and person-to-person interpretation. Explores the needs for and the predictable future applications of heritage interpretation processes of cultural stabilization, preservation, revitalization, and tourism.

Prereq: GHP 534 and two courses from GHP 535, GHP 536, or GHP 537.

GHP 636/637 Historic Preservation Field Project. 3/6 hrs

Specifically arranged supervised field experiences and application of theoretical viewpoints to field problems in historic preservation.

Prereq: Department permission.

GHP 679/680/681 Special Topics. 1/2/3 hrs

An experimental course for subject material not provided in other departmental offerings. The content will change from semester to semester. *Students may elect this course several times as long as different topics are covered. Not more than six hours of special topics courses may be used on a degree program.*

Prereq: Department permission.

GHP 687/688/689 Internship. 4/5/6 hrs

Supervised internship in some aspect of historic preservation which is of mutual interest to the student and the public or private agency that would "employ" the student. This experience is designed to integrate academic training with practical application. *A maximum of two internships is allowed totaling no more than eight semester hours.*

Prereq: Department permission.

GHP 690/691/692 Historic Preservation Project. 1/2/3 hrs

The student conceives his or her own idea for a preservation-related individual project. The student is responsible for the design or planning of the project and carrying it to completion. Required of all historic preservation majors and represents the student's culminating experience prior to graduation.

Prereq: Department permission.

GHP 694 Seminar. 2 hrs
The viability and desirability of neighborhood preservation is discussed and observed from the perspective of affected inhabitants and from the broader urban to national contexts.
Prereq: GHP 530 or department permission.

GHP 697/698/699 Independent Study. 1/2/3 hrs
An intensive study of a problem or specifically-focused subject matter pertaining to the field of cultural resource management under the direction of a University faculty member.
Prereq: Department permission.

OTHER COURSES

These upper division undergraduate courses may be taken for graduate credit. *A maximum of nine hours of approved 400-level coursework may be permitted in the earning of any graduate degree.*

If you intend to enroll in any of the following undergraduate courses for graduate credit, you must come to the Graduate School for written permission before enrolling in the course; otherwise, you will receive undergraduate credit.

- GEO 423 Principles of City and Regional Planning (3)
- GEO 432 Political Geography (3)
- GEO 433 Political Geography of the United States (3)
- GEO 435 History of Urban Form and Function (3)
- GEO 438 Industrial Location and Development (3)
- GEO 440 World Food Systems (3)
- GEO 441 Transportation Geography and Planning (3)
- GEO 445 Cultural Tourism Resources (3)
- GEO 446 Heritage Interpretation and Tourism (3)
- GES 401 Cartography (3)
- GES 402 Advanced Cartography (3)
- GES 410 Site Planning Studio (4)
- GES 450 Lake and Coastal Management (3)
- GES/GLG 470 Quantitative Methods in Geography and Geology (3)
- GES 475 Computer Mapping (3)
- GES 485 Introduction to Remote Sensing (3)
- GES 495 Environmental Assessment and Planning (3)
- GLG 428 Optical Mineralogy (4)
- GLG 430 Petroleum Geology (3)
- GLG 439 Economic Geology (3)
- GLG 448 Hydrogeology (3)
- GLG 459 Groundwater Modeling (3)
- GLG 460 Contaminant Hydrology (3)

HISTORY AND PHILOSOPHY

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The History and Philosophy department offers a Master of Arts degree in history. The department also coordinates an interdisciplinary Master of Arts in social science and a Master of Liberal Studies with a concentration in social science and American culture. Graduate and advanced graduate certificates in state and local history also are offered.

MASTER OF ARTS IN HISTORY

OBJECTIVES

The Master of Arts in history enables students to acquire both general and specific knowledge concerning the human past. The program features specialization and breadth in subject matter through the requirements pertaining to areas and fields. It also incorporates instruction in historiography and methodology as well as practice in doing research and writing history. Through the curriculum, students learn how to locate, evaluate, interpret, compile and present historical data drawn from primary and secondary sources. Thus, the Master of Arts in history helps students refine their understanding of the meaning and matter of history. The degree can serve as preparation for teaching on the secondary level, for positions in government or business, or for further graduate work on the doctoral level.

ADMISSION REQUIREMENTS

In addition to meeting the Graduate School degree admission requirements, the applicant must present a minimum of 20 semester hours of undergraduate courses in history, with a grade point average of at least 2.5 for all undergraduate courses in history.

PROGRAM REQUIREMENTS

The Master of Arts in history is awarded upon satisfactory completion of at least 30 semester hours of credit. This may include up to nine hours in approved upper division 400-level courses. For purposes of the degree requirements, the courses in history are divided into the following areas:

Area 1: United States

Area 2: Europe

Area 3: Other World Areas

The MA in history may be granted under the following three options. The choice among these options must be made by the time candidates have completed at least 12 but not more than 19 hours on their programs.

Plan A: Examination Option. This option requires an examination, oral or written at the student's option, in each of the two areas of concentration. The scope, nature and method of examination shall be determined by each examiner in consultation with the student.

Plan B: Thesis Option. This option requires six hours of directed research concluding with the completion of a thesis

program (project). The thesis will be read and accepted by three professors, one of whom will be the director.

Plan C: Local History Option. This option requires completion of a thesis or an oral or visual presentation such as tape recorded material or slides, resulting from original scholarly investigation and accompanied by a written component of at least 50 pages.

EXAMINATION OR THESIS OPTIONS

Required Courses	5 hours
HIS 505 Historical Method	3
(students entering the program without credit for such a course will register for HIS 505 during their first semester)	
HIS 688 Historiography	2
Restricted Electives	12-18 hours
Three courses in each of two of the following areas **:	
United States	
Europe	
Other World Areas	
<i>** Students with records of superior upper division undergraduate performance in these areas may be permitted to substitute elective hours for some or all of these requirements. The approval of the graduate adviser is required.</i>	
Electives in History	1-13 hours
Students on thesis option (Plan B) will select six hours from HIS 690/691/692 Thesis (1/2/3)	
Cognates	0-6 hours
To be chosen in consultation with the graduate adviser.	
Total	30 hours

LOCAL HISTORY OPTION

Required Courses	12-14 hours
HIS 505 Historical Method	3
HIS 530 Urban Communities in U.S. History	3
HIS 533 Studies and Techniques in Local History	3
HIS 688 Historiography	2
<i>One of the following:</i>	
HIS 687 Cooperative Education (3)	
HIS 689 Local History Internship (3)	
HIS 690/691/692 Thesis (1/2/3)	
HIS 697/698/699 Independent Study (1/2/3)	
Restricted Electives	12-14 hours
Select at least one course from Group A and one from Group B	
<i>Group A</i>	
HIS 482 The Age of Washington and Jefferson (3)	
HIS 538 Studies in Colonial American History (2)	
HIS 541 The United States, 1825-1860: Ferment and Reform (2)	
HIS 583 Studies in the Civil War and Reconstruction (3)	
HIS 584 Studies in the Gilded Age (2)	
HIS 585 Studies in 20th Century U.S. History (2)	
<i>Group B</i>	
HIS 414 The Automobile Industry and Modern America (3)	
HIS 463 United States Labor History (3)	
HIS 464 The Old West, 1540-1890 (3)	
HIS/WMS 525 Technology, Social Change, and the Role of Women (3)	
HIS 531 Studies in Black History (3)	
HIS 532 Studies in U.S. Indian History (3)	
HIS 535 Studies in the History of the Family in the United States (2)	
HIS 687 Cooperative Education (3)	
HIS 689 Local History Internship (3)	
HIS 697/698/699 Independent Study (1/2/3)	

Cognates	4-6 hours
To be chosen from one cognate area (e.g. historic preservation) or topic (musical theatre) in consultation with the graduate adviser.	
Total	30 hours

MASTER OF LIBERAL STUDIES IN SOCIAL SCIENCE AND AMERICAN CULTURE

The primary purpose of the master of liberal studies program is to offer a graduate degree that is interdisciplinary in design and non-professional in orientation. The MLS student will find that this program fosters individual inquiry and offers a number of diverse opportunities for educational development.

OBJECTIVES

The interdisciplinary master of liberal studies in social science and American culture is administered through the History and Philosophy department. The degree program draws upon courses in the departments of History and Philosophy; Art; Communication and Theatre Arts; Economics; English Language and Literature; Foreign Languages and Bilingual Studies; Geography and Geology; Interdisciplinary Technology; Music; Political Science; Sociology, Anthropology, and Criminology; and Teacher Education. The program leading to the degree is highly flexible, and is designed to allow students to become familiar with a wide range of American culture. It should be helpful to students seeking employment in business, industry, or government at local, state, and federal levels. Persons already employed should find this course of study useful in their professional advancement. It also provides preparatory training for those desiring to teach or to continue to the PhD degree.

ADMISSION REQUIREMENTS

Applicants to the MLS program must have completed a bachelor's degree, but no particular field or major is required.

Applicants must meet both the undergraduate grade point average for admission and the grade point average for graduation established by the Graduate School.

If the applicant does not meet the requirements for regular admission, the requirements for conditional admission of the department of the primary concentration are to be followed. For those students who show promise, but do not meet the undergraduate GPA requirement, non-degree admission (status 1: academic deficiencies) may be granted. (See Non-Degree Admission Status.)

In order to facilitate course scheduling and field placements, prospective students are strongly encouraged to begin their program of study during the fall semester.

PROGRAM REQUIREMENTS

The degree will be awarded upon satisfactory completion of 30 hours of courses approved for graduate credit. These may include a maximum of nine hours in approved 400-level undergraduate courses. In addition to completing 24 hours in the American History and Complementary concentrations below, the student will complete one of the following options:

Option A: Three hours of electives in approved courses in departments participating in the program and a three hour independent study. A two hour integrated examination (oral or written) in American culture will be administered by a committee of at least two professors selected from departments involved in the student's program.

Option B: Three hours of electives in approved courses in departments participating in the program and a creative, scholarly or pedagogical special project for three hours of credit. The special project must be supervised by a committee of at least two

professors selected from departments involved in the student's program.

Option C: A thesis for six hours of credit. The thesis must be in some aspect of American culture related to the student's course work and must demonstrate that the student has an integrated knowledge of American life and thought. The thesis committee must consist of at least two professors selected from departments involved in the student's program.

COURSE REQUIREMENTS

American History Concentration 12 hours
At least six hours selected from courses at the 500-600 level from the History list below.

Complementary Concentrations 12-15 hours
From the list below, select at least four hours of courses from each of two or more of the participating departments

Culminating Experience 3-6 hours
Select Special Project (number varies by department) or Independent Study (697/698/699) for 3 hours credit or select Thesis (690/691/692) for 6 hours credit

Total 30 hours

*Departments and courses which constitute the Master of Liberal Studies in social science and American culture are listed below.**

Department of History

- HIS 414 The Automobile Industry and Modern America
- HIS 424 The United States from 1917 to 1941
- HIS 425 The United States from 1941 to 1963
- HIS 426 The United States from 1963 to the Present
- HIS 463 United States Labor History
- HIS 464 The Old West, 1540-1890
- HIS 465 United States Constitutional History
- HIS 468 The American Mind to the Civil War
- HIS 469 The American Mind since the Civil War
- HIS 482 The Age of Washington and Jefferson
- HIS 531 Studies in Black History
- HIS 532 Studies in U.S. Indian History
- HIS 533 Studies and Techniques in Local History
- HIS 535 Studies in the History of the Family in the United States
- HIS 538 Studies in Colonial American History
- HIS 541 The United States, 1825-1860: Ferment and Reform
- HIS 583 Studies in the Civil War and Reconstruction
- HIS 584 Studies in the Gilded Age
- HIS 585 Studies in 20th Century U.S. History
- HIS 586 United States in World Politics

Department of Art

- FA 429 History of American Architecture

Department of Communication and Theatre Arts

- CTA 446 Contemporary Problems in Telecommunications
- CTA 537 Mass Communications
- CTA 562 American Theatre History

Department of Economics

- ECO 460 Industrial Organization
- ECO 501 Macroeconomic Theory and Policy
- ECO 502 Microeconomic Theory and Policy
- ECO 522 Collective Bargaining
- ECO 524 White Collar and Public Employee Unionism
- ECO 551 State and Local Government Finance
- ECO 562 Government and Business

Department of English Language and Literature

- LIT 401 Modern British and American Poetry 1914 to Present

- LIT 409 The Development of American Literature
- LIT 410 Modern American Literature
- LIT 523 Realism and Naturalism in the American Novel
- LIT 525 Henry James
- LIT 526 The Harlem Renaissance and Beyond
- LIT 568 Whitman and Dickinson
- LIT 569 The American Renaissance: 1830-1860
- LIT 576 Studies in 20th Century American Fiction
- LIT 577 Studies in 20th Century American Poetry

Department of Foreign Languages and Bilingual Studies

- FLA 421 History and Theory of Bilingual Education

Department of Geography and Geology

- GEO 423 Principles of City and Regional Planning
- GEO 431 Historical Geography of the United States
- GEO 433 Political Geography of the United States
- GEO 510 The American Midwest
- GHP 530 Introduction to Historic Preservation
- GEO 531 American Cultural Landscapes
- GEO 532 Historical Geography of Michigan
- GEO 548 American Folk Architecture
- GEO 550 Problems in Urban Geography
- GEO 552 Processes of Suburban Development
- GEO 553 Urban and Regional Planning
- GEO 567 Introduction to Coastal Environments
- GEO 570 Rural Planning and Preservation
- GHP 694 Seminar

Department of Interdisciplinary Technology

- IDT 500 Introduction to Interdisciplinary Technology
- IDT 501 History of Technology
- IDT 602 Contemporary Issues in Technology

Department of Music

- MUS 504 America's Music
- MUS 642 Foundations of Music Education

Department of Political Science

- PLS 456 Criminal Law I
- PLS 510 Modern Public Administration
- PLS 565 Studies in State and Local Government
- PLS 645 Intergovernmental Relations

Department of Sociology, Anthropology, and Criminology

- SOC 502 Racial and Cultural Minorities
- SOC 503 The Family as an Institution
- CRM 610 Theories of Criminal Behavior
- CRM 611 Sociology of Crime and Its Correction

Department of Teacher Education

- SFD 572 History of American Education
- SFD 603 Groups in Schools
- SFD 673 Black Experience and American Education

*Graduate-level *special topics courses* which offer content in American culture may also be used on the MLS program. *Not more than six hours of special topics courses may be used on a degree program.*

MASTER OF ARTS IN SOCIAL SCIENCE

PROGRAM OBJECTIVES

This degree program is an interdisciplinary effort among the Economics, Geography and Geology, History and Philosophy, Political Science and Sociology, Anthropology, and Criminology departments, coordinated through the History and Philosophy department. Students in the program take courses in at least three of the five departments.

Because the Master of Arts in social science is interdisciplinary and does not require heavy specialization, it is responsive to individual interests and curricular needs. The program can offer greater expertise to social studies teachers in the elementary and secondary schools. Students with career interests in business or government service can acquire the deeper knowledge and broader perspective that stem from graduate work in social science. Beyond career or professional considerations, the program offers a fuller understanding of the social, cultural, political, economic, and geographic factors that have shaped the past and present human experience.

ADMISSION REQUIREMENTS

In addition to meeting the Graduate School admission requirements, the applicant must present a minimum of 30 semester hours of undergraduate courses in social science, with a grade point average of at least 2.5 in all undergraduate courses. Two letters of recommendation from former instructors and/or employers must also be submitted.

For those students who show promise, non-degree admission (status I: academic deficiencies) may be granted to those students not meeting the above GPA requirements. (See Non-Degree Admission Status.) Students who are admitted under non-degree admission must maintain a "B" average to be granted degree admission. A minimum of nine and a maximum of 12 credit hours earned as a non-degree admittee may be applied toward the MA degree upon recommendation of the department coordinator of advising.

PROGRAM REQUIREMENTS

The Master of Arts in social science is awarded upon satisfactory completion of at least 30 semester hours of credit. This may include up to nine hours in approved 400-level undergraduate courses. The courses must be distributed as follows:

Major Concentration	12 hours
Select courses, at least six hours at the 500-600 level, in one of the following disciplines: economics, geography (from those geography courses classed as social science), history, political science (one course from each of three groups, as specified by the department), or sociology/anthropology.	
Restricted Electives	12 hours
Select courses from at least two of the above disciplines other than that of the major concentration	
Electives	6 hours
These may be social science courses or any other graduate courses offered by the University.	
Total	30 hours

ADVISING

In addition to the specific requirements mentioned above, degree candidates must satisfy all of the general requirements of the Graduate School.

Newly admitted students should arrange an early conference with the graduate adviser, in order to plan their programs in detail.

All course selections must be approved by the graduate adviser prior to registration each semester.

GRADUATE CERTIFICATE AND ADVANCED GRADUATE CERTIFICATE PROGRAMS IN STATE AND LOCAL HISTORY

PROGRAM

These certificate programs offer students a concentrated exposure to the methods, techniques, and materials of state and local

history. The required courses provide a solid grounding in the skills of historical research and analysis. Through the elective courses, students will gain familiarity with ethnic and minority groups, political, labor and urban issues, and the interrelationships among economic, social, and political developments. Students who elect a local history internship will be able to apply their knowledge in a carefully supervised work setting.

By investigating events, individuals, groups, and movements at the state and local level, the programs provide students with specific illustrations and in-depth understandings of the major trends in United States history. Because Michigan's long and rich history incorporates significant events from the time of colonial rivalries through the present era of technological change, it provides an eminently suitable focus for such study.

The programs are intended to benefit individuals involved in a variety of public and private agencies or organizations. Elementary and secondary teachers may gain general understandings and develop specifically classroom applicable materials and insights, persons doing historical research, writing, and analysis may develop and refine those skills, and workers in community history or local museum settings may enlarge their specific knowledge and increase their awareness of the larger state and national contexts affecting local developments.

ADMISSION REQUIREMENTS

Graduate Certificate Program

1. Students must hold a bachelor's degree and meet the Graduate School requirement of a 2.5 GPA for admission.
2. Students must have completed 12 hours of undergraduate courses in history, with at least 6 of those hours in United States history.

Advanced Graduate Certificate Program

1. Students must hold a graduate degree and meet the Graduate School requirements for admission. Alternative admission is not allowed.
2. Students must have completed 12 hours of course work in history at the undergraduate or graduate level, with at least 6 of those hours in United States history.

PROGRAM REQUIREMENTS

1. Each program shall consist of at least 15 hours of course work selected from the following list. No more than one 400-level course may be counted on a graduate certificate program. No 400-level courses may be applied to the advanced graduate certificate program.

Required Courses

HIS 505 Historical Method

HIS 533 Studies and Techniques in Local History

Electives

HIS 463 United States Labor History

HIS 530 Urban Communities in U.S. History

HIS 531 Studies in Black History

HIS 532 Studies in U.S. Indian History

HIS 534 Social and Political History of Michigan

HIS 535 Studies in the History of the Family in the United States

HIS 684 Workshop in Michigan History

HIS 689 Local History Internship

HIS 697/698/699 Independent Study

2. A minimum grade point average of 3.0 (B) must be achieved to obtain either the graduate certificate or the advanced graduate certificate.
3. The graduate certificate or advanced graduate certificate program must be completed within three years from the date of initial enrollment.

NOTE: Electives from the historic preservation program (GHP prefix) may be applied to a certificate program in state and local history with the approval of the history graduate adviser; for listing of these courses see Geography and Geology entry in the current graduate catalog.

HISTORY COURSES

Graduate courses (open to candidates for the MA in history or social science and to students from other disciplines who wish to take cognate hours in history).

AREA 1: UNITED STATES

HIS 530 Urban Communities in U.S. History. 3 hrs
A study of the economic, spatial, physical, social, and political structure and development of urban communities in the U.S. from the pre-industrial era to the present.

HIS 531 Studies in Black History. 3 hrs
Selected major developments in the history of black Americans from 1619 to the present.

HIS 532 Studies in U.S. Indian History. 3 hrs
A critical study of the current scholarship in selected chronological topics and work with the primary sources available on campus in United States Indian history.
Prereq: Either one U.S. history survey course, HIS 305 Indians of the United States, or permission of the instructor.

HIS 533 Studies and Techniques in Local History. 3 hrs
Topics drawn primarily from the history of southeastern Michigan and the surrounding areas will be used to illustrate the nature of local history, the sources that can be used in its study and the ways in which this study can provide insight into developments of greater scope.
Prereq: HIS 505 Historical Method or department permission.

HIS 534 Social and Political History of Michigan. 3 hrs
History of Michigan's development dating from the French period emphasizing settlement patterns, migration, immigration, and ethnic groupings. Involves broad readings from sources placing Michigan within context of U.S. development.
Prereq: One course in U.S. history or department permission.

HIS 535 Studies in the History of the Family in the United States. 2 hrs
The study of a significant issue or problem in the history of the family in the United States. The topic will vary from semester to semester.

HIS 538 Studies in Colonial American History. 2 hrs
Colonial American political, economic and social institutions; current scholarship and interpretation.
Prereq: HIS 123 The United States to 1877 or department permission.

HIS 541 The United States, 1825-1860: Ferment and Reform. 2 hrs
An intensive study of the reform movements of the era. Special emphasis is given to women, utopianism, antislavery, immigration, education, temperance, religion and the asylum.
Prereq: HIS 123 The United States to 1877 or department permission.

HIS 583 Studies in the Civil War and Reconstruction. 3 hrs
Major problems of interpretation in the period from 1850 to 1877.

HIS 584 Studies in the Gilded Age. 2 hrs
The United States moving into a modern phase after the Civil War, leaving behind the old frontier and the blacksmith economy to enter an era characterized by factories, large cities, a race for colonies and socio-political unrest.

HIS 585 Studies in 20th Century U.S. History. 2 hrs
Study of selected topics in the history of the United States from 1900 to the present. Topics may vary from semester to semester.
Prereq: One course in U.S. history or department permission.

HIS 586 United States in World Politics. 2 hrs
American foreign policy in the 20th century, the nation's transition to great-power status and its adjustment to the demands of that role.

HIS 684 Workshop. 3 hrs
Intensive program using area archives to develop materials for elementary and secondary classroom use. Emphasizes bibliographical development, museum sources, and designing a topical framework for teaching Michigan history.
Prereq: One course in U.S. history or department permission.

AREA 2: EUROPE

HIS 511 Studies in Ancient History. 2 hrs
Intensive study of selected topics in classical Greek and Roman history during the period 500 B.C.-A.D. 600.

HIS 514 Studies in Renaissance and Reformation History. 3 hrs
An examination of major Renaissance and Reformation issues and developments in their historical setting.
Prereq: HIS 330 Europe in the Renaissance and Reformation or department permission.

HIS 515 Studies in Medieval History. 3 hrs
Intensive study of selected topics in European history during the period 300-1300.

HIS 517 Historical Background of Modern Britain. 2 hrs
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.

HIS 518 Studies in Recent German History. 2 hrs
World War I, the Weimar Republic, the rise of National Socialism and the National Socialist state, World War II, and contemporary Germany.
Prereq: HIS 338 German History Since 1815 or department permission.

HIS 520 French Revolution and Napoleon, 1774-1815. 3 hrs
A study of the French Revolution and its Napoleonic aftermath. Emphasis is placed upon an understanding of the revolutionary movement, interpretation, and significance for the future.
Prereq: HIS 427 Europe from Absolutism to Revolution, 1648-1815.

HIS 522 Studies in 20th Century Europe. 3 hrs
Topics in 20th century European history selected from the following examples: the World Wars, European communism, the fascist experience, the crisis of European democracies, the Cold War, political reconstruction and economic recovery, and postwar social and cultural change.

HIS 547 Nineteenth Century Ideological Background of the Russian Revolution. 3 hrs
Russian thought from the accession of Nicholas I (1825) until the Bolshevik revolution. Major themes to be treated are the Slavophiles and Westernizers, socialism, anarchism, nihilism, populism, liberalism, and conservatism.
Prereq: One course in modern European history or department permission.

HIS 548 History Travel-Study Tours. 2 hrs
Representative areas with significant historical background. May be taken more than once, but only two hours of such credit may be applied toward any one degree program.

HIS 550 Twentieth-Century Russia. 2 hrs
Political, diplomatic, social, and cultural developments in Russia from 1894 to the present.

AREA 3: OTHER WORLD AREAS

HIS 510 Studies in the History of Religion. 2 hrs
Broad topics in one or more religious traditions, usually Hinduism, Buddhism, Judaism, Christianity, or Islam. The current topic will be announced in the time schedule.
Prereq: One course in history, preferably history of religion, or department permission.

HIS 525 Technology, Social Change, and the Role of Women. 3 hrs
This course will examine the nature and origins of technology, the influence of its historical development from classical to modern times on women in the United States and Europe, and problems stemming from current technological advance.

HIS 543 Nationalism and Modernization in the Middle East and North Africa. 3 hrs
The development of nationalism and modernization in the Middle East and North Africa from World War I to the present; political and social changes occurring in this developing area.
Prereq: HIS 341 The Middle East, 1798 to Present; HIS 342 North Africa, 1798 to Present; or department permission.

HIS 554 Studies in Modern India. 3 hrs
The development of India from mid-19th century to the post-independence period; major problems confronting contemporary India.
Prereq: HIS 375 Modern India or department permission.

HIS 555 Studies in Far Eastern History. 2 hrs
Study of selected eras and topics in Far Eastern History. The topic selected will be announced in the time schedule.
Prereq: One course in Far Eastern history or department permission.

HIS 560 Studies in Latin American History. 2 hrs
An intensive investigation of selected political, economic, social, and cultural topics in Latin American history. The specific topics and chronological coverage are announced in the class schedule.
Prereq: One course in Latin American history or department permission.

SPECIAL COURSES

HIS 505 Historical Method. 3 hrs
This course encompasses training in research strategies appropriate to a variety of historical resources as well as instruction in the skills necessary for communicating the results of such research. A workshop approach offers discrete units in library and archive investigation, demographic and cartographic techniques, and oral and local history, culminating in a research paper.

HIS 590/591/592 Special Topics. 1/2/3 hrs
An experimental course for subject matter not provided in other department offerings. Subject matter will change from semester to semester. *Course may be repeated for credit, up to a limit of six hours.*

HIS 679/680/681 Special Topics. 1/2/3 hrs
An experimental course for subject matter not provided in other department offerings. Subject matter will change from semester to

semester. *Course may be repeated for credit, up to a limit of six hours.*

HIS 687 Cooperative Education. 3 hrs
Four to six months of full-time employment in a business or industry chosen to provide practical experience in the student's major field. The cooperative education program consists of one or two work experiences alternated with full-time attendance at the University. *Credit/no credit.*
Prereq: Approval by Cooperative Education Office and department permission.

HIS 688 Historiography. 2 hrs
A critical study of the writings, philosophy, and influence of major historians.
Prereq: Fifteen hours of graduate credit in history.

HIS 689 Local History Internship. 3 hrs
Supervised internship in local history, mutually agreeable to student, faculty adviser, and internship agency. Content varies with student needs and interests and available placement opportunities. *May not be repeated for credit.*
Prereq: Department permission.

HIS 690/691/692 Thesis. 1/2/3 hrs
Intensive research into an historical problem and the preparation of a thesis consistent in substance and form with the standards of the historical profession. *Credit/no credit.*
Prereq: Department permission.

HIS 697/698/699 Independent Study. 1/2/3 hrs
An intensive study of a problem or group of problems under the direction of a University faculty member. *A maximum of six hours may be applied toward a degree program. A maximum of three hours may be taken in any one semester or session.*
Prereq: Department permission.

OTHER COURSES FOR CREDIT TOWARD THE MASTER'S DEGREE

Approved 400-level undergraduate courses in history may be taken for graduate credit and applied toward the degree programs in history and social science. *Note that a maximum of nine hours of such credit may be used in any one degree program.* For information about undergraduate courses that may be taken for graduate credit, please consult the coordinator of advising.

If you intend to enroll in an undergraduate course for graduate credit, you must come to the Graduate School for written permission before enrolling in the course; otherwise, you will receive undergraduate credit.

MATHEMATICS

Don R. Lick
Department Head
515 Pray-Harrold
487-1444

Kenneth Shlskowsky
Coordinator of Advising
516-B Pray-Harrold
487-1294

The Mathematics department offers a graduate program leading to the degree of Master of Arts in mathematics. The department also offers a Master of Arts in mathematics with a concentration in computer science, and a Master of Arts in mathematics with a concentration in statistics.

The Mathematics and Computer Science departments award several graduate assistantships each year. A graduate assistantship stipend ranges from \$5,040 to \$5,250. In addition, the University pays full tuition for up to 18 credit hours for each fiscal year of the assistantship, as well as registration, student government and health service fees. The total package approximates \$7,020, depending on whether you are a resident or non-resident of Michigan.

Graduate fellowships are also awarded to qualified students with high grade point averages who are not receiving graduate assistantships. Students interested in applying for a graduate assistantship or fellowship should contact the mathematics department head or coordinator of advising.

MASTER OF ARTS IN MATHEMATICS

OBJECTIVES

1. To develop a greater competence in mathematics or related areas beyond that attained at the undergraduate level.
2. To improve pedagogical competence in the teaching of mathematics.
3. To provide preparation for further study or graduate work beyond the master's level in mathematics or mathematics education.
4. To strengthen the mathematical background of those who require analytical and quantitative skills in their profession.
5. To meet the needs of teachers continuing their education.
6. To provide opportunity for research in mathematics and mathematics education.

ADMISSION REQUIREMENTS

The requirements for admission to the master's degree program in mathematics are:

1. meet the Graduate School degree admission requirements;
2. possess a strong undergraduate major in mathematics comparable to that offered at Eastern Michigan University (approximately 30 credit hours with a grade point average of 2.75 in the mathematics courses). Students without such a major may be admitted to the program after meeting requirements specified by the department.

DEGREE REQUIREMENTS

The Master of Arts degree in mathematics requires a minimum of 30 graduate credit hours beyond the bachelor's degree, to be distributed with the approval of the department according to the course requirements below. Approval by the student's adviser of each semester's courses is suggested prior to registration although not required. Final recommendation for the degree by the coordinator of advising is required.

One of the following two options is required and is to be selected by the student:

- (a) Four hours of thesis research.
Additional thesis hours may be taken but will not replace the requirements listed below under required courses, restricted electives, electives and cognates. Before the start of their thesis research, students must submit to the department head a request to form a thesis committee. The committee will be made up of three faculty members of the Mathematics department. The chair, who will direct the research, is usually selected by the student and requires the approval of the department head. The chair, in consultation with the student, will then recommend for department head approval the other two committee members. At the conclusion of their research, students will submit to the department head the original thesis plus three copies written in a manner suitable for publication and approved by the thesis committee.
- (b) One to three hours in research study.
Students who elect this option will, with the approval of the coordinator of advising, select a supervisor to direct the research study. A presentation, based on the research study, will be made to at least three departmental faculty members. A typed copy of the study written in good and acceptable form will be filed with the department.

COURSE REQUIREMENTS

Required Courses	0-9 hours
MTH 411 Modern Algebra with Applications (3) or equivalent	
MTH 416 Linear Algebra (3) or equivalent	
MTH 420 Introduction to Analysis (3) or equivalent	
Students with undergraduate credit in any or all of these courses will substitute approved mathematics electives for these hours.	
Restricted Electives	5-6 hours
One course from each of two of the following three groups:	
a. <i>Algebra</i>	
MTH 511 Linear Algebra (3)	
MTH 518 Theory of Groups (3)	
MTH 618 Theory of Fields (3)	
b. <i>Analysis</i>	
MTH 524 Complex Analysis (3)	
MTH 526 Real Analysis (3)	
c. <i>Probability and statistics</i>	
MTH 571 Mathematical Statistics I: Probability Theory (3)	
MTH 573 Statistical Data Analysis (2)	
MTH 671 Mathematical Statistics II: Statistical Inference (3)	
Research	1-4 hours
MTH 690/691/692 Research Study (1/2/3) for either 1-3 hours in research study or 4 hours of thesis research	
Electives in Mathematics	5-24 hours
Usually no more than six hours in mathematics education courses. Thesis or research study hours in mathematics education are not to be counted as part of this six hour limitation.	
Cognates	0-6 hours
May be taken, with the approval of the adviser, outside the Mathematics department but must be in an area related to mathematics. The number of such hours permitted in the program will be based upon the student's background and need. Students who are presently teachers of mathematics or will be upon graduation may take, instead of cognates, up to six additional hours in mathematics education beyond those permitted as electives above.	
Total	30 hours

Students seeking a Master of Arts degree in mathematics and having an interest in computer science or applied mathematics should see the following Master of Arts degree in mathematics with a concentration in computer science.

** A total of nine hours of approved 400-level courses taken for graduate credit may be used on a graduate degree program.*

MASTER OF ARTS IN MATHEMATICS WITH CONCENTRATION IN COMPUTER SCIENCE

OBJECTIVES

1. To develop a greater competence in mathematics and computer science beyond that attained at the undergraduate level.
2. To improve pedagogical competence in the teaching of both mathematics and computer science.
3. To provide preparation for further study or graduate work beyond the master's level in mathematics and/or computer science.
4. To strengthen the background of those who require analytical and quantitative skills in their profession related to mathematics and computer science.
5. To provide opportunity for research in mathematics and/or computer science.

ADMISSION REQUIREMENTS

The requirements for admission to the master's degree program in mathematics with a concentration in computer science are:

1. meet all Graduate School degree admission requirements;
2. possess the equivalent of at least a minor in both mathematics and computer science (approximately 20 credit hours in each subject) although a major in one or the other subject is preferred. Also, at least a grade point average of 2.75 is required in both mathematics and computer science course work. Students without such a background may be admitted to the program after meeting requirements specified by the two departments.

DEGREE REQUIREMENTS

This program is designed for students seeking a Master of Arts degree in mathematics and having an interest in computer science or applied mathematics. It requires a minimum of 34 graduate credit hours beyond the bachelor's degree, to be distributed with the approval of both departments according to the course requirements below. The program includes a minimum of 17 graduate credit hours in mathematics, of which 11 must be at the 500-600 level and a minimum of 15 graduate credit hours in computer science, of which 12 must be at the 500-600 level. Because of these credit hours requirements, in general only six credit hours of 400-level course work in mathematics and only three credit hours of 400-level course work in computer science may be counted toward this degree.* Approval by the student's adviser of each semester's courses is suggested prior to registration, but not required. Final recommendation for the degree by the coordinator of advising is required.

**A total of nine hours of approved 400-level courses taken for graduate credit may be used on a graduate degree program.*

COURSE REQUIREMENTS

Mathematics 15 hours
Required Courses 0-9 hours
 MTH 411 Modern Algebra with Applications (3) or equivalent

MTH 416 Linear Algebra (3) or equivalent
 MTH 420 Introduction to Analysis (3) or equivalent
 Students with undergraduate credit in any or all of these courses will substitute approved mathematics electives for these hours.

Restricted Electives 5-6 hours
 One course from each of two of the following three groups:
 a. *Algebra*
 MTH 511 Linear Algebra (3)
 MTH 518 Theory of Groups (3)
 MTH 618 Theory of Fields (3)
 b. *Analysis*
 MTH 524 Complex Analysis (3)
 MTH 526 Real Analysis (3)
 c. *Probability and Statistics*
 MTH 571 Mathematical Statistics I: Probability Theory (3)
 MTH 573 Statistical Data Analysis (2)
 MTH 671 Mathematical Statistics II: Statistical Inference (3)
Electives in Mathematics 2-12 hours
 At least six of these hours must be at the 500-600 level.

Computer Science 15 hours

Required Courses 3 hours
 CSC 530 Formal Methods in Software Development (3) or
 CSC 531 Automata, Computability, and Formal Languages (3)
Restricted Electives 3 hours
 One course from the following:
 CSC 630 Advanced Compiler Construction (3)
 CSC 632 Automated Reasoning (3)
 CSC 633 Advanced Operating Systems (3)
 CSC 635 Real Time Processing (3)
 CSC 660 Software Engineering Practicum (3)
Electives in Computer Science 9 hours
 At least six of these hours must be at the 500-600 level.
 CSC 504 Fundamentals of Computer Science I and CSC
 505 Fundamentals of Computer Science II do not
 count toward this master's degree program.

General 2-3 hours

Required Courses 2-3 hours
 MTH 691/692 Research Study (2/3) or CSC 691/692
 Thesis (2/3)

Two hours of research study in either mathematics or computer science are required. Students will, with the approval of the coordinators of advising, select a supervisor to direct the research study. A presentation, based on the research study, will be made to at least three departmental faculty members. A typed copy of the study written in good and acceptable form will be filed with the Mathematics department. Students interested in a thesis option should see the coordinators of advising and the thesis requirement of the MA in Mathematics.

Total 34 hours

MASTER OF ARTS IN MATHEMATICS WITH CONCENTRATION IN STATISTICS

OBJECTIVES

1. To develop a greater competence in mathematics and statistics beyond that attained at the undergraduate level.
2. To improve pedagogical competence in the teaching of both mathematics and statistics.
3. To provide preparation for further study or graduate work beyond the master's level in mathematics and/or statistics.

4. To strengthen the background of those who require analytical and quantitative skills in their profession related to mathematics and statistics.
5. To provide opportunity for research in mathematics and/or statistics.

ADMISSION REQUIREMENTS

The requirements for admission to the master's degree program in mathematics with a concentration in statistics are:

1. meet all Graduate School degree admission requirements;
2. possess the equivalent of at least a minor in both mathematics and statistics (approximately 20 credit hours in each subject) although a major in one or the other subject is preferred. Also, at least a grade point average of 2.75 is required in both mathematics and statistics coursework. Students without such a background may be admitted to the program after meeting requirements specified by the department.

DEGREE REQUIREMENTS

This program requires a minimum of 34 graduate credit hours beyond the bachelor's degree, to be distributed with the approval of the department according to the course requirements below. Approval by the student's adviser of each semester's courses is suggested prior to registration, but not required. Final recommendation for the degree by the coordinator of advising is required.

COURSE REQUIREMENTS

Mathematics	15 hrs
<i>Required Courses</i>	<i>0-9 hours</i>
MTH 411 Modern Algebra with Applications (3) or equivalent	
MTH 416 Linear Algebra (3) or equivalent	
MTH 420 Introduction to Analysis (3) or equivalent	
Students with undergraduate credit in any or all of these courses will substitute approved mathematics electives for these hours.	
<i>Restricted Electives</i>	<i>5-6 hours</i>
One course from each of two of the following three groups:	
a. <i>Algebra</i>	
MTH 511 Linear Algebra (3)	
MTH 518 Theory of Groups (3)	
b. <i>Analysis</i>	
MTH 522 Fourier Analysis (3)	
MTH 524 Complex Analysis (3)	
MTH 526 Real Analysis (3)	
c. <i>Applied</i>	
MTH 419 Advanced Mathematical Modeling (3)	
MTH 475 Applied Combinatorics (3)	
MTH 536 Numerical Analysis (3)	
MTH 560 Introduction to Optimization Theory (3)	
<i>Electives in Mathematics</i>	<i>2-12 hours</i>
At least fifteen hours from mathematics other than statistics	
Statistics	17 hours
<i>Required Courses</i>	<i>11 hours</i>
MTH 571 Mathematical Statistics I: Probability Theory (3)	
MTH 572 Design and Analysis of Experiments (3)	
MTH 573 Statistical Data Analysis (2)	
MTH 671 Mathematical Statistics II: Statistical Inference (3)	
<i>Restricted Electives</i>	<i>5-6 hours</i>
Two courses from the following:	
MTH 574 Applied Statistics (3)	
MTH 575 Linear Regression Analysis (3)	
MTH 576 Applied Survey Sampling (3)	
MTH 577 Applied Multivariate Statistics (3)	

MTH 578 Non-Parametric Statistics (3)

General **2-3 hours**

Required Courses *2-3 hours*

 MTH 691/692 Research Study (2/3)

 At least two hours of thesis in either mathematics or statistics are required. Students, will, with the approval of the coordinator of advising, select a supervisor to direct the thesis. A presentation is required at the conclusion of the thesis.

Total **34 hours**

MATHEMATICS COURSES

MTH 500 Modern Mathematics Content, K-6. **2 hrs**

The modern mathematics required for teaching this subject in the elementary grades (K-6); set theory, logic, numeration systems, the real number system and geometry. *Not applicable to MA in mathematics program. Not open to students who have credit in MTH 501.*

MTH 501 New Topics in Modern Mathematics, K-8. **2 hrs**

New topics in modern mathematics programs, the materials of various study groups, practical problems in teaching mathematics in grades K-8. *Not applicable to MA in mathematics program. Not open to students who have credit in MTH 500.*

Prereq: Teaching experience or MTH 381 The Teaching of Mathematics K-6 or department permission.

MTH 503 Arithmetic Methods. **2 hrs**

Current problems in teaching arithmetic. Evaluating pupil achievement; new topics. *Not applicable to MA in mathematics program.*

Prereq: Teaching experience or MTH 381 The Teaching of Mathematics K-6 or department permission.

MTH 504 Mathematics and Statistics for MBAs. **3 hrs**

An elementary course emphasizing an understanding of differential calculus and its use in optimization, and an understanding of basic probability and statistics. *Open to MBA students only.*

Prereq: Two years of high school algebra, or MTH 104 Intermediate Algebra or equivalent.

MTH 506 Introduction to Mathematical Logic. **2 hrs**

Propositional and first order predicate calculi and rules of deduction; application in mathematical systems and proofs.

Prereq: A minor in mathematics or department permission.

MTH 507 Theory of Numbers. **3 hrs**

Divisibility theory of integers, primes, theory of congruences, Fermat's Theorem, Wilson's Theorem, number theoretic functions, multiplicity, Mobius inversion formula, Euler's phi function, quadratic reciprocity.

Prereq: MTH 411 Modern Algebra with Applications or department permission.

MTH 508 Foundations of Mathematics. **2 hrs**

An introduction of axiomatic method, axiomatic set theory, transfinite arithmetic, logical paradoxes; their influence on modern conceptions of mathematics.

Prereq: A minor in mathematics or department permission.

MTH 511 Linear Algebra. **3 hrs**

Theory of a single linear transformation, canonical forms, inner product spaces.

Prereq: MTH 411 Modern Algebra with Applications and MTH 416 Linear Algebra or department permission.

MTH 518 Theory of Groups. **3 hrs**

Groups, subgroups and quotient groups, finitely generated abelian groups, Sylow theorems, further topics.

Prereq: MTH 411 Modern Algebra with Applications or department permission.

- MTH 522 Fourier Analysis.** 3 hrs
An introduction to Fourier series and their application to the solution of boundary value problems in the partial differential equations of physics and engineering.
Prereq: MTH 325 Differential Equations and MTH 420 Introduction to Analysis or department permission.
- MTH 524 Complex Analysis.** 3 hrs
Complex numbers, analytic functions, elementary complex functions and mappings, Cauchy's Theorem and Cauchy's integral formula, maximum modulus principle, power series and calculus of residues and further topics.
Prereq: MTH 420 Introduction to Analysis or MTH 526 or department permission.
- MTH 526 Real Analysis.** 3 hrs
Topology of the real line, sequences and series, metric spaces, real-valued functions, functions of bounded variation, theory of differentiation and integration, introduction to Lebesgue integration.
Prereq: MTH 420 Introduction to Analysis or department permission.
- MTH 536 Numerical Analysis.** 3 hrs
Introduction to numerical computation, numerical linear algebra, solution of non-linear equations, interpolation and approximation, numerical solution of ordinary differential equations.
Prereq: MTH 223 Multivariable Calculus, MTH 416 Linear Algebra, and a computer programming course; or department permission.
- MTH 542 Non-Euclidean Geometry.** 2 hrs
Foundations of geometry and historical development. A study of hyperbolic and elliptic plane geometries. These compared with parabolic plane geometry.
Prereq: A minor in mathematics or department permission.
- MTH 543 Analytic Projective Geometry.** 2 hrs
Projective geometry as defined on a vector coordinate space. The corresponding vector algebra is studied and then adapted to the affine plane and two of its subplanes; Euclidean and Space-Time.
Prereq: An undergraduate major in mathematics or department permission.
- MTH 546 Graph Theory.** 2 hrs
A study of undirected and directed graphs and their structural properties including connectivity and traversibility. Associated matrices, groups and relations and applications to networks.
Prereq: A minor in mathematics or department permission.
- MTH 548 Introduction to Differential Geometry.** 3 hrs
Fundamental concepts of the theory of curves and surfaces in three-dimensional space. Applications. *Not open to students with credit in MTH 448 Differential Geometry with an Introduction to General Relativity.*
Prereq: An undergraduate major in mathematics or department permission.
- MTH 550 General Topology.** 3 hrs
General theory of topological spaces, metric spaces, continuity, product and quotient spaces, separation axioms, compactness and connectedness.
Prereq: MTH 420 Introduction to Analysis or department permission.
- MTH 560 Introduction to Optimization Theory.** 3 hrs
An introduction to various aspects of optimization theory including linear and non-linear programming, primal dual methods, calculus of variations, optimal control theory, sensitivity analysis, and numerical methods.
Prereq: An undergraduate major in mathematics or department permission.
- MTH 571 Mathematical Statistics I: Probability Theory.** 3 hrs
Set theory, Borel sets, Sigma field of events, probability measures on a sigma field, axioms, finite and countable spaces, random variables and distributions, functions of random vectors, derived distributions, generating and characteristic functions, limit theorems, modes of convergence, law of large numbers.
Prereq: MTH 370 Probability and Statistics I and MTH 420 Introduction to Analysis or department permission.
- MTH 572 Design and Analysis of Experiments.** 3 hrs
Principles of experimental design and analysis: randomized blocks and Latin Squares, nested or hierarchical designs, experimental and sampling errors, fixed and random effects models, components of variance, expected mean squares, factorial and fractional designs. *Not open to students who have credit in MTH 462 Design and Analysis of Experiments.*
Prereq: A calculus-based statistics course.
- MTH 573 Statistical Data Analysis.** 2 hrs
Data analysis using statistical packages such as SAS and MINITAB. Analysis of variance, multivariate regression, stepwise regression, analysis of categorical data including non-parametric tests, goodness-of-fit tests, tests for normality. Emphasis is on application and understanding the basic assumptions in testing data.
Prereq: MTH 370 Probability and Statistics I or MTH 571, or department permission.
- MTH 574 Applied Statistics.** 3 hrs
An empirical approach to statistics: generate samples and model distributions; tests of fit to specified distributions; tests of assumptions of randomness (trend); independence (association); biostatistics; product and system reliability. *Not open to students with credit in MTH 474 Applied Statistics.*
Prereq: A calculus based statistics course.
- MTH 575 Linear Regression Analysis.** 3 hrs
Modeling a response as a sample or multiple regression model, validity of assumptions, using models for estimation and prediction, multicollinearity, auto-correlation of error terms, residual analysis, influence diagnostics, stepwise regression. *Not open to students who have credit in MTH 461 Linear Regression Analysis.*
Prereq: A calculus-based statistics course and MTH 416 Linear Algebra or department permission.
- MTH 576 Applied Survey Sampling.** 3 hrs
Theory and applications of sampling: selection of samples; sampling designs; estimation of means and variances; ratio; regression and difference methods; simple, systematic, cluster, and stratified random sampling; probability proportional to size sampling. *Not open to students who have credit in MTH 460 Applied Survey Sampling.*
Prereq: A calculus-based statistics course.
- MTH 577 Applied Multivariate Statistics.** 3 hrs
Techniques for analyzing multi-dimensional data, including multivariate analysis of variance, principle component, discriminant analysis and canonical correlation.
Prereq: MTH 462 Design and Analysis of Experiments or MTH 572.
- MTH 578 Non-Parametric Statistics.** 3 hrs
Selected distribution free tests; Wilcoxon signed rank; Mann-Whitney tests; Kolmogorov-Smirnov, Chi-square and rank correlation tests; Kruskal-Wallis, Friedman correlation and regression.
Prereq: A calculus-based statistics course.
- MTH 581 Modern Mathematics Methods, K-6.** 2 hrs
Elective techniques in presenting materials, planning class activities and creating good learning situations; current problems in a modern mathematics curriculum for grades K-6. *Not applicable to MA in mathematics program.*
Prereq: MTH 500 Modern Mathematics Content, K-6 or department permission.

MTH 582 Microcomputers for Educators. 2 hrs
Capabilities and applications of microcomputers in schools. Students will learn programming in the BASIC Language and will learn how microcomputers work. No microcomputer experience assumed. Intended for educators.

Prereq: Teaching experience or department permission.

MTH 584 Middle School Mathematics, Methods, and Content. 3 hrs

Middle school mathematical content and contemporary ways of using materials and strategies to present the content. Topics include algebra, geometry, probability and statistics, number theory, logic, and other general mathematics notions.

Prereq: Teaching experience in junior or middle school mathematics or 15 hours of undergraduate credit in mathematics or department permission.

MTH 585 Modern Mathematics Methods, Senior High School. 2 hrs

For students lacking an undergraduate high school methods course in mathematics. *Not applicable to MA in mathematics program. Not open to students who have credit in MTH 306 Teaching of High School Mathematics.* Offered as needed.

Prereq: A minor in mathematics or department permission.

MTH 587 Enriching Introduction in High School Mathematics. 2 hrs

New teaching aids and supplementary reading materials; subject matter usually not developed in standard texts (e.g., linear programming, principles of computers and advanced geometric constructions). Topics for accelerated high school classes.

Prereq: Teaching experience in high school mathematics or department permission.

MTH 588 High School Mathematics, Methods, and Content. 3 hrs

Presents information and materials to broaden and deepen a secondary teacher's background in teaching mathematics. Topics include general mathematics, algebra, geometry, trigonometry, and senior mathematics. Applications, strategies of presentation, and teaching aids are discussed.

Prereq: A minor in mathematics or department permission.

MTH 589 Geometry for Secondary Teachers. 2 hrs

Presents information and materials to broaden and deepen a secondary teacher's background in teaching of geometry. Foundations of geometry, modern geometry, non-Euclidean geometries and a little topology are studied.

Prereq: Department permission.

MTH 590/591/592 Special Topics. 1/2/3 hrs

A graduate-level course in a specific area of mathematics, to be determined by the field of specialization of the instructor and the interest of the students.

Prereq: Department permission.

MTH 595 Workshop. 2 hrs

Students will be provided practical and theoretical study in a selected topic area. *Usually not applicable to MA in mathematics program.*

Prereq: Department permission.

MTH 597/598/599 Independent Study. 1/2/3 hrs

A report on an approved subject in the field of mathematics, the history of mathematics or the teaching of mathematics, under the guidance of a faculty member of the mathematics department.

Prereq: Department permission.

MTH 601 Teaching Junior College Mathematics. 2 hrs

Current problems in a junior college mathematics program. The role of algebra and trigonometry, elementary functions, analytic geometry, the calculus and linear algebra; content and techniques of instruction. CUPM recommendations for a college program. (Not offered currently.)

Prereq: Department permission.

MTH 610 Rings and Ideals. 2 hrs

Polynomial rings, ideals and homomorphisms, imbedding theorems, prime ideals, the radical, minimal and maximal prime ideals belonging to an ideal. (Not offered currently.)

Prereq: Any course in abstract algebra or department permission.

MTH 618 Theory of Fields. 3 hrs

Finite fields, prime fields and their extensions, normal extensions and Galois groups, splitting fields, separability, irreducibility, ruler and compass constructions, unsolvability of the general quintic equation.

Prereq: MTH 518 or department permission.

MTH 648 An Introduction to Differentiable Manifolds and Riemannian Geometry. 3 hrs

Metric spaces, differentiable manifolds from both a coordinate (tensorial) and a coordinate-free (linear algebra) point of view. Basic Riemannian geometry including metric tensors, connections, parallelism, geodesics and curvature.

Prereq: MTH 416 Linear Algebra and MTH 548 or department permission.

MTH 671 Mathematical Statistics III: Statistical Inference. 3 hrs

Distributions, exact sampling distributions, properties of estimators, MLE, BLUE, Bayes and Min-Max estimation, Rao-Blackwell Theorem, completeness, minimal sufficiency, optimal tests, Neyman-Pearson Lemma, likelihood ratio tests, chi-square tests.

Prereq: MTH 416 Linear Algebra and MTH 571; or department permission.

MTH 679/680/681 Special Topics. 1/2/3 hrs

A graduate level course in a specific area of mathematics, to be determined by the field of specialization of the instructor and the interest of the students.

Prereq: Completion of a minimum of 10 hours of graduate credit in mathematics and graduate GPA in mathematics of 3.3 or above and department permission.

MTH 687 Cooperative Education. 3 hrs

Practical experience in an industrial setting consisting of a supervised placement involving extensive use of mathematics. The student will be required to submit a plan outlining the academic benefits, and a summary of the experience upon conclusion. *Credit/no credit.*

Prereq: Department permission.

MTH 690/691/692 Research Study. 1/2/3 hrs

Research in areas of mathematics or mathematics education under guided direction. Thesis or final paper dependent upon program option is required at the conclusion of the research work.

Prereq: Department permission.

MTH 697/698/699 Independent Study. 1/2/3 hrs

A report on an approved subject in the field of mathematics, the history of mathematics or the teaching of mathematics, under the guidance of a faculty member of the mathematics department.

Prereq: Completion of a minimum of 10 hours of graduate credit in mathematics and graduate GPA in mathematics of 3.3 or above and department permission.

OTHER COURSES FOR GRADUATE CREDIT

The following courses may be elected for graduate credit; course descriptions may be found in the undergraduate catalog. A

maximum of nine hours of approved 400-level coursework may be permitted in the earning of any graduate degree. Information about courses in mathematics not listed here may be obtained from the coordinator of advising, Kenneth Shiskowski.

If you intend to enroll in any of the following undergraduate courses for graduate credit, you must come to the Graduate School for written permission before enrolling in the course; otherwise, you will receive undergraduate credit.

- MTH 400 History and Development of Mathematics (3)
- MTH 403 Current Research in Elementary School Mathematics (3)
- MTH 406 Introduction to Computability (3)
- MTH 411 Modern Algebra with Applications (3)
- MTH 416 Linear Algebra (3)
- MTH 418 Applied Linear Algebra (3)
- MTH 419 Advanced Mathematical Modeling (3)
- MTH 420 Introduction to Analysis (3)
- MTH 424 Introduction to Complex Variables (3)
- MTH 425 Mathematics for Scientists (3)
- MTH 426 Differential Equations II (3)
- MTH 436 Introduction to Numerical Analysis (3)
- MTH 460 Applied Survey Sampling (3)
- MTH 461 Linear Regression Analysis (3)
- MTH 462 Design and Analysis of Experiments (3)
- MTH 471 Probability and Statistics II (3)
- MTH 474 Applied Statistics (3)
- MTH 475 Applied Combinatorics (3)

MUSIC

James B. Hause
 Department Head
 N101 Alexander
 487-0244

Mary D. Teal
 Coordinator of Advising
 N101 Alexander
 487-1044

Concentrations leading to the Master of Arts degree are offered in music education, music theory-literature, piano pedagogy, and music performance. Specializations available within the music performance concentration include: accompaniment, choral music, organ, piano, voice; and wind, stringed, and percussion instruments. Programs are flexibly designed to meet varying student needs. The primary objectives are to improve performance and musicianship, teaching skills, and analytical and research skills. All music curricula are accredited by the National Association of Schools of Music.

MASTER OF ARTS IN MUSIC (PENDING APPROVAL)

ADMISSION REQUIREMENTS

Admission to a graduate program in the Music department is granted to students who meet the requirements of both the Graduate School and the Music department. Application for admission should be made to the Graduate School, where undergraduate transcripts are evaluated. Transcripts should be forwarded to the Graduate School at the time of application. In addition to Graduate School requirements for degree admission, the department requires the applicant to have an undergraduate degree in music or its equivalent. Students wishing to major in performance should send a tape to the Music department or write for information on auditions. Upon general admission to the department, additional auditions are necessary for applied music study or acceptance in a performance concentration.

Students who meet Graduate School requirements for admission but who do not meet all departmental requirements may be granted conditional admission. Conditions that must be met before degree admission is granted include: (a) completion of all graduate placement examinations and auditions; (b) completion of all deficiency courses and requirements; (c) completion of MUS 601 Introduction to Graduate Studies; and (d) completion of at least six credit hours of graduate study in music at Eastern Michigan University with a cumulative grade point average of 3.0 ("B") or better.

For degree admission, an international student must present a score of 90 on the Michigan English Language Assessment Battery (MELAB)/550 on the TOEFL (Test of English as a Foreign Language). A conditionally admitted international student must present a score of 85-90 on the MELAB/500-550 on the TOEFL.

PROGRAM REQUIREMENTS

All candidates for the MA in music are required to complete the following:

1. Music Theory-Literature Placement Examination;
2. Audition for acceptance into any performance concentration and for applied music study;
3. Comprehensive examination prior to graduation;
4. At least 15 hours of course work at the 600 level.

Upon admission to the Music department, each student is assigned an adviser who assists in planning a curriculum based on student needs and future plans. Placement examinations in theory,

literature, history, and performance are given each semester and students are expected to complete these tests before decisions on course elections are made. Students should write or call the Music department for the next scheduled test date. The results of the placement tests are used by advisers in determining the course needs of students. Students with deficiencies may be required to take remedial courses without graduate credit. Auditions are arranged with the adviser and area chair.

Programs consist of 12 hours of foundation courses including research techniques, music theory and literature, and applied music; 14 hours of concentration in the student's field of interest; and 4 hours of elective or cognate courses. A final recital, thesis, or special project is required in each degree program.

In addition to regular tuition, students accepted for private music lessons will be assessed applied music fees described under the section on tuition and fees.

COURSE REQUIREMENTS

Required Courses 12 hours

- MUS 601 Introduction to Graduate Studies 2
- One of the following (based on Music Theory-Literature placement examination results) 2
- MUS 511 Survey of Harmonic Techniques
- MUS 513 Form and Analysis
- Theory-Literature Elective
- Music History-Literature course (at 600 level for Music Education concentration) 2
- Applied Music 2
- Music electives from outside the area of concentration 4 (Applied Music and Ensembles recommended for Music Education concentration; Applied Music, Ensembles and Composition recommended for Music Theory-Literature concentration)

Concentration 14 hours

Select all courses listed in one of the following concentrations:

Music Education

- MUS 642 Foundations of Music Education 2
- MUS 694 Seminar: Music Education Topic 2
- MUS 576 Score Study and Rehearsal Strategies for Music Educators or MUS 678 Advanced Methods and Conducting Techniques for Music Educators 2
- Either MUS 691 Thesis (strongly recommended for students who wish to pursue the doctorate in Music Education) or MUS 692 Final Project 2
- Six hours from the following 6
- MUS 561 Studies in Literature (Band, Choral, Orchestra) (2)
- MUS 576 Score Study and Rehearsal Strategies for Music Educators (2)
- MUS 591 Special Topics: Music Education only—K-12 (2)
- MUS 595 Workshop: Music Education only—K-12 (2)
- MUS 660 Studies in Pedagogy (Music Education topics) (2)
- MUS 678 Advanced Methods and Conducting Techniques for Music Educators (2)
- MUS 697/698 Independent Study: Music Education (1/2)
- Other Music Education courses with adviser approval

Music Theory-Literature

- MUS 635 Music of the 20th Century 2
- MUS 660 Studies in Pedagogy (Theory-Literature) 2
- MUS 691 Thesis or MUS 692 Final Project 2
- Two of the following: 4
- MUS 504 America's Music (2)
- MUS 505 World Music (2)
- MUS 631 Renaissance Music (2)

- MUS 632 Baroque Music (2)
- MUS 633 Music in the Classic Era (2)
- MUS 634 Music in the Romantic Era (2)

- Four hours from the following: 4
- MUS 513 Form and Analysis (2)
- MUS 613 Advanced Form and Analysis (2)
- MUS 638 The New Music (2)
- MUS 697/698 Independent Study: Theory-Literature topics (1/2)

Piano Pedagogy

- AMU 602 Applied Music (Piano) (level 622-B81, 626-B82) 4
- MUS 692 Final Project (lecture-recital or paper on piano pedagogy plus fluent reading of thirty minutes of music of higher intermediate difficulty) 2
- Two of the following: 4
- MUS 660 Studies in Pedagogy (Studio Piano) (2)
- MUS 660 Studies in Pedagogy (Adult Group Piano) (2)
- MUS 660 Studies in Pedagogy (Children: Private/Group) (2)
- Four hours from the following: 4
- MUS 561 Studies in Literature (Piano) (2)
- MUS 595 Workshop: Keyboard Topics (2)
- MUS 660 Studies in Pedagogy (topic not chosen in preceding option) (2)
- MUS 660 Studies in Pedagogy (Taubman Piano Techniques) (2)
- Other appropriate Music courses with adviser approval

Music Performance (Accompaniment)

- AMU 602 Applied Music (Piano) (4) (level 622 B81 and above) 4
- MUS 551 Vocal and Instrumental Accompanying (Piano) 4
- MUS 687 Graduate Recital 2
- Four hours from the following: 4
- MUS 561 Studies in Literature (Piano) (2)
- MUS 590/591 Special Topics: Chamber Music (1/2)
- MUS 660 Studies in Pedagogy (Studio Piano) (2)
- MUS 660 Studies in Pedagogy (Adult Group Piano) (2)
- MUS 660 Studies in Pedagogy (Children: Private/Group) (2)
- MUS 660 Studies in Pedagogy (Taubman Piano Techniques) (2)
- Ensemble (any large or small approved by adviser)
- Other appropriate Music courses with adviser approval

Music Performance (Choral)

- AMU 601-602 Applied Music (at least one semester at the A 81 level or above by the end of 4 hours of study) 4
- MUS 660 Studies in Pedagogy (Choral) 2
- MUS 687 Graduate Recital 2
- MUS 561 Studies in Literature (Choral Music) or MUS 561 Studies in Literature (Opera) 2
- Four hours from the following: 4
- MUS 561 Studies in Literature (Solo Song) (2)
- MUS 576 Score Study and Rehearsal Strategies for Music Educators (2)
- MUS 660 Studies in Pedagogy (Vocal) (2)
- MUS 678 Advanced Methods and Conducting Techniques for Music Educators (2)
- Ensemble (up to 2 hours; any large or small approved by adviser)
- Other appropriate Music courses with adviser approval

Music Performance (Organ)

AMU 602 Applied Music (Organ) (level 650 C91 and above)	6
MUS 561 Studies in Literature (Organ)	2
MUS 687 Graduate Recital	2
Four hours from the following:	4
MUS 551 Vocal and Instrumental Accompanying (2)	
MUS 561 Studies in Literature (Choral Literature, Church Liturgy, second term of Organ Literature) (2)	
MUS 660 Studies in Pedagogy (Organ) (2)	
Other appropriate Music courses with adviser approval	

Music Performance (Piano)

AMU 602 Applied Music (Piano) (level 622 B91 and above)	6
MUS 561 Studies in Literature (Piano)	2
MUS 687 Graduate Recital	2
Four hours from the following:	4
MUS 551 Vocal and Instrumental Accompanying (2)	
MUS 590/591 Special Topics: Chamber Music (1/2)	
MUS 660 Studies in Pedagogy (Studio Piano) (2)	
MUS 660 Studies in Pedagogy (Adult Group Piano) (2)	
MUS 660 Studies in Pedagogy (Children: Private/Group) (2)	
MUS 660 Studies in Pedagogy (Taubman Piano Techniques) (2)	
Ensemble (any large or small approved by adviser)	
Other appropriate Music courses with adviser approval	

Music Performance (Voice)

AMU 602 Applied Music (Voice) (level 610 A91 and above)	6
MUS 687 Graduate Recital	2
Ensemble (any large or small vocal ensemble approved by adviser)	2
Four hours from the following:	4
MUS 561 Studies in Literature (Solo Song) (2)	
MUS 561 Studies in Literature (Opera) (2)	
MUS 660 Studies in Pedagogy (Vocal Diction) (2)	

Music Performance (Wind, Stringed, and Percussion Instruments)

AMU 602 Applied Music (major instrument) (level 650 C91 and above)	6
MUS 687 Graduate Recital	2
Ensemble (any large or small approved by adviser)	2
Four hours from the following:	4
AMU 501, 601, 602 Applied Music	
MUS 576 Score Study and Rehearsal Strategies for Music Educators (2)	
MUS 595 Workshop: Band, Orchestra Instrument Repair (2)	
MUS 660 Studies in Pedagogy (Brass, Percussion, Strings, Woodwind) (2)	
MUS 678 Advanced Methods and Conducting Techniques for Music Educators (2)	
Ensemble (any large or small approved by adviser) (2)	
Other appropriate Music courses with adviser approval	

Electives (music or non-music courses approved by adviser) 4 hours
(Applied Music elected by students in Music Performance concentrations may not be on the principal instrument.)

Total 30 hours

COURSES OPEN TO GRADUATE STUDENTS AND QUALIFIED SENIORS

MUS 504 America's Music.	2 hrs
The diversified styles of music made and continuously used by the people of the United States in terms of our historical cultural traditions.	
<i>Prereq: Music major or department permission.</i>	
MUS 505 World Music.	2 hrs
The history, style, and social basis of music from various cultures around the world. Will include comparisons between art music and popular music in western and non-western traditions.	
MUS 510 Masterpieces of Music.	2 hrs
Promotes interest, enjoyment, and understanding of some of the important works of great composers; importance of music as a factor in human experience and as a mode of thought. <i>Not open to students who have a major or minor in music.</i>	
MUS 511 Survey of Harmonic Techniques.	2 hrs
Compositional and harmonic techniques and practices of major composers of the 18th, 19th, and 20th centuries.	
<i>Prereq: MUS 202 Music Theory IV or equivalent.</i>	
MUS 512 Counterpoint.	2 hrs
A detailed study of the basic techniques in 16th century counterpoint and the expansion of those techniques as evidenced in 18th century contrapuntal style.	
<i>Prereq: MUS 511 or department permission.</i>	
MUS 513 Form and Analysis.	2 hrs
Structural principles and techniques through analysis of representative works of 18th, 19th, and 20th centuries.	
<i>Prereq: MUS 202 Music Theory IV or equivalent.</i>	
MUS 514 Sixteenth Century Counterpoint.	2 hrs
Polyphonic techniques and forms based upon stylistic principles of the 16th century.	
<i>Prereq: MUS 202 Music Theory IV or equivalent.</i>	
MUS 517 Music Composition I.	2 hrs
The creative process in music through analysis of traditional and new music; original composition in small forms illustrating various techniques and media. <i>May be repeated for credit.</i>	
<i>Prereq: Department permission.</i>	
MUS 551 Vocal and Instrumental Accompanying.	2 hrs
Provides pianists or organists with experience in accompanying singers and instrumentalists through acquisition of basic skills and repertoire. <i>May be repeated for credit.</i>	
<i>Prereq: Department permission.</i>	
MUS 561 Studies in Literature.	2 hrs
Topics to be selected from the following: piano, organ, vocal repertoire, band, orchestra, choir, solo song, chamber ensemble, opera, or similar topics. Topics to be offered will be announced in the schedule of classes. <i>May be repeated for credit with permission of adviser.</i>	
MUS 576 Score Study and Rehearsal Strategies for Music Educators.	2 hrs
In depth analysis of representative band, orchestral, and choral scores for the purpose of teaching and rehearsing.	
<i>Prereq: Department permission.</i>	
MUS 590/591/592 Special Topics.	1/2/3 hrs
An experimental course for subject matter not provided in other departmental offerings. The content will change from semester to semester. <i>Students may select this course several times as long as</i>	

different topics are studied. Not more than six hours of special topics may be used on a degree program.

Prereq: Department and adviser approval.

MUS 595 Workshop. 2 hrs

Topic to be announced in the schedule of classes. Topics usually will relate to some aspect of music education or performance such as Choral Workshop, String Workshop, Band Workshop, Keyboard Workshop, General Music Workshop, Chamber Music Workshop, or some similar topic. *May be repeated for credit.*

Prereq: Department permission.

PERFORMANCE COURSES

MUS 546 Collegium Musicum. 1 hr

Various ensembles of soloists—instruments, vocal, and mixed. Opportunity to perform old and new music infrequently heard. *May be repeated for credit.*

Prereq: Department permission.

MUS 547 Collegium Musicum. 2 hrs

Various ensembles of soloists—instrumental, vocal, and mixed. Opportunity to perform old and new music infrequently heard. Credit beyond one semester hour is earned through individual projects and research. *May be repeated for credit.*

Prereq: Department permission.

MUS 550 Ensemble. 1 hr

Participation in any regular departmental ensemble as a means of expanding knowledge of literature, observing techniques of conducting, and increasing efficiency in principal or secondary performance areas. *May be repeated for credit. Open to qualified students upon satisfactory audition.*

Prereq: Department permission.

AMU 501/502 Applied Music—Secondary Performance. 1/2 hrs

Open to majors and non-majors. May be repeated for credit.

Prereq: Audition.

COURSES OPEN TO GRADUATE MUSIC MAJORS

MUS 601 Introduction to Graduate Studies. 2 hrs

An introductory course in scholarly research and writing which includes library orientation for the music researcher, basic types of music research, evaluation of basic source materials for music research, style for writing and documentation of scholarly research, organization of a bibliography.

MUS 613 Advanced Form and Analysis. 2 hrs

In depth structural analysis of masterworks from the general concert repertoire.

Prereq: MUS 512 or MUS 513 or department permission.

MUS 617 Music Composition II. 2 hrs

Original composition based upon techniques of the 20th century; composition of works of moderate length. *May be repeated for credit.*

Prereq: MUS 517 or equivalent.

MUS 618 Music Composition III. 2 hrs

Original composition in larger forms with the intent of performance. *May be repeated for credit.*

Prereq: MUS 517 and MUS 617 or equivalent.

MUS 631 Renaissance Music. 2 hrs

Selected works representing the forms, styles, and idioms of the 15th and 16th centuries.

Prereq: Music major or department permission.

MUS 632 Baroque Music. 2 hrs

Selected works representing some of the styles and idioms of the 18th century, and of the early and mid-18th century (Bach, Handel).

Prereq: Music major or department permission.

MUS 633 Music in the Classic Era. 2 hrs

The development of musical style and form in the classical era, principally in the works of Haydn, Mozart, and Beethoven.

Prereq: Music major or department permission.

MUS 634 Music in the Romantic Era. 2 hrs

The development of musical style and form in the romantic era. Intensive study of selected compositions.

Prereq: Music major or department permission.

MUS 635 Music of the 20th Century. 2 hrs

Study of major works, composers, and aesthetic systems of 20th century music. Selected works to be announced each time the course is offered.

Prereq: Music major or department permission.

MUS 638 The New Music. 2 hrs

Examination of the new music; its sound, sources, structures, notation, performance, and perception. Listening, study, discussion, and performance, covering vocal, instrumental, and electronic techniques.

Prereq: Music major or department permission.

MUS 640 The Orchestra and Its Literature. 2 hrs

A chronological survey of music for orchestra from its inception in the 18th century to the present. It will include overtures, suites, concertos, symphonies, tone poems, pieces for chorus and soloists with orchestras, and other miscellaneous compositions. Emphasis will be on listening, stylistic features, and historical background.

Prereq: Music major or department permission.

MUS 642 Foundations of Music Education. 2 hrs

The study of the development of music education in the United States and the influence of philosophy upon development.

Prereq: Department permission.

MUS 660 Studies in Pedagogy. 2 hrs

Topics may be selected from the following: piano, organ, voice, vocal diction, brass, woodwind, strings, theory, literature, percussion, or similar subjects. Topics to be offered will be announced in the schedule of classes. *May be repeated for credit with permission of adviser.*

MUS 678 Advanced Methods and Conducting Techniques for Music Educators. 2 hrs

In depth study of interpretative factors and subtle baton techniques for the advanced conductor. Study of conducting styles and analysis of representative band, orchestra, and choral scores.

Prereq: Department permission.

MUS 679/680/681 Special Topics. 1/2/3 hrs

An intensive study at an advanced level, of special topics which may not be covered in the regular course offerings. *Topics must be approved by the department head. May be repeated for credit with permission of adviser.*

Prereq: Department permission.

MUS 690/691 Thesis. 1/2 hrs

A substantial and original undertaking in scholarly research designed to reflect, focus, and deepen the student's individual interests and to provide a culminating work leading to a master's degree in music.

Prereq: Department permission.

MUS 692 Final Project. 2 hrs

A creative, analytical or pragmatic project of a substantial and original nature designed to reflect the student's individual interests and to serve as a culminating work leading to a master's degree in music. Final projects may be of several types such as lecture-recital, original composition and analytical paper, annotated bibliography or discography, survey, unit of study, course outline.

Prereq: Department permission.

MUS 694 Seminar. 2 hrs
 Topics may be in some area of music education, theory, literature, history, musicology or performance. May serve for the development of research proposals, literature reviews, research techniques, or other similar purposes. *May be repeated for credit with permission of adviser.*
Prereq: Department permission.

MUS 697/698/699 Independent Study. 1/2/3 hrs
 An intensive study of a problem or group of problems under the direction of a University faculty member. *May be repeated for credit.*
Prereq: Department permission.

PERFORMANCE COURSES

AMU 601/602/603/604 Applied Music—Performance. 1/2/3/4 hrs
 Open to performance majors and graduate students who completed an undergraduate concentration in performance. *May be repeated for credit.*
Prereq: Audition.

MUS 687 Graduate Recital. 2 hrs
 Required in partial fulfillment of the master of arts degree for those students concentrating in performance and for those students who qualify for and select recital as a culminating option. Students must be enrolled in AMU 601/602/603/604 concurrently.

PHYSICS AND ASTRONOMY

Daniel Trochet
 Department Head
 303 Strong Hall
 487-4144

Coordinators of Advising:

Physics:
Richard Roth
Natthi Sharma
 303 Strong Hall
 487-4144

Physics Education:
Daniel Trochet
 303 Strong Hall
 487-4144

General Science:
Jon K. Wooley
 303 Strong Hall
 487-4144

The Physics and Astronomy department offers three programs leading to the Master of Science degree. The physics program is for those interested in continuing their work at the PhD level and research. The physics education program is for high school physics teachers who wish to enhance their physics background or prepare for further graduate study. The general science program is interdisciplinary in nature and is intended for junior high school teachers who are looking for a program to strengthen and broaden their science background.

Each program requires a minimum of 30 semester hours of approved graduate-level course work. No more than 9 semester hours of 400-level undergraduate courses approved for graduate credit may be used on any program. Each student's program may include up to 6 hours of course work in approved cognate areas. Upon admission to a program, the student will arrange a program of study with his/her assigned adviser.

MASTER OF SCIENCE IN PHYSICS

ADMISSION REQUIREMENTS

Those entering this program should have the equivalent of an undergraduate major in physics with a strong background in mathematics including multivariable calculus and differential equations. Students who do not meet these requirements may be granted conditional admission which requires the completion of additional undergraduate course work in physics and/or mathematics.

PROGRAM REQUIREMENTS

This program prepares students in the area of traditional physics research. Graduates from this program are well prepared for further advanced study at the PhD level or for a teaching career at the junior college or community college level.

Graduation requirements include successful completion of 30 semester hours of approved graduate credit, satisfactory performance on a comprehensive written/oral examination, and the successful completion of a research problem culminating in a written thesis or report.

Further information may be obtained from Dr. Richard Roth or Dr. Natthi Sharma, graduate advisers in the Physics and Astronomy department.

COURSE REQUIREMENTS

Required Courses	11-13 hours
PHY 662 Advanced Mechanics I	3
PHY 671 Electromagnetic Theory	3
PHY 675 Quantum Mechanics	4
(PHY 675 requirement may be waived in exceptional cases upon department approval)	
PHY 690/691/692 Thesis/Final Project	1/2/3
Electives in Physics	13-17 hours
Cognates	0-6 hours
Total	30 hours

MASTER OF SCIENCE IN PHYSICS EDUCATION

ADMISSION REQUIREMENTS

Those entering the program must have at least the equivalent of an undergraduate minor in physics with a background in mathematics through multivariable calculus. Students who do not meet these requirements may be granted conditional admission which requires the completion of additional undergraduate course work in physics and/or mathematics. Admission is restricted to either in-service teachers or to those intending to enter the teaching profession.

PROGRAM REQUIREMENTS

This program is designed to improve the preparation of high school physics teachers. Graduates also are well-qualified for further advanced study at the PhD level in such areas as physics education or science education.

Graduation requirements include successful completion of 30 semester hours of approved graduate credit, satisfactory performance on a comprehensive oral examination, and the successful completion of an essay in physics, the history of physics, or the teaching of physics.

Further information may be obtained from Dr. Daniel Trochet, graduate adviser in the Physics and Astronomy department.

COURSE REQUIREMENTS

Required Courses	4 hours
PHY 650 New Approaches to Teaching Physics I	2
PHY 651 New Approaches to Teaching Physics II	2
(PHY 650/651 requirement may be waived in exceptional cases upon department approval)	
Electives in Physics	20-26 hours
Cognates	0-6 hours
Total	30 hours

MASTER OF SCIENCE IN GENERAL SCIENCE

ADMISSION REQUIREMENTS

Prerequisites for admission to the program include a minimum of 30 semester hours of coursework in science with basic coursework in four of the five science areas of astronomy, biology, chemistry, earth science, and physics. At least a minor in one of the listed science areas or mathematics is required. Mathematics preparation through the level of college algebra and trigonometry is mandatory. Students who do not meet these requirements may be granted conditional admission requiring the completion of additional undergraduate course work in science and/or mathematics. Admission is restricted to those who are either teaching or planning to teach.

PROGRAM REQUIREMENTS

This program is interdisciplinary in nature and covers the five science areas listed above. It is designed for junior high school teachers who wish to upgrade and update their science content and methodology as they prepare for leadership roles in science education.

Graduation requirements include the completion of 30 semester hours of approved coursework. All students must take at least 4 but not more than 6 semester hours of coursework related to the methods of teaching science at the secondary level. There is no essay, report, or thesis requirement for this program.

Further information may be obtained by contacting Dr. Jon K. Wooley, graduate adviser, Physics and Astronomy department.

COURSE REQUIREMENTS

Required Courses	4 hours
PHY 622 New Approaches to the Teaching of Science in the Junior High School I	2
PHY 623 New Approaches to the Teaching of Science in the Junior High School II	2
Electives	20-26 hours
Courses chosen in consultation with the adviser from the five science areas listed above or from mathematics.	
Cognates	0-6 hours
Total	30 hours

PHYSICS COURSES

PHY 505 Physical Science for Elementary Teachers I. 2 hrs

A course which emphasizes both the content and the processes of the physical sciences. Discussions and demonstrations leading to an understanding of basic concepts through the processes of discovery and inquiry.

Prereq: Two courses in physical science (such as PHY 100 Science for Elementary Teachers or CHM 101 Science for Elementary Teachers).

PHY 506 Physical Science for Elementary Teachers II. 2 hrs

A course that emphasizes both the content and the processes of the physical sciences. Discussions and demonstrations leading to an understanding of basic concepts through the processes of discovery and inquiry.

Prereq: PHY 505.

PHY 511 Mechanics, Sound, and Heat for Teachers. 3 hrs

A study of motion, forces, heat, and sound for teachers of general science who have had little or no previous experience with physics.

PHY 512 Light, Electricity, and Magnetism for Teachers. 3 hrs

A study of light, electricity, and magnetism for teachers of general science who have little previous experience with physics.

Prereq: PHY 511 or equivalent; may be taken concurrently.

PHY 514 Instrumentation for Teachers. 3 hrs

This course treats the fundamentals of electrical instruments and the care and use of those instruments commonly encountered in secondary school science and in general science courses.

PHY 515 Atomic and Nuclear Physics I. 2 hrs

A study of relativity, the quantum properties of waves and the wave properties of particles, the Bohr atom, atomic spectra, and wave machines. *Not open to students with credit in PHY 370 Introduction to Modern Physics.*

Prereq: One year college physics.

PHY 516 Atomic and Nuclear Physics II. 2 hrs

A study of nuclear structure, radioactive decay, detection and measurement of nuclear radiation, nuclear reactions, fission, fusion, and elementary particles.

Prereq: PHY 515.

PHY 520 Teaching of Physical Science. 2 hrs

Scientific attitudes for use with elementary pupils, the scientific method, a selected group of physical principles, simple experiments which may be used in the elementary school.

PHY 527 Introduction to the Use of Radioisotopes. 2 hrs

Properties, measurement, safe handling and dosage of radioisotopes. *Not open to students who have credit in PHY 471 Nuclear Physics.*

Prereq: PHY 221 Mechanics, Sound, and Heat and PHY 222 Electricity and Light or equivalent.

PHY 536 Theoretical Acoustics. 4 hrs

Waves in bars, membranes and plates, as well as in ducts and acoustic horns are considered. Also treated are acoustic radiation from a piston in a sphere and sound waves in non-rectangular rooms and in rooms with absorption.

Prereq: PHY 431 Intermediate Mechanics II, PHY 436 Vibration and Sound, and PHY 481 Mathematical Physics; or department permission.

PHY 540 The History of Physics and Astronomy. 2 hrs

A course designed to give students an understanding of the contributions made by selected scientists to the development of physics and astronomy and the relationship of these ideas to the period in which the scientists lived.

Prereq: Three courses in physics and/or astronomy (one may be taken concurrently).

PHY 541 Modern Optics. 3 hrs

A course dealing with those aspects of physical and quantum optics that are essential for the quantitative description of modern optical technology such as lasers and holography. Emphasis is on physical optics. Topics covered include application of Fourier Transform to diffraction holography, Fresnel reflection coefficients, propagation of light in crystals, coherence and partial coherence, and lasers.

Prereq: PHY 440 Optics and MTH 223 Multivariable Calculus.

PHY 576 Solid State Physics. 3 hrs

An introduction to the principles and phenomena associated with the solid state: crystal structure, lattice waves, free electron model, band theory, properties of solids, imperfections.

Prereq: PHY 450 Electricity and Magnetism II and PHY 475 Introduction to Quantum Mechanics.

PHY 579 Signal Processing. 3 hrs

The student will gain an understanding of data collection and analysis techniques with emphasis on acoustical and random measurements. Instruments for performing dual channel fast fourier transforms and acoustic time-delay spectroscopy will be available for student projects.

Prereq: PHY 436 Vibration and Sound, one course in probability and statistics, or department permission.

PHY 587 Cooperative Education. 3 hrs

The course involves a cooperative education experience for the equivalent of one semester full time. A written report is required at the end of the employment. *Credit/no credit. Credit on a graduate program is subject to departmental approval.*

Prereq: Department permission.

PHY 590/591/592 Special Topics. 1/2/3 hrs

An experimental course for subject matter not provided in other department offerings. The content will change from semester to

semester. Students may elect this course several times as long as different topics are covered. *Not more than six hours of special topics may be used on a degree program.*

PHY 594/595/596 Workshop in Physics. 1/2/3 hrs

Laboratory and/or field experience guided toward problems and new curricula in physics and physical science.

Prereq: Department permission.

PHY 622 New Approaches to the Teaching of Science in the Junior High School I. 2 hrs

Emphasis will be placed on the philosophy, content, teaching strategies, and implementation of newer science curriculum materials designed for use in the junior high or middle school. Needed subject matter background will be provided. Extensive hands-on experience with demonstration and laboratory equipment will be included.

Prereq: Science teaching experience or three laboratory science courses.

PHY 623 New Approaches to the Teaching of Science in the Junior High School II. 2 hrs

Emphasis will be placed on the philosophy, content, teaching strategies and implementation of newer science curriculum materials designed for use in the junior high or middle school. Needed subject matter background will be provided. Extensive hands-on experience with demonstration and laboratory equipment will be included.

Prereq: Science teaching experience or three laboratory science courses.

PHY 625 Physical Science. 2 hrs

A course for teachers dealing with some fundamentals of the physics and chemistry of electric charge, the forms of energy, and the conservation of energy.

Prereq: Three laboratory courses in science.

PHY 650 New Approaches to Teaching Physics I. 2 hrs

Designed to increase the subject matter competency of those teaching or preparing to teach high school physics. Content, organization, problems, and philosophy of the latest high school physics text materials.

Prereq: One year of college physics and one course in calculus.

PHY 651 New Approaches to Teaching Physics II. 2 hrs

Designed to increase the subject matter competency of those teaching or preparing to teach high school physics. The content, organization, problems and philosophy of the latest high school physics text materials.

Prereq: PHY 650.

PHY 652 Supervision of the Science Program. 2 hrs

Problems in organizing, staffing, planning, and evaluating the K-12 science program.

Prereq: Graduate standing.

PHY 653 Recent Science Curricular Developments. 2 hrs

Problems in development and implementation of materials, methods and content of recent curricular efforts.

Prereq: Science teaching experience and graduate standing.

PHY 662 Advanced Mechanics I. 3 hrs

This course considers exactly soluble problems in the mechanics of discrete and continuous media.

Prereq: Permission of graduate adviser.

PHY 663 Advanced Mechanics II. 4 hrs

This course describes the approximate solution of problems in the mechanics of linear continuous media via variational methods. Emphasis is placed on finite element analysis.

Prereq: PHY 662 and one course in computer science.

PHY 671 Electromagnetic Theory. 3 hrs
Provides the student with a foundation in the classical theory of the Maxwell field equations and indicates the many current applications. Typical topics covered are: Maxwell's equations, conservation laws, plane waves, wave guides, resonant cavities, dipole radiation, diffraction, radiation by moving charges, Bremsstrahlung, Cerenkov radiation, multiple fields, plasma electrodynamics.
Prereq: PHY 450 Electricity and Magnetism II or department permission.

PHY 675 Quantum Mechanics. 4 hrs
The Schrodinger equation and its applications in three dimensions, angular momentum, electron spin, Heisenberg's matrix mechanics, Dirac notation, perturbation theories, variational methods, scattering theory.
Prereq: PHY 475 Introduction to Quantum Mechanics.

PHY 679/680/681 Special Topics. 1/2/3 hrs
An experimental course for subject matter not provided in other department offerings. The content will change from semester to semester. Students may elect this course several times as long as different topics are covered. *Not more than six hours of special topics may be used on a degree program.*

PHY 682/683/684 Workshop in Physics. 1/2/3 hrs
Laboratory and/or field experience guided toward problems and new curricula in physics and physical science.
Prereq: Department permission.

PHY 687/688 Cooperative Education. 2/3 hrs
The course involves a cooperative education experience for the equivalent of one semester full time. A written report is required at the end of the employment. *Credit/no credit. Credit on a graduate program is subject to departmental approval.*
Prereq: Department permission.

PHY 690/691/692 Thesis/Final Project. 1/2/3 hrs
Intensive research in physics or physics education including the submission of a thesis or written report under the direction of a research adviser.
Prereq: Department permission.

PHY 693/694/695 Seminar. 1/2/3 hrs
Presentation of special reports and group discussion on selected topics in physics and physical science.

PHY 697/698/699 Independent Study/Research. 1/2/3 hrs
An intensive study of a problem or group of problems under the direction of a University faculty member.
Prereq: Department permission.

ASTRONOMY COURSES

AST 503 Astronomy I. 2 hrs
A non-mathematical descriptive course in astronomy to acquaint the teacher with the general field of astronomy. Many of the topics considered can be used in the elementary classroom. A study of the sun and its family of planets as well as the stars and nebulae in the universe beyond the solar system. Naked eye observations of the constellations and telescopic observations of the moon, planets, double stars and clusters. *Not open to students who have credit in AST 203 Exploration of the Universe or AST 205 Principles of Astronomy.*

AST 504 Astronomy II. 2 hrs
A non-mathematical descriptive course in astronomy to increase the teacher's 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 school classroom; the stellar system; a review of the solar system; and the motions of the

earth. Naked eye and telescopic observations constitute the laboratory phase of the course.

Prereq: AST 503 or AST 203 Exploration of the Universe, AST 205 Principles of Astronomy or equivalent.

AST 590 Special Topics. 1 hr
An experimental course for subject matter not provided in other department offerings. The content will change from semester to semester. Students may elect this course several times as long as different topics are covered. *Not more than six hours of special topics may be used on a degree program.*
Prereq: Department permission.

OTHER COURSES FOR CREDIT TOWARD THE MASTER OF SCIENCE IN PHYSICS OR PHYSICS EDUCATION

The following advanced undergraduate courses are available to graduate students for graduate credit depending on the background, needs and curriculum of the student. On this matter the student should, before completing registration, have a clear understanding with the adviser in the Physics and Astronomy department. *A maximum of nine hours of approved 400-level coursework may be permitted in the earning of any graduate degree.* For descriptions of these courses, see the Undergraduate Catalog.

If you intend to enroll in any of the following undergraduate courses for graduate credit, you must come to the Graduate School for written permission before enrolling in the course; otherwise, you will receive undergraduate credit.

PHY 406 Ethical Issues in Physics (1)
PHY 420 Engineering Physics Design (3)
PHY 431 Intermediate Mechanics II (3)
PHY 436 Vibration and Sound (3)
PHY 440 Optics (3)
PHY 442 Optics Laboratory (1)
PHY 450 Electricity and Magnetism II (4)
PHY 452 Electrical Measurements (4)
PHY 456 Electronics for Scientists (4)
PHY 458 Microcomputer and Digital Electronics (4)
PHY 462 Kinetic Theory and Statistical Mechanics (3)
PHY 471 Nuclear Physics (4)
PHY 475 Introduction to Quantum Mechanics (3)
PHY 481 Mathematical Physics (3)

POLITICAL SCIENCE

Joanna V. Scott
Department Head
601 Pray-Harrold
487-3113

Raymond A. Rosenfeld
Director
Master of Public Administration Program
Coordinator of Advising
601/J-K Pray-Harrold
487-2522

Courses offered by the Political Science department serve the specific purposes of two programs: (1) a Master of Public Administration and (2) an interdisciplinary Master of Arts in social science with a concentration in political science. Information on the latter program is listed in the History and Philosophy department section of this catalog. In addition, many students from other disciplines select political science courses to meet cognate requirements or for other individual reasons.

MASTER OF PUBLIC ADMINISTRATION (BEING REVISED-CONTACT DIRECTOR FOR CURRENT INFORMATION)

OBJECTIVES

This program enables students to concentrate in local government administration—the administration of small communities, medium-sized cities, regions, counties, and states. It provides graduate professional education for individuals who are currently pursuing or preparing to enter public service careers as city managers, assistants to city managers, directors of public works, finance, personnel and human services departments, appointed city clerks, administrative personnel in engineering departments, and members of administrative staffs. The MPA curriculum offers a foundation for both entry-level personnel such as analysts, researchers, and staff workers, and persons in intermediate positions intent upon advancing professionally in such roles as administrative staffers, department directors, decision makers, politicians, and city managers.

The MPA program is accredited by the National Association of Schools of Public Affairs and Administration.

ADMISSION REQUIREMENTS

For admission to the program, applicants must meet Graduate School degree admission requirements and must have earned a grade point average of 2.75 ("A" = 4.0) for all undergraduate work or 3.0 in the last half of the undergraduate program. A personal interview with the program director is also recommended.

Applicants not meeting the requirements for regular admission must follow departmental requirements for conditional admission. For students who show promise but do not meet the undergraduate grade point average requirement, non-degree admission (status 1: academic deficiencies) may be granted. (See Non-Degree Admission Status) Applicants may be admitted to the program after completing, with a grade point average of 3.0 ("B"), a minimum of 10 graduate hours approved by the program director.

Although applicants' undergraduate degrees may be in any field, they must demonstrate or acquire specific preparation in statistics, accounting, public sector economics, and computer methods. They are also expected to have completed the following preparatory undergraduate courses:

1. two political science courses in the fundamentals of American government, public law or public administration;

2. two basic economics courses—preferably macroeconomics and microeconomics; and
3. one course each in accounting, statistics, and microcomputer methods.

Exceptions may be granted by the program director for comparable professional experience gained outside the classroom. If necessary, these preparatory courses may be taken after admission to the MPA program, concurrently with courses in the program, but they must be completed prior to completion of 12 graduate credits and will not count toward the degree.

If the applicant's native language is not English, a TOEFL (Test of English as a Foreign Language) score of 550, or a score of 80 on the Michigan English Language Assessment Battery (MELAB) is required.

PROGRAM REQUIREMENTS

The Master of Public Administration is awarded upon satisfactory completion of fifteen graduate courses with at least 36 semester hours of appropriate credit, a total that may include up to nine hours in upper division 400-level undergraduate courses. All course selections must be approved by the program director prior to registration each semester. Listed below are required, elective and cognate courses.

- | | |
|---|-----------------|
| A. Required courses | 18 hours |
| PLS 510 Modern Public Administration | 3 |
| PLS 515 Public Personnel Administration | 3 |
| PLS 610 Public Organization Theory | 3 |
| PLS 615 Public Budget Administration | 3 |
| PLS 678 Quantitative Analysis in Government | 3 |
| PLS 695 Seminar | 3 |
| B. Elective courses (five courses) | 10 hours |
| Select ten hours from the following courses: | |
| PLS 549 Comparative Administrative Systems (2) | |
| PLS 565 Studies in State and Local Government (2) | |
| PLS 590/591/592 Special Topics (1/2/3) | |
| PLS 620 Legal Aspects of Local Administration (2) | |
| PLS 625 Small Community Administration and Politics (2) | |
| PLS 630 Public Bureaucracies and Policy Formation (2) | |
| PLS 640 Modern County Government (2) | |
| PLS 645 Intergovernmental Relations (2) | |
| PLS 688 Practicum in Public Affairs (3) | |
| PLS 697/698/699 Independent Study (1/2/3) | |
| ECO 550 Public Finance: Analysis and Policy (3) | |
| ECO 551 State and Local Government Finance (3) | |
| C. Cognate Courses | 8 hours |
| Choose one course from four of the following five groups: | |
| 1. Planning Studies | |
| PLS 520 Land Use and Preservation Law (3) | |
| ECO 534 Regional and Urban Economics (3) | |
| ECO 586 Economic Planning (3) | |
| GEO 552 Processes of Suburban Development (2) | |
| GEO 553 Urban and Regional Planning (2) | |
| GEO 581 Advanced Environmental Assessment (3) | |
| 2. Community Studies | |
| EDL 511 Community Organization (2) | |
| HIS 533 Studies and Techniques in Local History (3) | |
| SOC 656 Human Ecology and Community Development (3) | |
| 3. Leadership and Communication Studies | |
| CTA 509 Communication for Leaders (2) | |
| EDL 710 Leadership Theory (2) | |
| MGT 567 Business Communication: Specialized Organizational Report Writing (3) | |
| 4. Quantitative Studies | |
| ECO 510 Applied Economic Statistics (3) | |
| EDP 651 Inferential Statistics (2) | |

- MTH 574 Applied Statistics (2)
 SOC 630 Advanced Social Statistics (3)
 5. Personnel Studies
 ECO 522 Collective Bargaining (3)
 ECO 524 White Collar and Public Employee
 Unionism (3)

POLITICAL SCIENCE COURSES

PLS 510 Modern Public Administration. 3 hrs
 An overview of the nature of public administration and its relation to politics and the tasks of the modern political system.
Prereq: Department permission.

PLS 515 Public Personnel Administration. 3 hrs
 This course examines contemporary administration practices in public sector personnel management, particularly as related to the local level of government. Areas of emphasis include the collective bargaining process, discipline practices, grievance handling and arbitration preparation, affirmative action requirements and recruitment, and validation of evaluation and promotion practices.
Prereq: Department permission.

PLS 520 Land Use and Preservation Law. 3 hrs
 A study of real property law in a political and legal context, with special emphasis on the private law devices of easement and covenants running with the land and on the public device of zoning.

PLS 545 International Relations. 2 hrs
 Relations between nations, factors affecting behavior in the state system and possibilities of developing a viable international system.
Prereq: PLS 112 American Government or PLS 202 State and Local Government.

PLS 546 Studies in International Law. 2 hrs
 Selected problems in international law, the law of the United Nations, world law, the law of war and peace, the International Court of Justice, national concepts of international law.

PLS 547 Communist Political Systems. 2 hrs
 A comparative study of selected topics in the politics of communist-ruled states—principally Soviet Russia, China, and East Europe. Sources of bloc unity and diversity, as well as changing trends in and among communist states and parties will be examined.

PLS 549 Comparative Administrative Systems. 2 hrs
 Processes of administrative adaptation to development goals in newly independent non-Western countries, current approaches and theories of administrative modernization and development in the light of Western and non-Western experiences.
Prereq: Department permission.

PLS 565 Studies in State and Local Government. 2 hrs
 Studies in the governmental process at the state and local levels. Focuses on current issues and problems, including the changing aspects of federalism.

PLS 581 Contemporary Problems in American Government. 2 hrs
 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.

PLS 587 Cooperative Education. 3 hrs
 Four to six months full-time employment in the public sector. The program consists of one or two directed work experiences alternated with full-time University attendance. *Application of credit toward political science programs is subject to departmental approval. Offered on a credit/no credit basis.*
Prereq: Department recommendation.

PLS 590/591/592 Special Topics. 1/2/3 hrs
 An experimental course for subject matter not provided in other departmental offerings. The content will change from semester to semester. Students may elect this course several times as long as different topics are studied. *Not more than six hours of special topics may be used on a degree program.* Information on content can be obtained at department office.
Prereq: Department permission.

PLS 610 Public Organization Theory. 3 hrs
 An analysis of theories of organization in relation to government and public institutions.
Prereq: Department permission.

PLS 615 Public Budget Administration. 3 hrs
 An examination of the political significance and administrative procedures of government budgeting, with emphasis on the state and local levels.
Prereq: Department permission.

PLS 620 Legal Aspects of Local Administration. 2 hrs
 An examination of legal issues concerning governmental units, agencies, and governmental activities as they relate to public administration.

PLS 625 Small Community Administration and Politics. 2 hrs
 An examination of the politics and administrative needs and problems of American communities with populations of less than 50,000.

PLS 630 Public Bureaucracies and Policy Formation. 2 hrs
 A study of the roles of public bureaucracies within the policy formation process. The course examines modern approaches to policy analysis, the nature of public bureaucracies, and the problems of implementing and evaluating public policies.

PLS 640 Modern County Government. 2 hrs
 Examines the past, present, and future of county government in the United States. Topics covered include the legal setting, organization and structure, intergovernmental relations, politics, finances, and service capabilities of counties.

PLS 645 Intergovernmental Relations. 2 hrs
 A study of recent trends in the American federal system. The course examines the major programs and organizational structures used to coordinate public policies at the federal, state, and local levels of government. Emphasis will be placed on the concerns of local levels of government.

PLS 678 Quantitative Analysis in Government. 3 hrs
 Examines the uses of computers and statistical analysis in local and state governments.
Prereq: One course in statistics and one in computers; department permission.

PLS 688 Practicum in Public Affairs. 3 hrs
 Extends classroom learning through administrative experience with public sector agencies. Includes written assignments and a seminar designed to help students relate their field experience to public administration concepts.
Prereq: Department permission.

PLS 695 Seminar. 3 hrs
 A capstone course in the public administration curriculum, acquainting students with the major research trends and problems in the discipline. Requires from the student a substantial research project, to be reviewed by three faculty members.
Prereq: PLS 510, PLS 610, PLS 678, and department permission.

PLS 697/698/699 Independent Study.

1/2/3 hrs

An intensive study of a problem or group of problems under the direction of a University faculty member.

Prereq: Department permission.

OTHER COURSES

These upper division undergraduate courses may be taken for graduate credit and applied on the degree program in social studies or as cognates by majors in other fields. *A maximum of nine hours of approved 400-level coursework may be permitted in the earning of any graduate degree.*

If you intend to enroll in any of the following undergraduate courses for graduate credit, you must come to the Graduate School for written permission before enrolling in the course; otherwise, you will receive undergraduate credit.

- PLS 410 Political Science in Fiction (3)
- PLS 412 Comparative Legal Systems (3)
- PLS 418 20th Century Political Theory (3)
- PLS 420 Democracy and Power (3)
- PLS 431 Theories of Public Organization (3)
- PLS 456 Criminal Law I (3)
- PLS 462 Foreign Relations of the Soviet Union (3)

PSYCHOLOGY

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Department Head
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Kay Hodges
Director of Clinical Training
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Peter Holmes, Marilyn Bonem, and James Todd
Coordinators of Advising
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John Knapp
Coordinator of Advising
General
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 487-0104

Gary Navarre
Coordinator of Advising
School Psychology
 227 Rackham
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The Psychology department offers graduate programs leading to a Specialist in Arts in school psychology and the Master of Science degree in psychology with emphases in general psychology, clinical psychology, or clinical behavioral psychology.

GENERAL ADMISSION REQUIREMENTS

Admission to the master's programs in clinical, clinical behavioral, or general psychology requires that students meet the degree admission requirements of both the Graduate School at Eastern Michigan University and the Psychology department. The primary criteria on which the selection is made are the promise of successful completion of the program requirements based on previous academic performances, acceptable scores on the Graduate Record Examination, and the applicant's suitability for the program.

To qualify for consideration for degree admission status in the graduate programs in psychology, the student must:

1. meet the academic requirements for admission to the Graduate School;
2. present an undergraduate academic record of good quality (GPA of approximately 3.0 or better on a 4.0 scale);
3. present a minimum of 20 semester hours of credit in psychology, including courses in statistics and experimental psychology;
4. submit a transcript of scores from the Graduate Record Examination which includes the verbal and quantitative tests. The applicant is expected to attain a combined score of 1000 on the verbal and quantitative tests in order to be admitted. Results from the advanced (psychology) test may also be required for the general and clinical programs.
5. present letters of recommendation from employers or others who can testify to the applicant's suitability for the program of study (two letters for the general program; three for the clinical and clinical behavioral programs).
6. submit an autobiography describing academic and professional history and professional goals. Applicants for the clinical behavioral program must also submit a writing sample from prior coursework or publication.

7. qualified applicants in the clinical and clinical behavioral programs must also complete an interview prior to admission to the program.

Application to the psychology program should not be made until the stated requirements can be satisfied. Credits earned under non-degree student status do not automatically apply to the requirements of the degree program.

Applications should be submitted to the Graduate School in accordance with the instructions described in this catalog. A copy of the application should also be mailed directly to the Psychology department.

There are no admissions to degree programs in the spring and summer terms. After the admission quota for the program has been filled, students will be placed on a waiting list. Placement on the waiting list, however, does not guarantee admission unless spaces become available in accordance with departmental admission standards and policies.

MASTER OF SCIENCE IN PSYCHOLOGY (GENERAL)

OBJECTIVES

The curriculum is designed to produce a master's level psychologist with general knowledge of psychology that includes a variety of content areas, research methodologies, and theoretical formulations. Students completing this program can enhance their opportunity to pursue employment in a wide variety of industrial and institutional settings or to continue their training in doctoral programs.

PROGRAM REQUIREMENTS

The Master of Science degree in general psychology requires the completion of 30 graduate credits, of which at least 24 must be graduate credits in psychology. The specific program of each student is designed in consultation with a graduate adviser and must be approved by the adviser before the student may enroll for course credit.

The requirements outlined below provide the basic guidelines within which students' programs are developed.

Required core courses	12 hours
PSY 600 Psychological Statistics I	3
PSY 620 Learning	3
PSY 646 Personality: Theory and Research	3
PSY 692 Thesis	3

Restricted electives **6 hours**
Select one course from Group A and one from Group B

Group A (three hours)

PSY 601 Psychological Statistics II (3)
PSY 605 Research Design (3)
PSY 623 Experimental Analysis of Behavior (3)
PSY 625 Behavior Change Methods I (3)
PSY 626 Motivation and Emotion (3)
PSY 629 Physiological Psychology (3)
PSY 632 Sensation and Perception (3)

Group B (three hours)

PSY 635 Cognitive Processes (3)
PSY 637 Social Psychology (3)
PSY 640 Developmental Psychology (3)
PSY 743 Psychopathology (3)
PSY 750 Clinical Psychology (3)
PSY 775 Theory of Psychological Testing (3)

Electives **6-12 hours**
Psychology courses within the department

Cognates **0-6 hours**
Courses from outside the department

MASTER OF SCIENCE IN PSYCHOLOGY (CLINICAL)

OBJECTIVES

This program prepares students for professional practice of psychology as limited license psychologists in Michigan. Limited license psychologists in Michigan typically work in a variety of institutional settings (e.g. community mental health centers, private and public clinics and agencies) under the supervision of a doctoral level psychologist. Students in this program receive training in diagnosis of psychiatric disorders and in treatment of client problems via psychotherapy from an insight-oriented approach.

The program objective is to produce graduates capable of recognizing, assessing and ameliorating client problems. It is intended that the graduate will be able to undertake and complete research problems typically found in the clinical setting. The practicum experiences are designed to provide opportunities to develop a variety of skills in assessment, diagnosis, psychotherapy and research, and to provide the opportunity for professional growth through interaction with professional people from the various allied areas, such as medicine, social work, psychiatry, and public health. Graduates of this program have been successful in being admitted to doctoral programs in psychology.

PROGRAM REQUIREMENTS

This program requires the completion of 45 graduate credits, the basic guidelines for which are outlined below.

Required core courses	9 hours
PSY 600 Psychological Statistics I	3
PSY 646 Personality: Theory and Research	3
PSY 743 Psychopathology	3
Assessment	8 hours
PSY 762 The Wechsler Intelligence Tests	4
PSY 770 Personality Evaluation I or PSY 771 Projective Techniques	4
Professional Practice/Treatment	6 hours
PSY 750 Clinical Psychology	3
PSY 751 Psychotherapy	3
Practicum	6 hours
PSY 788 Practicum in Clinical Psychology I	3
PSY 789 Practicum in Clinical Psychology II	3
Electives	9-16 hours
Psychology courses within the department	
Cognates	0-6 hours
Courses from outside the department	

MASTER OF SCIENCE IN PSYCHOLOGY (CLINICAL BEHAVIORAL)

This program prepares students for professional practice of psychology as limited license psychologists in Michigan. Limited license psychologists in Michigan typically work in a variety of settings under the supervision of a doctoral level psychologist. Students in this program develop a wide range of behaviorally-oriented skills for assessment and treatment such as rapid assessment instruments, relaxation training, stress management, and family intervention. The program stresses developing competency skills for employment as a master's level psychologist in community mental health centers, outpatient clinics, private agencies, substance abuse programs, state agencies for persons with mental illness or developmental disabilities, traumatic brain injured centers, and agencies for family and children. Graduates from the program may also pursue advanced training at the doctoral level.

OBJECTIVES

1. Provide preparation for diverse employment opportunities in behavior therapy and applied behavior analysis.
2. Prepare students to meet state requirements for licensing master's level psychologists.
3. Emphasize treatment skills.
4. Offer opportunity for basic and applied research.
5. Provide preparation for doctoral work.
6. Enable program completion by night attendance only or in two years for full time students.

PROGRAM REQUIREMENTS

The program requires the completion of 45 graduate credits that are outlined below.

Required core courses	9 hours
PSY 600 Psychological Statistics I	3
*PSY 620 Learning	3
*PSY 623 Experimental Analysis of Behavior	3
Assessment (Evaluation)	7 hours
*PSY 619 Behavioral Assessment	3
PSY 762 The Wechsler Intelligence Tests or PSY 770 Personality Evaluation I	4
Treatment (Intervention)	6 hours
*PSY 625 Behavior Change Methods I	3
*PSY 627 Behavior Change Methods II	3
Practicum	8 hours
PSY 641 Prepracticum I: Assessment (To be taken concurrently with PSY 619)	1
PSY 651 Prepracticum II: Research (To be taken concurrently with PSY 623.)	1
PSY 661 Prepracticum III: Individual Treatment (To be taken concurrently with PSY 625)	1
PSY 671 Prepracticum IV: Treatment in Systems (To be taken concurrently with PSY 627)	1
PSY 683 Field Practicum with Seminar (250 hours field experience)	2
PSY 684 Field Practicum with Seminar (250 hours field experience)	2
Electives	9-15 hours
Psychology courses within the department	
Cognates	0-6 hours
Courses from outside the department	

*Students admitted to the clinical behavioral program must achieve a minimum grade of "B" in each of the following courses, PSY 619, 620, 623, 625 and 627. A student who receives a grade lower than "B" in any of these courses may elect to repeat the class in order to meet graduation requirements.

**SPECIALIST IN ARTS IN SCHOOL
PSYCHOLOGY**

The program is an interdisciplinary effort among the Teacher Education, Psychology, and Special Education departments and is coordinated through the Psychology department.

OBJECTIVES

1. Meet state requirements for full approval of school psychologists.
2. Provide psychological services required by state and federal laws.
3. Promote student welfare through the development of effective programming recommendations.
4. Develop improved understanding of students' educational needs in parents, teachers, administrators and others interested in promoting student welfare.

ADMISSION REQUIREMENTS

The admission committee will select students in terms of the promise of successful completion of program requirements based on previous academic performance, evidence of aptitude, past experience and letters of recommendation. Committee decisions will be made once each year by February 15 for the fall class. Approximately 10 students will be accepted each year.

Applicants with a bachelor's degree (including all persons without a master's degree) must meet the following requirements:

1. Present background preparation in the areas of psychology, special education, or education. This preparation must include a bachelor's degree with a minimum of 36 hours primarily in the preceding fields.
2. Have a minimum undergraduate grade point average of 2.75 on a 4.0 scale.
3. Normally, students applying for the specialist's program should have a minimum of three years of full-time successful professional experience in the fields of psychology, special education, or education.
4. Submit results of the verbal and quantitative sections of the Graduate Record Examinations, with a minimum combined score of 1000. In addition, the applicant must supply results of the advanced achievement tests in psychology or education on the Graduate Record Examination and achieve scores acceptable to the admissions committee.
5. Supply letters of recommendation from three professional persons familiar with the applicant's academic performance and professional abilities.
6. Supply a current vita (resume).

Applicants holding the master's degree must meet all the above requirements except number 2. Persons with a master's degree must present a minimum undergraduate GPA of 2.75 and a graduate GPA of at least 3.3 ("B+").

PROGRAM REQUIREMENTS

The Specialist in Arts degree in school psychology requires a minimum of 62 semester credits of graduate work, including a 1,200 clock-hour internship. The course work and required educational experiences are designed to provide the competencies required by state law. The competencies ensure that the graduate will have a depth of understanding and ability to perform psycho-educational evaluations, help plan educational strategies, communicate findings, implement intervention programs, consult and counsel with school personnel, parents and pupils, and assume a leadership role in developing services to students.

Program requirements, including practicum and internship, will generally necessitate two calendar years of study. A minimum of three semesters of full-time day scheduling is required.

An overall GPA of 3.3 ("B+") is required for graduation.

COURSE REQUIREMENTS

Required Courses	55-57 hours
Psychological Foundations	25 hours
<i>Assessment Techniques</i>	14 hours
SGN 661 Advanced Assessment and Decision-Making ...	3
PSY 762 The Wechsler Intelligence Tests	4
PSY 763 Individual Testing II	4
PSY 775 Theory of Psychological Testing	3
<i>Interventions and Theory</i>	11 hours
PSY 646 Personality: Theory and Research	3
PSY 743 Psychopathology	3
PSY 751 Psychotherapy	3
PSY 520 Coping with Problem Behavior	2
Educational Foundations	14 hours
<i>Education of Exceptional Children</i>	11 hours

SGN 510 The Exceptional Child in the Regular Classroom	3
SEI 510 Advanced Theory of Emotional Impairment	3
SLD 468 Education of Children with Learning Disabilities	2
SMI 557 Mental Retardation: Nature, Needs, and Issues	3
<i>Legal/Ethical Issues</i>	3 hours
SGN 621 Law and Public Policy for Persons with Disabilities	3
Statistics and Research Design	6-8 hours
EDP 631 Measurement and Evaluation	2
*PSY 600 Psychological Statistics I (3) or EDP 621 Statistical Applications in Educational Research (2)	2-3
EDP 677 Research Techniques (2) or EDP 678 Empirical Methods for Educational Research (3)	2-3
(*PSY 600 has prerequisite of PSY 205 or equivalent and department permission)	
Practicum and Internship Experiences	10 hours
PSY 793 Seminar (1 hr/sem; take 4 sems)	4
PSY 794 Internship in School Psychology	3
PSY 795 Internship in School Psychology	3
(1,200 clock hours of internship is required)	
Electives	5-7 hours
Highly recommended are: PSY 610 Clinical Neuropsychology (3) and PSY 629 Physiological Psychology (3). Other choices include:	
<i>Psychological Foundations</i>	
<i>Assessment Techniques</i>	
PSY 770 Personality Evaluation I (4)	
PSY 771 Projective Techniques (4)	
<i>Interventions and Theory</i>	
PSY 750 Clinical Psychology (3)	
PSY 620 Learning (3)	
PSY 625 Behavior Change Methods I (3)	
PSY 632 Sensation and Perception (3)	
PSY 637 Social Psychology (3)	
PSY 640 Developmental Psychology (3)	
PSY 528 The Psychology of Stress and Relaxation (3)	
<i>Educational Foundations</i>	
<i>Educational Psychology</i>	
EDP 600 Human Development (2)	
EDP 605 Mental Hygiene (2)	
EDP 611 Piaget for Educators (2)	
EDP 618 Play and Human Development (2)	
EDT 616 Technology of Instruction (2)	
<i>Counseling</i>	
SGN 615 Social Psychology of Disability: Family, School, and Society (3)	
SGN 632 Collaborative Consultation in Special Education (2)	
Total	62 hours

COURSES OPEN TO SENIORS AND GRADUATE STUDENTS

PSY 520 Coping with Problem Behavior.	2 hrs
The application of psychological principles of learning to school (and school-related) problem behaviors. Emphasis is on procedures that can be implemented with minimal cost by classroom teachers, principals, and other school-related personnel.	
<i>Prereq: One course in psychology.</i>	
PSY 528 The Psychology of Stress and Relaxation.	3 hrs
An overview of major stress theories, personal and professional application of relaxation and stress prevention techniques, and exploration of therapeutic and community efforts designed to deal with stress-related problems.	
<i>Prereq: One course in psychology.</i>	

PSY 532 Psychology of Adolescence.	2 hrs
Physical, intellectual, emotional, and social development from puberty to adulthood with emphasis on the significance for teachers and others interested in youth.	
<i>Prereq: One course in psychology.</i>	
PSY 535 Developmental Psycholinguistics.	3 hrs
An introduction to the processes involved in children's learning of oral language.	
<i>Prereq: One course in psychology or permission of the instructor.</i>	
PSY 540 Psychology of Adjustment.	2 hrs
Issues, concepts, principles, and theories in human adjustment.	
<i>Prereq: One course in psychology.</i>	
PSY 542 Women and Mental Health.	2 hrs
Focus on theory and research concerning women's responses to life stresses, women as clients in psychotherapy, and the role of the female mental health professional.	
<i>Prereq: One course in psychology.</i>	
PSY 543 Abnormal Psychology.	2 hrs
Behavior pathologies of children and adults, including symptom origins and methods of treatment. <i>Not open to students who hold credit in PSY 360 Abnormal Psychology.</i>	
<i>Prereq: One course in psychology.</i>	
PSY 550 Dynamics of Human Behavior.	2 hrs
The determinants of behavior and personality with emphasis on the physiological, psychological, and cultural bases.	
<i>Prereq: One course in psychology.</i>	
PSY 551 Psychology of Death and Dying.	2 hrs
Study of attitudes toward, theories about and empirical data concerning human mortality and suicide and its relevance to life adjustment, aging, religion, and other areas.	
<i>Prereq: PSY 360 Abnormal Psychology or PSY 543, and PSY 552.</i>	
PSY 552 Theories of Personality.	2 hrs
Major theories of personality including Freud, Jung, Adler, Rank, Sullivan, Kelly, and holistic and learning theorists.	
<i>Prereq: One course in psychology.</i>	
PSY 553 Existential Psychology.	2 hrs
Origins, growth, major contributors, and foci of concern of the existential movement(s) in psychology and psychotherapy.	
<i>Prereq: Two courses in psychology; PSY 552 is recommended.</i>	
PSY 560 Psychology of Film.	3 hrs
Examination of the interaction of film, audience, and film-maker. Major topics include psychology of viewer and film-maker, cinematic presentations of psychology, family, male/female relationships, violence, and sexuality.	
<i>Prereq: Graduate status.</i>	
PSY 565 Industrial Psychology.	2 hrs
Psychological principles, theories and methodology applied to behavior in industrial settings. <i>Not open to students who hold credit in PSY 351 Industrial Psychology.</i>	
<i>Prereq: One course in psychology.</i>	
PSY 567 Engineering Psychology.	2 hrs
A survey of psychological principles, theories, and methodology relating to the human use of the products of engineering design processes. Attention is given to simple products (e.g., common household articles) as well as complex products (e.g., computerized decision aids), and to how psychological research can contribute to improvements in product design.	
<i>Prereq: One course in psychology.</i>	

PSY 570 Consumer Psychology. 2 hrs
A survey of psychological principles, theories, and methodology relating to consumer behavior.
Prereq: One course in psychology.

PSY 580 Psychology of Individual Differences. 2 hrs
The objective and quantitative investigation of human variability in behavior phenomena and the factors influencing these differences.
Prereq: One course in psychology.

PSY 590/591/592 Special Topics. 1/2/3 hrs
Course content will consist of new topics in psychology taught on an experimental basis, thus changing from one semester to the next. *Not more than six hours of special topics may be used on a degree program.*
Prereq: Department permission.

PSY 595 Workshop in the Scientific Approach to Problem Solving. 2 hrs
The scientific approach to the solving of problems, the application of psychological principles.
Prereq: One course in psychology.

COURSES OPEN ONLY TO GRADUATE STUDENTS

PSY 600 Psychological Statistics I. 3 hrs
A study of statistical techniques including small sample theory, analysis of variance, and non-parametric statistics.
Prereq: PSY 205 Quantitative Methods in Psychology or equivalent and department permission.

PSY 601 Psychological Statistics II. 3 hrs
More complex analysis of variance models plus various correlational procedures.
Prereq: PSY 600 and department permission.

PSY 605 Research Design. 3 hrs
Research methods and analysis of data.
Prereq: PSY 301 Introductory Experimental Psychology and department permission.

PSY 610 Clinical Neuropsychology. 3 hrs
Study of methodology, research and clinical application of clinical neuropsychological principles. Includes demonstration of neuropsychological assessment test instruments.
Prereq: Graduate student; 20 hours in psychology or equivalent and department permission.

PSY 619 Behavioral Assessment. 3 hrs
A behavioral approach to measuring and analyzing personality using standardized tests and behavioral observation techniques; multiple test administration, scoring, and evaluation experience are included in concurrent enrollment in PSY 641.
Prereq: Department permission.

PSY 620 Learning. 3 hrs
Research methods, experimental findings, and theories of learning.
Prereq: Twenty hours in psychology, including PSY 301 Introductory Experimental Psychology or equivalent and department permission.

PSY 623 Experimental Analysis of Behavior. 3 hrs
The principles and parameters of respondent and operant conditioning and their application. Lecture and laboratory.
Prereq: Twenty hours in psychology, including PSY 301 Introductory Experimental Psychology or equivalent and department permission.

PSY 625 Behavior Change Methods I. 3 hrs
Behavioral theory and research relating to issues, techniques, and implementation of treatment for psychological problems are introduced. *To be taken concurrently with PSY 661.*
Prereq: PSY 619, PSY 620, and department permission.

PSY 626 Motivation and Emotion. 3 hrs
A review of major findings, theories, and recent research developments in the areas of motivation and emotion.
Prereq: Twenty hours in psychology, including PSY 301 Introductory Experimental Psychology or equivalent and department permission.

PSY 627 Behavior Change Methods II. 3 hrs
The study of the application of behavioral analysis in systems and organizations such as business, industry, schools, the family, and health care settings. *Concurrent registration in PSY 671 required.*
Prereq: PSY 619, PSY 620, and department permission.

PSY 629 Physiological Psychology. 3 hrs
An examination of physiological processes and their relationships to behavior.
Prereq: Twenty hours in psychology, including PSY 301 Introductory Experimental Psychology or equivalent and department permission.

PSY 630 Behavioral Medicine. 3 hrs
Study of the application of behavioral science theory, principles and methods to understanding health and illness and to prevention, diagnosis, treatment, rehabilitation, and health-care delivery.
Prereq: Twenty hours in psychology, including PSY 301 Introductory Experimental Psychology or equivalent and department permission.

PSY 632 Sensation and Perception. 3 hrs
A review of research and theory dealing with sensory experience and perception.
Prereq: Twenty hours in psychology, including PSY 301 Introductory Experimental Psychology or equivalent and department permission.

PSY 635 Cognitive Processes. 3 hrs
A review of theoretical and empirical developments in the area of thinking, problem solving, concept formation, creativity, and decision making.
Prereq: Twenty hours in psychology, including PSY 301 Introductory Experimental Psychology or equivalent and department permission.

PSY 637 Social Psychology. 3 hrs
The study of the processes underlying social interaction and behavior in social contexts.
Prereq: Twenty hours in psychology and department permission.

PSY 640 Developmental Psychology. 3 hrs
Biological, intellectual, social, and emotional changes through the life span. Major concepts and problems related to developmental stages of life.
Prereq: Twenty hours in psychology and department permission.

PSY 641 Practicum I: Assessment. 1 hr
Methods for measuring and analyzing behavior will be carried out in applied setting. Two hours of field work are required each week. *Concurrent registration in PSY 619 is required.*
Prereq: Department permission.

PSY 646 Personality: Theory and Research. 3 hrs
Advanced study of concepts and empirical research in personality.
Prereq: Twenty hours in psychology, including PSY 451 Dynamics of Personality or equivalent and department permission.

- PSY 651 Prepracticum II: Research.** 1 hr
Research that involves the experimental analysis of behavior will be conducted two hours each week in laboratory or field setting. *Concurrent registration in PSY 623 is required.*
Prereq: Twenty hours in psychology and department permission.
- PSY 661 Prepracticum III: Individual Treatment.** 1 hr
Single casework with persons interested in changing unwanted behaviors will be carried out for two hours each week. *Concurrent registration in PSY 625 is required.*
Prereq: PSY 619, PSY 620, and department permission.
- PSY 671 Prepracticum IV: Treatment in Systems.** 1 hr
Casework will be conducted in a setting that will permit a system analysis and intervention such as a school, institution, or family setting. The course requires two hours of field work each week. *Concurrent registration in PSY 627 is required.*
Prereq: PSY 619, PSY 620, and department permission.
- PSY 680/681/682 Special Topics.** 1/2/3 hrs
Course content will consist of new topics in psychology taught on an experimental basis, thus changing from one semester to the next. *Not more than six hours of special topics may be used on a degree program.*
Prereq: Department permission.
- PSY 683/684 Field Practicum with Seminar.** 2 hrs each
Students will participate in an organized health care setting for at least 250 clock hours. The practicum is to be supervised by a licensed psychologist on a regular, continuous, and scheduled basis. *Credit/no credit.*
Prereq: PSY 641, PSY 651, and PSY 661 or PSY 671 and department permission.
- PSY 690/691/692 Thesis.** 1/2/3 hrs
Completion of research problem, writing thesis, and defense of thesis. *Credit/no credit.*
Prereq: Department permission.
- PSY 697/698/699 Individual Reading.** 1/2/3 hrs
Supervised reading of psychological literature to provide in-depth understanding of a selected psychological problem.
Prereq: One course orienting student to the problem area and department permission.
- PSY 743 Psychopathology.** 3 hrs
A study of behavior disorders with emphasis upon current research methodologies, special problems, and theoretical formulations, including controversial issues and social and ethical considerations.
Prereq: Twenty hours in psychology, including PSY 360 Abnormal Psychology or department permission.
- PSY 750 Clinical Psychology.** 3 hrs
An overview of the field of clinical psychology, including the history of clinical psychology, professional practice, ethics, legal issues, and current critical issues.
Prereq: Twenty hours in psychology and department permission.
- PSY 751 Psychotherapy.** 3 hrs
Principles of psychological interviewing, psychotherapy, and psychotherapeutic techniques.
Prereq: Graduate status in MS clinical program or allied graduate programs (educational psychology, guidance and counseling, social work) and department permission.
- PSY 762 The Wechsler Intelligence Tests.** 4 hrs
Training and supervised experience in the administration and interpretation of the WISC and WAIS tests, plus a review of the relevant clinical research literature.
Prereq: Department permission.
- PSY 763 Individual Testing II.** 4 hrs
Training and supervised experience in cognitive assessment with Binet scales and introduction to assessment instruments in related areas of infant development, visual-motor perception, auditory perception, academic achievement, and adaptive behavior functioning; focus on school-age children.
Prereq: PSY 762 and department permission.
- PSY 770 Personality Evaluation I.** 4 hrs
An introduction to individual clinical tests in the study of personality diagnosis. Includes learning to administer, score and interpret the MMPI and 16 PF. Entails a knowledge of the clinical assessment research literature covering the reliability of each testing method.
Prereq: Department permission.
- PSY 771 Projective Techniques.** 4 hrs
Introduction to administration, scoring, and interpretation of projective techniques with special emphasis upon the Rorschach and TAT.
Prereq: Department permission.
- PSY 775 Theory of Psychological Testing.** 3 hrs
Assumption, rationale, and statistical foundation of psychological tests used in differential diagnosis.
Prereq: Twenty hours in psychology and department permission.
- PSY 788 Practicum in Clinical Psychology I.** 3 hrs
Supervised psychological testing and interviewing in a clinical setting. *Credit/no credit.*
Prereq: PSY 750, PSY 762, and department permission.
- PSY 789 Practicum in Clinical Psychology II.** 3 hrs
Supervised psychological testing and counseling in a clinical setting, plus completion of a research project in that setting. *Credit/no credit.*
Prereq: PSY 788 and department permission.
- PSY 793 Seminar.** 1 hr
Biweekly seminar for presentation and discussion of critical issues and problems in school psychology, including case studies, role definitions, ethical problems, inter- and intra-professional relationships, and research findings. Four semester hours required on degree program. *Credit/no credit.*
Prereq: Admission to the school psychology program and department permission.
- PSY 794/795 Internship in School Psychology.** 3 hrs each
A full-time supervised experience in school settings in which student demonstrates proficiencies acquired and acquires new skills and knowledge best learned in field settings.
Prereq: Permission of coordinator of school psychology program.

SOCIOLOGY, ANTHROPOLOGY, AND CRIMINOLOGY

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The department offers two graduate degree programs; one in sociology, and one in criminology and criminal justice. A family specialty concentration and a specialty concentration in evaluation and applied research are also available within the sociology degree.

MASTER OF ARTS IN SOCIOLOGY

The MA program in sociology is designed to prepare students for: careers in business, industry and government at local, state, and federal levels; further graduate work leading toward the PhD in sociology; and post-secondary teaching.

ADMISSION REQUIREMENTS

To qualify for admission to the MA program in sociology, applicants must have an undergraduate grade point average of at least 2.5 ("A" = 4.0) with a 3.0 in their major, or demonstrate the ability to do quality graduate work by attaining a score at the 60th percentile on the Graduate Record Exam. In addition, they must have completed the following undergraduate courses or their equivalents:

- SOC 250 Social Statistics I
- SOC 304 Methods in Sociological Research
- SOC 403 Modern Sociological Theory

Applicants who have not completed one or more of these courses may be admitted conditionally to the program with the permission of the program chair. Courses required to make up deficiencies in sociology will be arranged with the graduate adviser in the Sociology department and will be above and beyond (and sometimes prior to) the 31 hours of requirements.

DEGREE REQUIREMENTS

All graduate students in sociology are required to have their programs approved by the graduate adviser in the Sociology, Anthropology, and Criminology department prior to registration each semester. The degree program includes four hours for a thesis or a non-thesis option.

Thesis option: Each student may choose to write a thesis. The subject of the thesis is determined by the student and the adviser in light of the student's special interests. The completed thesis must be approved by the department.

Non-Thesis option: Students must submit two essays, each dealing with a methodological, substantive or theoretical issue in sociology. These essays may be based on papers completed in graduate courses, but must be of higher quality than usual term papers, must meet the requirements established by the department, and be approved by the department.

COURSE REQUIREMENTS

Required courses 13 hours
 SOC 630 Advanced Social Statistics3
 SOC 677 Advanced Methods in Sociological Research ...3
 SOC 678 Methods in Social Program Evaluation 3
 SOC 690/691/692 Thesis or Non-Thesis option 4

Concentration (select one of the following) 12-16 hours
Sociology 12 hours
 SOC 503 The Family as an Institution3
 SOC/CRM 513 Social Deviance3
 SOC 640 Advanced Sociological Theory 3
 SOC 647 Contemporary Community Structure 3
Family Specialty 16 hours
 SOC 503 The Family as an Institution3
 SOC/CRM 513 Social Deviance or SOC 647
 Contemporary Community Structure 3
 SOC 640 Advanced Sociological Theory or SOC 643
 Organizations and Networks3
 SOC 646 Research in Family Interaction3
 SOC 662 Supervised Field Experience2*
 * Two semesters (four credit hours) of supervised field experience approved by the department to provide either experience in family research or some application of family sociology.

Evaluation and Applied Research Specialty 16 hours
 SOC 640 Advanced Sociological Theory or SOC 643
 Organizations and Networks 3
 SOC 647 Contemporary Community Structure 3
 SOC 662 Supervised Field Experience 2*
 SOC 695 Program Evaluation Skills Development
 Seminar 3
 SOC 504 Demographic Analysis or SOC 636 Qualitative
 Analysis or SOC 641 Theory Construction and
 Verification 3
 * Two semesters (four credit hours) of supervised field experience approved by the department to provide either experience in evaluation research or some aspects of applied sociology.

Electives 0-10 hours
 Additional graduate sociology electives as approved by the graduate adviser in the Sociology department. Selected 400-level undergraduate courses in sociology and anthropology may be taken for graduate credit in consultation with the graduate adviser. Graduate students in sociology may take courses SOC 500-509 for elective credit as part of their course requirements only upon the approval of the graduate adviser.

Cognates 0-9 hours
 Courses in other fields, as approved by the graduate adviser in the Sociology department.

Total 31-34 hours

FAMILY SPECIALTY CONCENTRATION

The family specialty concentration within the master's degree curriculum in sociology provides knowledge and skills in theory and methodology with specific emphasis on the family as a social institution. The program is designed to prepare students for more responsible positions in the public and private sector serving families. It serves the following educational and career goals:

1. achievement of basic academic knowledge for students preparing to pursue the PhD in sociology or teach at the community college level;
2. increased knowledge and skills for students already employed in applied fields of sociology, especially in agencies serving or working with families in such set-

tings as social service agencies, schools, courts, hospitals, or community education;

3. knowledge and skills to prepare students for careers in family sociology.

EVALUATION AND APPLIED RESEARCH SPECIALTY

The evaluation and applied research specialty within the master's degree curriculum in sociology provides knowledge and skills in theory and general methodology, but with specific emphasis on the evaluation of ongoing programs. The option is designed to prepare students for more responsible positions in the applied areas of sociology. It serves the following educational and career goals:

1. knowledge and skills to prepare students for careers in evaluation and applied research;
2. increased knowledge and skills for students already employed in applied fields of sociology, either in the private sector or in agencies serving or working with populations in such settings as social service agencies, schools, courts, prisons, police departments, hospitals, or community education;
3. achievement of basic knowledge for students preparing to pursue the PhD in sociology or teach at the community college level.

MASTER OF ARTS IN CRIMINOLOGY AND CRIMINAL JUSTICE

OBJECTIVES

The master's degree curriculum in criminology and criminal justice serves the following educational and career goals:

1. attainment of advanced education for persons who wish to enter careers in post-secondary education;
2. development of skills in research and program planning and evaluation in criminology and criminal justice;
3. strengthening of the professional qualifications of persons employed in the fields of criminal justice.

The analytical and evaluative skills offered by this program should enable students to identify, evaluate and assess the often conflicting objectives of criminal justice and to apply this knowledge to the investigation of basic issues and practical problems in criminology and the administration of criminal justice.

ADMISSION REQUIREMENTS

Applicants must have at least a 2.5 ("A" = 4.0) grade point average in their undergraduate work. In addition, they must have completed the following undergraduate courses or their equivalent.

- SOC 250 Social Statistics I*
- SOC 304 Methods in Sociological Research*
- CRM 371 Criminology
- CRM 372 Criminal Justice in Contemporary Society

*SOC 341 and SOC 342 Quantitative Methods of Social Research I and II can be substituted for SOC 250 and SOC 304.

A grade of no less than "B" is required in SOC 250 Social Statistics I, SOC 304 Methods in Sociological Research or in SOC 341 and SOC 342 Quantitative Methods of Social Research I and II. Applicants who meet the grade point average requirement, but have not completed one or more of these courses may be admitted conditionally to the program with the permission of the program chair and complete them prior to taking required graduate courses.

DEGREE REQUIREMENTS

The degree program includes four hours for a thesis or a non-thesis option.

Thesis option: Each student may choose to write a thesis. The subject of the thesis is determined by the student and the

adviser in light of the student's special interests. The completed thesis must be approved by the department.

Non-Thesis option: Students must submit two essays, each dealing with a methodological, substantive or theoretical issue in criminology and criminal justice. These essays may be based on papers completed in graduate courses, but must be of higher quality than usual term papers, must meet the requirements established by the department, and be approved by the department.

The degree program consists of 31 hours of credit apportioned as follows:

Required courses	4 hours
SOC 690/691/692 Thesis or Non-thesis option	4
Concentration area	17-21 hours
SOC/CRM 412 Law and Society (3)	
SOC/CRM 513 Social Deviance (3)	
CRM 610 Theories of Criminal Behavior (3)	
CRM 611 Sociology of Crime and Its Correction (3)	
SOC 647 Contemporary Community Structure (3)	
SOC 677 Advanced Methods in Sociological Research (3)	
SOC 678 Methods in Social Program Evaluation (3)	
Electives	6-10 hours
Total	31 hours

SOCIOLOGY COURSES

Graduate students not majoring in sociology but desiring a cog-nate in the department may elect courses SOC 500-509 for cog-nate credit in consultation with their advisers.

SOC 500 Man in Society. **2 hrs**
Basic concepts, theory, and analysis of social structures, social process, and social disorganization. *Not open to students who have credit in SOC 105 Introductory Sociology.*

SOC 501 Contemporary Society. **2 hrs**
Basic sociological concepts and principles in an understanding of contemporary society; sociological research studies will be analyzed in detail. *Not open to students who have credit in more than two courses in sociology.*
Prereq: SOC 105 Introductory Sociology or SOC 500.

SOC 502 Racial and Cultural Minorities. **2 hrs**
Racial and cultural minorities in the modern world with particular references to the black race and to European and Oriental immigrants in the United States; racial myths, doctrines and movements; conflict and accommodation of majority and minority peoples; proposed solutions of ethnic problems. *Not open to students with credit in SOC 214 Racial and Cultural Minorities.*
Prereq: SOC 105 Introductory Sociology or SOC 500.

SOC 503 The Family as an Institution. **3 hrs**
The course highlights changes in marriage, family composition, social relations and roles, as well as the mutual interdependence between these and other institutions of society. It begins with the traditional pre-industrial or pre-urban family, showing how and why the family began changing at a rapid rate and exploring the problems of transitional phases. The present family with its middle class ideals is then examined closely. Finally, several trends in modern families are identified and some tentative predictions about future families and alternate family forms are made. *Not open to students with credit in SOC 450 The Family.*
Prereq: SOC 105 Introductory Sociology or SOC 500 .

SOC 504 Demographic Analysis. **3 hrs**
The analysis of population dynamics with special emphasis on applied research using computer simulation. Focus on the social, political, and economic implications of the relationship among human numbers, population composition, and resources.
Prereq: SOC 105 Introductory Sociology or SOC 500.

- SOC 505 Sociology of Science and Technology.** 3 hrs
An introduction to the sociology of the scientific and technological communities and to the social processes involved in changes in science and technology.
Prereq: Graduate standing or permission of instructor.
- SOC 508 Social Psychology.** 2 hrs
An introductory study of 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. *Not open to students with credit in SOC 308 IPSY 309 Social Psychology.*
Prereq: SOC 105 Introductory Sociology or SOC 500 and PSY 101/102 General Psychology.
- SOC 509 Personality and Social Systems.** 2 hrs
The cross-cultural study of personality and socio-cultural systems. Attention is paid to modal personality types as these relate to group structure, socialization, and social structure. Individual differences are not studied. *Not open to students with credit in ANT/SOC 309 Culture and Personality.*
Prereq: SOC 105 Introductory Sociology or SOC 500 or ANT 135 Introduction to Cultural Anthropology or ANT 505.
- SOC 513 Social Deviance.** 3 hrs
The development of deviant self-conceptions; social psychological processes of group alienation and individual estrangements. Deviant behavior patterns and the development of deviant careers; theories of deviance.
Prereq: Two courses in sociology.
- SOC 515 Sociology of Women.** 3 hrs
The course examines the changing role of women in American institutions especially in the world of work and in the family. Materials on minority and working-class women will be included.
Prereq: Graduate standing or permission of instructor.
- SOC 630 Advanced Social Statistics.** 3 hrs
This course will focus considerable attention on non-parametric statistics but also will examine the problem of controlling for variables in a statistical sense. Certain of the classical techniques of multivariate analysis will be included.
Prereq: SOC 250 Social Statistics I.
- SOC 636 Qualitative Analysis.** 3 hrs
An examination of the methods and techniques of quantitative analysis in sociology. Research will be conducted by class members and reviewed in seminar presentations.
Prereq: SOC 304 Methods of Sociological Research and SOC 403 Modern Sociological Theory.
- SOC 640 Advanced Sociological Theory.** 3 hrs
An analysis of contemporary theoretical schools of thought in sociology.
Prereq: SOC 304 Methods of Sociological Research and SOC 403 Modern Sociological Theory.
- SOC 641 Theory Construction and Verification.** 3 hrs
Analysis of contemporary strategies in theory, construction, and verification. Problems of validity and reliability will be emphasized. Open to non-sociology majors with permission of the instructor.
Prereq: SOC 304 Methods of Sociological Research and SOC 403 Modern Sociological Theory.
- SOC 642 Social Stratification Theory and Research.** 3 hrs
A comprehensive study of the theories of social stratification, an examination of the problems encountered in attempts at empirical verification of these theories and an exploration of current research relating to social stratification.
Prereq: SOC 310 Contemporary American Class Structure or an undergraduate degree in sociology.
- SOC 643 Organizations and Networks.** 3 hrs
How organizations are created and changed as they struggle to achieve their goals. Theoretical readings and case studies on organizational and inter-organizational dynamics provide theoretical and practical knowledge for students.
Prereq: Graduate standing in sociology or permission of the instructor.
- SOC 645 Advanced Social Psychology.** 3 hrs
This course is an in-depth study of interpersonal behavior and group processes with special emphasis on the effects of group membership on individual behavior. Topics studied may include attitudes, interpersonal influence and attraction, and leadership.
Prereq: SOC 250 Social Statistics I, SOC 304 Methods of Sociological Research, and SOC 308 Social Psychology.
- SOC 646 Research in Family Interaction.** 3 hrs
Review of research on family interaction, with particular emphasis on experimental observational studies. Power structure role differentiation, communication patterns, and coalition formation.
Prereq: Nine credit hours in sociology.
- SOC 647 Contemporary Community Structure.** 3 hrs
Theoretical perspectives in the analysis of urban communities including urban change, the development of stratification patterns and power structures, and the role of various urban institutions.
Prereq: Nine credit hours in sociology.
- SOC 656 Human Ecology and Community Development.** 3 hrs
An analysis of the forms and development of the urban community; spatial and temporal patterns, organization of urban functions, rural-urban relationships, and the current metropolitan trend in the U.S.
Prereq: Nine credit hours in sociology.
- SOC 662 Supervised Field Experience.** 2 hrs
Supervised internship in a community agency such as a correctional institution, an enforcement agency, human relations committee, city planning agency, or in a project for the rehabilitation of persons in culturally or economically deprived segments of the community. Students are ordinarily placed for two consecutive semesters.
Prereq: Department permission.
- SOC 665 Program Evaluation Skills Development Seminar.** 3 hrs
This course advances the evaluation and applied research skills of the student. It requires students to do an evaluation on-site in an agency. Type of agency may vary each time course is offered.
Prereq: SOC 678.
- SOC 677 Advanced Methods in Sociological Research.** 3 hrs
Relationship of theory and research is stressed. Consideration of the research process as a decision-making situation both on the general level of research design and the specific level of special techniques. The process and logic of data analysis.
Prereq: SOC 304 Methods of Sociological Research.
- SOC 678 Methods in Social Program Evaluation.** 3 hrs
The course is designed to train students in strategies, techniques, and issues in social program evaluation. It will be concerned both with the design of program evaluations and with their implementation in various social settings.
Prereq: SOC 304 Methods of Sociological Research.
- SOC 679/680/681 Special Topics.** 1/2/3 hrs
An experimental course for subject matter not provided in other department offerings. The content will change from semester to semester. *Students may elect this course several times as long as different topics are studied. Not more than six hours of special topics may be used on a degree program.*
Prereq: Department permission.

SOC 688 Cooperative Education. 3 hrs
Practical experience in business, industrial, or governmental settings which provide job skills.
Prereq: Regular degree admission to one of the department graduate programs and six hours of graduate credit in sociology.

SOC 690/691/692 Thesis. 1/2/3 hrs
Completion of research and/or analytical problem, writing of thesis and committee approval of same. *Graded on a credit/no credit basis.*
Prereq: Department permission.

SOC 694 Seminar. 2 hrs
The intensive exploration of theoretical and methodological issues in a selected area of sociology. The topic will be announced in the class schedule issued prior to registration.
Prereq: Department permission.

SOC 695 Program Evaluation Skills Development Seminar. 3 hrs
This course offers experience applying the strategies and techniques of evaluation research to specific contexts. Students are apprenticed to university institutes to assist project directors in conducting specific researches.
Prereq: SOC 678.

SOC 697/698/699 Independent Study. 1/2/3 hrs
Intensive study of a sociological problem or theory supervised by a member of the sociology faculty.
Prereq: Department permission.

ANTHROPOLOGY COURSES

ANT 505 Cultural Anthropology. 2 hrs
Technology, social structure, political institutions, warfare, kinship and the family, religion and magic, art, recreation, and education in the cultures of non-literate peoples. Cultural dynamics; applied anthropology. *Not open to students with credit in ANT 135 Introduction to Cultural Anthropology.*

ANT 509 Personality and Social Systems. 2 hrs
The cross-cultural study of personality and socio-cultural systems. Attention is paid to modal personality types as these relate to group structure, socialization, and social structure. Individual differences are not studied. *Not open to students with credit in SOC/ANT 309 Culture and Personality.*
Prereq: ANT 135 Introduction to Cultural Anthropology or ANT 505, SOC 105 Introductory Sociology or SOC 500.

ANT 525 Anthropology of Contemporary Issues. 3 hrs
This course will look at the contributions of anthropology to an understanding of contemporary social issues. The various issues to be examined from a social and cultural perspective include violence; poverty; political, economic, educational, and cross-cultural racism; ethnicity; and the role of Western culture on the Third World.

ANT 590/591/592 Special Topics. 1/2/3 hrs
The content and form of this course will be experimental and vary from year to year. Special topics in anthropology not given in usual course offerings, but of anthropological importance, will be covered. The exact title of the course will be announced in the appropriate schedule.
Prereq: Department permission.

ANT 679/680/681 Special Topics. 1/2/3 hrs
The content and form of this course will be experimental and vary from year to year. Special topics in anthropology not given in usual course offerings, but of anthropological importance, will be covered. The exact title of the course will be announced in the appropriate schedule.
Prereq: ANT 505 or equivalent.

ANT 697/698/699 Independent Study. 1/2/3 hrs
Intensive study of an anthropological problem or theory supervised by a member of the anthropology faculty on an individual basis.
Prereq: Department permission.

CRIMINOLOGY COURSES

CRM 506 Criminology. 3 hrs
The study of the nature, measurement, types and causes of crime. *Not open to students with credit in CRM 371 Criminology.*
Prereq: SOC 105 Introductory Sociology or SOC 500.

CRM 507 Criminal Justice In Contemporary Society. 2 hrs
The course gives critical analysis of various components of criminal justice. Interrelationships to broader societal processes are stressed. Focus is directed on the police, courts and parts of the punitive/correctional apparatus.
Prereq: SOC 105 Introductory Sociology or SOC 500.

CRM 513 Social Deviance. 3 hrs
The development of deviant self conceptions; social psychological processes of group alienation and individual estrangements. Deviant behavior patterns and the development of deviant careers; theories of deviance.
Prereq: Two courses in sociology.

CRM 547 Advanced Studies in Criminology. 3 hrs
An intensive analysis of selected problems in criminology and the application of criminology to policies and programs of crime prevention and control.
Prereq: CRM 371/506 and CRM 372/507.

CRM 590/591/592 Special Topics. 1/2/3 hrs
An experimental course for subject matter not provided in other department offerings. The content will change from semester to semester. *Students may elect this course several times as long as different topics are studied. Not more than six hours of special topics may be used on a degree program.*
Prereq: Department permission.

CRM 610 Theories of Criminal Behavior. 3 hrs
Consideration of major theories of criminal and delinquent causation. Emphasis on sociological factors in criminal acts and dynamics of criminal and delinquent behavior.
Prereq: Two courses in sociology, including CRM 371 Criminology.

CRM 611 Sociology of Crime and Its Correction. 3 hrs
Punishment, rehabilitation, and contemporary correctional policies. The courts and criminal responsibility. The social structure of correctional organizations and institutions and their effect on the correctional process.
Prereq: Two courses in sociology, including CRM 371 Criminology.

CRM 683 Workshop in Crime and the Community. 2 hrs
A brief, intensive exploration of specific aspects of crime and its relationship to social organization. *Not open to students with credit in CRM 371 Criminology.*
Prereq: SOC 105 Introductory Sociology or SOC 500.

CRM 679/680/681 Special Topics. 1/2/3 hrs
A brief, intensive exploration of specific aspects of crime and its relationship to social organization.
Prereq: Department permission.

CRM 690/691/692 Thesis. 1/2/3 hrs
Completion of research and/or analytical problem, writing of thesis and committee approval of same. *Graded on a credit/no credit basis.*
Prereq: Department permission.

CRM 697/698/699 Independent Study. 1/2/3 hrs
Intensive study of a criminological problem or theory supervised by a member of the criminology faculty.
Prereq: Department permission.

WOMEN'S STUDIES

Ellene Tratras Contis
Director
720 Pray-Harold
487-1177

The Master of Liberal Studies in women's studies is an interdisciplinary degree administered by the Women's Studies director. The primary purpose of the program is to promote an understanding of gender roles in contemporary society. The program fosters individual inquiry while providing a number of opportunities for academic development.

MASTER OF LIBERAL STUDIES IN WOMEN'S STUDIES

OBJECTIVES

The Master of Liberal Studies in women's studies draws upon a range of courses in the Colleges of Arts and Sciences, Business, Education, Health and Human Services, and Technology.

The program leading to the degree is a highly flexible one designed to promote scholarly debate and to develop research skills. It should be helpful to students seeking employment in business, industry, or government at local, state, and federal levels. Persons already employed should find this course of study useful in assisting their professional advancement. In addition, the program provides a women's studies concentration for students who intend to pursue a doctoral degree, while also providing preparatory training for those desiring to teach at the secondary, junior college, or community college level.

ADMISSION REQUIREMENTS

Applicants for the MLS in women's studies must have completed a bachelor's degree, but no particular field or major is required.

Applicants must meet both the undergraduate grade point average (2.5) for admission and the grade point average for graduation established by the Graduate School.

Students not meeting regular admission requirements may be admitted on a conditional basis with the approval of the program director. Students not meeting the grade point average requirement may be admitted under non-degree admission (status 1: academic deficiencies) with the permission of the director of the program and the Graduate School. (See Non-Degree Admission Status.)

DEGREE REQUIREMENTS

It is expected that students will develop competencies through a range of courses elected to fulfill the primary and complementary concentrations in the program. There are three components:

1. primary concentration—12 semester hours;
2. complementary concentration—12 semester hours;
3. capstone experience—6 semester hours.

COURSE REQUIREMENTS

Primary Concentration 12 hours
WMS 550 Feminist Thought 3
WMS 695 Seminar: Research on Women's Issues 3
Six hours from the following:
WMS/SOC 515 Sociology of Women (3)
WMS/HIS 525 Technology, Social Change, and the Role of Women (3)
WMS/PSY 542 Women and Mental Health (2)
WMS/ENG 543 Language of, by, for, and about Women (3)

WMS 590/591/592 Special Topics (1/2/3)
WMS 632 The Man-Woman Relationship in Modern Society (2)
WMS 642 Family in the Middle and Later Years (2)
WMS 697/698/699 Independent Study (1/2/3)

Complementary Concentration 12 hours

At least 4 hours from each of at least two of the following concentrations.

Educational Leadership

EDL 611 Introduction to Adult Education (2)
EDL 623 Adult Education Administration (2)
EDL 696 Seminar (3)

Educational Psychology

EDP 600 Human Development (2)
EDP 605 Mental Hygiene (2)
EDP 631 Measurement and Evaluation (2)
EDP 677 Research Techniques (2)

History

HIS 505 Historical Method (3)
WMS/HIS 525 Technology, Social Change, and the Role of Women (3)
HIS 541 The United States, 1825-1860: Foment and Reform (2)

Family and Consumer Science

WMS/FCS 450 Adult Role Transition (3)
WMS/FCS 630 Family Financial Planning (2)
WMS 632 The Man-Woman Relationship in Modern Society (2)
WMS 642 Family in the Middle and Later Years (2)
HEC 678 Research Methods and Design (3)

Physical Education

PED 505 Basic Statistics (2)
PED 677 Research Techniques (2)

Psychology

WMS/PSY 542 Women and Mental Health (2)
PSY 550 Dynamics of Human Behavior (2)
PSY 551 Psychology of Death and Dying (2)
PSY 605 Research Design (3)

Sociology

WMS/SOC 515 Sociology of Women (3)
SOC 630 Advanced Social Statistics (3)
SOC 677 Advanced Methods in Sociological Research (3)

Capstone Experience 6 hours

WMS 686/687/688/689 Practicum in Women's Studies (1/2/3/4) or WMS 690/691/692 Thesis (1/2/3) or WMS 697/698/699 Independent Study/Research (1/2/3)

Total 30 hours

WOMEN'S STUDIES COURSES

WMS 510 Family Financial Management. 3 hrs
Principles of family financial planning and relationship to economic conditions, social trends, and the needs of the family over the family life cycle.

WMS/SOC 515 Sociology of Women. 3 hrs
The course examines the changing role of women in American institutions especially in the world of work and in the family. Materials on minority and working-class women will be included.
Prereq: Graduate standing or permission of instructor.

WMS 525 Technology, Social Change, and the Role of Women. 3 hrs
This course examines the nature and origins of technology, the influence of its historical development from classical to modern

times on women in the United States and Europe, and problems stemming from current technological advance.

WMS 542 Women and Mental Health. 2 hrs

Focus on theory and research concerning women's responses to life stresses, women as clients in psychotherapy, and the role of the female mental health professional.

Prereq: One course in psychology.

WMS 543 Language of, by, for, and about Women. 3 hrs

A study of women's language; how and why it differs from men's, how it affects writing style, what social effects it has and how it is changing.

WMS 550 Feminist Thought. 3 hrs

Feminist thought provides a scholarly overview of the literature and methodology of feminist studies in such disciplines as history, psychology, literature, sociology, anthropology, economics, religion, health, law, and politics.

WMS 590/591/592 Special Topics. 1/2/3 hrs

Course content consists of new topics in women's studies taught on an experimental basis, changing from one semester to the next. *Not more than six hours of special topics may be used on a degree program.*

Prereq: Department permission.

WMS 630 Family Financial Planning. 2 hrs

Principles of basic family financial planning, its relationship to economic conditions, social trends, and the family life cycle. Special concern is given to procedures in periods of financial emergency. Planning for security and protection against critical family distress is also included.

Prereq: A course in family financial management.

WMS 632 The Man-Woman Relationship in Modern Society. 2 hrs

Consideration of the changes and dynamics of interaction stimulated by emerging shifts in roles of men and women, implications of these changes for the family and society, and impact of multiple roles upon various men-women relationships is investigated.

WMS 642 Family in the Middle and Later Years. 2 hrs

Individual, family and community planning for the later years of life; developing potentialities; maintaining health; providing reasonable security; building interpersonal relationships. Lectures, field trips, and demonstrations.

Prereq: FCS 622.

WMS 679/680/681 Special Topics. 1/2/3 hrs

Course content consists of new topics in women's studies taught on an experimental basis, changing from one semester to the next. *Not more than six hours of special topics may be used on a degree program.*

Prereq: Department permission.

WMS 686/687/688/689 Practicum. 1/2/3/4 hrs

This course will provide supervised field placement in places suitable to a candidate's career goals including women's centers, women's shelters, personnel and administrative centers in large corporations, neighboring community colleges, and governmental agencies. Paper required.

Prereq: Department permission.

WMS 690/691/692 Thesis/Final Report. 1/2/3 hrs

A substantial and original undertaking in scholarly research designed to deepen and focus the individual student's interests. The preparation of the thesis will be consistent with the highest professional standards.

Prereq: Department permission.

WMS 693/694/695/696 Seminar. 1/2/3/4 hrs

A critical survey of a particular topic which will change from semester to semester.

Prereq: Department permission.

WMS 695 Seminar: Research on Women's Issues. 3 hrs

Investigation of research on women in education, work, and families. A culminating experience leading to integration of interdisciplinary research.

Prereq: WMS 550.

WMS 697/698/699 Independent Study. 1/2/3 hrs

Intensive study of a problem or theory relevant to women's studies supervised by a member of the women's studies faculty on an individual basis.

Prereq: Department permission.

COLLEGE OF BUSINESS

Stewart Tubbs, Dean
Susan E. Moeller, Acting Associate Dean
Amelia Chan, Assistant Dean
473 Gary M. Owen Building
487-4140

DEPARTMENTS

Accounting
Finance and Computer Information Systems
Management
Marketing

GRADUATE PROGRAMS IN BUSINESS

William E. Whitmire
Coordinator of Graduate Business Programs
401 Gary M. Owen Building
487-4444

The College of Business offers four graduate degree programs which provide professional preparation for management careers: The Master of Business Administration (MBA) degree which is designed to establish a broad understanding of the business function; the Master of Science in accounting (MSA) degree which is designed to provide an opportunity to specialize in financial management and accounting; the Master of Science in computer-based information systems (MSIS) degree designed to provide the basic conceptual framework and tools of analysis necessary to design, develop, implement, and control computer-based information systems; and the Master of Science in human resource/organizational development (HR/OD) degree designed to provide training for human resource managers and organization development specialists to help them find ways to maximize the contributions of their human resources.

The primary purpose of these programs is to provide high-level, professional education needed to enhance the career opportunities of men and women currently employed in business, industry, and public service positions in southeastern Michigan.

In addition, these programs provide professional preparation required for men and women who contemplate pursuing management careers in business, industry, and government.

GENERAL ADMISSION INFORMATION

Admission to graduate programs in the College of Business will be limited to students showing high promise of success in post-baccalaureate study in business. Various predictive measures of high promise will be used, including (a) the candidate's undergraduate grade point average, or undergraduate grade point average in the last half of the undergraduate study; and (b) the candidate's performance on the Graduate Management Admission Test.*

Graduate Management Admission Test (GMAT) scores more than five years old without active satisfactory graduate matriculation must be retaken and the required minimum score met as stated under each program.

The college may admit candidates who have not yet taken the GMAT on a conditional basis. A conditional-GMAT student must meet the grade point average required for the particular program, is restricted to just foundation courses, and must take the GMAT and achieve the score required within one year of the date of admission.

For degree admission, all application materials should be received by the Graduate School, Starkweather Hall, Eastern Michigan University, Ypsilanti, MI 48197, before March 15 for consideration for fall semester; before September 15 for consideration for winter semester; and before February 15 for consideration for spring/summer sessions.

All applicants for admission must hold either the bachelor's or master's degree from a regionally accredited college or university. Admission to a master's degree program will not be granted until the applicant has completed all degree admission requirements of the Graduate School along with the requirements for the master's degree program selected.

Applicants who hold degrees from foreign colleges or universities must present a Class I or II diploma, or the equivalent thereof. If the applicant's native tongue is not English, a TOEFL (Test of English as a Foreign Language) score of 550 or above, or

a score of 85 or above on the MELAB (Michigan English Language Assessment Battery at the English Language Institute, the University of Michigan) is required for degree admission into a program in the College of Business.

1. Applicants with TOEFL scores of 500-549 or MELAB scores of 80-84 may be admitted on a conditional basis but must enroll in ESL 642 English as a Second Language for Special Purposes: Business, five semester hours, during their first semester at EMU. The student is also restricted to mathematics deficiency course work or foundation courses until the College of Business language proficiency minimum is attained.
2. If the TOEFL score is below 500 or MELAB is below 80, the student must complete remedial language course work before enrolling in any undergraduate or graduate business course.

After completing either 1. or 2. above, the student must retake the TOEFL and achieve a score of at least 550 or retake the MELAB and achieve a score of at least 85 before being degree admitted to a business program. These scores must be achieved within one calendar year of the student's admission date.

Specific admission requirements for each master's degree program are indicated in the descriptions of the individual programs.

**The Graduate Management Admission Test is offered four times a year at sites throughout the United States and in most other countries. For information and registration materials write: Graduate Management Admission Test, Educational Testing Service, P.O. Box 6101, Princeton, NJ 08541-6101.*

LENGTH OF PROGRAM

The length of time required to complete a business master's degree program depends upon the undergraduate preparation of the student. The program is an evening program (Monday through Thursday). There also is a weekend MBA program available. Students with undergraduate business administration degrees may complete the master's program in less time than students without undergraduate course work in business. Students who attend full-time will take less time than students who attend part-time.

FOUNDATION/PREREQUISITE REQUIREMENT

Each business master's program has a required common body of knowledge which each student must complete before enrolling in core level graduate courses.

Eastern Michigan University offers a series of 500-level foundation courses, open only to graduate students, which cover most subjects in the common bodies of knowledge. Introductory courses are open to students admitted to any graduate level degree program including non-business programs. These courses cannot count toward core level requirements in any graduate business program.

Once admitted into a graduate business program, graduate students who have not completed basic course work must take foundation courses first. The courses may be waived for those who have completed undergraduate equivalents with a "C" or better prior to completion of their undergraduate degree, depending upon the accreditation of the undergraduate institution. After admittance to the program, all courses taken, including foundation courses, must be graduate-level. Waiver of courses taken after earning a bachelor's degree will be granted only if the course presented as a substitute:

- a. is equivalent to the course being waived;
- b. was taken at an approved accredited four-year institution; and
- c. was passed with a grade of "B" or better.

UPPER LEVEL REQUIREMENTS

Upper level courses are those graduate courses, both required and elective (600 and 515 and above) which provide the 30-39 hours of advanced course work for the graduate degree. These courses are reserved for those students admitted to a graduate business program who have completed all foundation/prerequisite requirements. Students must apply for upper-level graduate candidacy through the Graduate Business Programs Office before they can register for upper-level courses.

Graduate students outside the College of Business must have permission from the Coordinator of Graduate Business Programs to take 600-level business courses.

GRADUATION REQUIREMENTS

Graduate business students must complete all foundation/prerequisite and core level requirements for the program in which they are enrolled, maintaining at least a "B" (3.0) average. The student must also maintain a "B" (3.0) average in the core required courses, which are those courses that must be taken by all students in a particular program, electives not included. Core level courses completed more than six years prior to graduation cannot be applied unless validated by examination. Out-of-date courses in which the students received a grade of "B-" or below must be re-taken.

A maximum of six hours of core level course work may be transferred from other institutions for credit if:

- the course is determined to be equivalent to the course to be waived;
- it was taken at an AACSB accredited institution; and
- was passed with a grade of "B" or better.

DISMISSAL FROM PROGRAM POLICIES

If a graduate student allows his/her GPA to fall below 3.0 ("B"), he/she may be dismissed from the program if after two semesters of enrollment, he/she has not restored the GPA to a 3.0 ("B").

Undergraduate courses that are part of the foundation program must be passed with a minimum grade of "C-." A graduate student may be dismissed from a graduate business program if he/she earns more than two grades below "B." (2.7) in any of the required foundation and core courses. Should a student repeat a course, the repeated grade will be the grade of record.

NON-DEGREE STATUS

Students holding non-degree student status must have special permission to enroll in undergraduate or graduate business courses.

A guest student who does not seek a degree but wishes to take a few courses, or who wishes to have courses transferred to another institution's graduate program, must meet the standards for regular admission.

FACILITIES

The new Gary M. Owen Building classrooms and lecture halls are equipped with TV monitors. There are special accounting and operations management laboratory facilities. The college maintains an information systems laboratory with mini/micro-computer systems and data terminals, some with hard-line connections to the Instructional Computer Center.

MASTER OF BUSINESS ADMINISTRATION (MBA)

William E. Whitmire
Coordinator of Advising
401 Gary M. Owen Building
487-4444

OBJECTIVES

The MBA is a generalist program with emphasis on practical implementation of business fundamentals. The program is designed to establish a broad understanding of the business function and its relation to society as a whole as well as the effect of social and political forces on business. Students may choose to focus their studies in a nine credit hour concentration or a fifteen credit hour area of specialization to develop managerial skills in a chosen area of employment.

ADMISSION CRITERIA

Admission to the MBA program is granted to those graduates of regionally accredited colleges and universities whose grades and Graduate Management Admission Test (GMAT) scores indicate an aptitude for advanced study in business.

Degree Admission

The basic standards for degree admission are a 2.5 cumulative undergraduate grade point average (or a 2.75 for the last half of the undergraduate study) and a GMAT score of 450.

Conditional Admission

Conditional admission may be granted to students whose undergraduate grade point averages are below regular admission standards, and whose GMAT scores are correspondingly higher.

Conditionally admitted students must maintain a "B" (3.0) average in foundation courses and the first 12 hours of adviser-approved core courses. Conditionally admitted students must have an appropriate adviser's permission to enroll in foundation and core-level courses. Students who successfully meet the probationary requirements will be granted regular admission.

PROGRAM REQUIREMENTS

Foundation/prerequisite courses (21 hours)

Students must complete course work in each of the following foundation areas unless they have satisfactorily completed an acceptable undergraduate equivalent.

<i>Foundation</i>	<i>Undergraduate Equivalent (hours)</i>
ACC 501 (3)	Principles of Accounting (6)
LAW 503 (3)	Legal Environment of Business (3)
ECO 500 (3)	Principles and Institutions of Economics (6)
FIN 502 (3)	Principles of Finance (3)
MKT 510 (3)	Principles of Marketing (3)
ORI 502 (3)	Business Information Systems (3)
ORI 503 (3)	Production and Operations Management (3)

Some students may find it necessary to complete a mathematics course in calculus and statistics if they have not taken these in their undergraduate program. Math 504 Mathematics and Statistics for MBAs will satisfy this requirement.

Core Level Requirements (33-39 hours)

The MBA core consists of 33 or 39 hours; 24 hours of required courses; and 9 or 15 hours of electives. The required courses are:

Tool Core

- ORI 602 Techniques in Business Research (3)
- ORI 605 Managerial Economics and Decision Analysis (3)

Operational Core

- ACC 605 Administrative Controls (3)
 MGT 604 Management Communication Theory and Practice (3)
 MGT 605 Organizational Theory and Behavior (3)
 MKT 610 Marketing Policies and Problems (3)
 FIN 620 Financial Administration Policies (3)

Capstone

- MGT 696 Seminar: Management Strategy and Policy (3)*

**Management Strategy and Policy, a capstone case course taken at or near the end of the program, is designed to improve decision-making ability.*

ELECTIVES

General MBA

Students choosing the General MBA (program code BU99) will select three electives from among the functional areas of business or may develop a concentration in one of the areas noted below. MBA students with an undergraduate degree in business may not select the same area of concentration in their master's program without prior approval of the department involved and the MBA coordinator. Students may elect up to two 500-level electives, with prior approval of the adviser (500-level foundation courses may not be used as electives). Students may, with adviser approval, elect up to six hours of business-related graduate credit from outside the College of Business.

The courses noted under the area of concentration below is a guide to help students in career development. The concentration is not noted on the transcript or the letter of degree verification. The diploma reads "Master in Business Administration".

Accounting Information Systems

- ACC 448 EDP Auditing and Controls (3)
 ACC 610 Accounting System Design and Installation (3)
 ACC 620 Advanced Managerial Accounting (3)

Financial Accounting (select nine hours)

- ACC 540 Advanced Accounting I (3)
 ACC 541 Advanced Accounting II (3)
 ACC 665 Theory of Accounting (3)
 ACC 667 Professional Auditing (3)

Tax Accounting

- ACC 644 Tax Research Methods, Practice, and Problems (3)
 ACC 672 Estate Tax Planning (3)
 ACC 685 Business Tax Planning (3)

Finance (select nine hours)

- FIN 540 International Finance (3)
 FIN 615 Financial Markets and Institutions (3)
 FIN 625 Securities Analysis (3)
 FIN 660 Advanced Financial Management (3)

International Business (select nine hours)

- ACC 675 International Accounting (3)
 FIN 540 International Finance (3)
 MGT 550 International Management: A Cultural Perspective (3)
 MKT 520 International Business (3)

Decision Science (select nine hours)

- ORI 603 Quantitative Methods I (3)
Two of the following:
 ORI 604 Quantitative Methods II (3)
 ORI 636 Forecasting Models (3)
 ORI 638 Simulation and Modeling (3)
 ORI 640 Operations Management (3)

Marketing (select nine hours)

- MKT 520 International Business (3)
 MKT 630 Sales Operation Management (3)
 MKT 640 Promotions Management (3)
 MKT 650 Channels of Distribution and Logistics (3)

- MKT 665 Seminar in Buyer Behavior (3)
 MKT 670 Advanced Methods in Marketing Research (3)
 MKT 675 Market Planning and Forecasting (3)

Organizational Development (select nine hours)

- MGT 601 Diagnostic and Quantitative Methods in Organizations (3)
 MGT 602 Theory and Techniques of Organizational Development (3)
 MGT 615 Organization Design and Strategy (3)
 MGT 628 Human Resource Development (3)
 MGT 638 Building Continuous Improvement Teams (3)
 MGT 648 Communication and Organizational Development (3)

Human Resource Management (select nine hours)

- MGT 609 Human Resource Management (3)
 MGT 618 Staffing Organizations (3)
 MGT 620 Compensation Management (3)
 MGT 625 Management in Unionized Settings (3)
 MGT 628 Human Resource Development (3)

Information Systems Design

- ORI 510 Programming and Data Structures (3)
 ORI 614 Systems Analysis (3)
 ORI 645 Database Management Systems (3)

Information Systems Management (select nine hours)

- ORI 510 Programming and Data Structures (3)
 ORI 614 Systems Analysis (3)
 ORI 620 Data Networks (3) or ORI 624 Operating Systems and Management of Computing Resources (3)

Strategic Quality Management (select nine hours)

- COB 650 Strategic Quality Management (3)
 MKT 620 Customer-Driven Quality (3)
One of the following:
 ACC 642 Strategic Cost Management (SCM) (3)
 COB 655 Innovation and Development Leadership Process (3)
 MGT 638 Building Continuous Improvement Teams (3)
 MGT 650 Leadership of the Strategic Quality Management Firm (3)
 POM 577 Tools for Strategic Quality Management (currently offered as ORI 577) (3)

General Business

Select nine hours from two or more departments. Consult the Graduate Business Advising Office if you have questions.

Electives may be taken at any time during the core phase of the program as long as prerequisites are met.

MBA in (Area of Specialization)

If a student would like an MBA with an area of specialization noted on the transcript and on the Graduate School's letter of degree verification, the student must select one of the five course elective tracks noted below. The student must take the electives noted. Substitutions are subject to approval by the department and the MBA coordinator.

When applying for the MBA program, the applicant must note the correct program code. For example, the General MBA would be BU99, while an MBA in Finance would be BU9996. If a student wants to change from one program within the MBA to another (i.e., from BU99 to BU9998), then a program transfer form must be submitted to the Graduate School and the Graduate Business Office notified so that a new program of study can be issued.

Students may select an area of specialization in the following tracks:

Accounting—Taxation (BU9998)

- ACC 544 Theory of Individual Taxation
 ACC 644 Tax Research Methods, Practice, and Problems
 ACC 672 Estate Tax Planning
 ACC 674 International Taxation

- ACC 685 Business Tax Planning
- Accounting—Financial and Operational Control (BU9997)**
 ACC 448 EDP Auditing and Controls
 ACC 610 Accounting System Design and Installation
 ACC 650 Internal Auditing
 ACC 651 Seminar in Applied Internal Auditing
 ACC elective to be approved by an adviser
- Finance (BU9996)**
 FIN 540 International Finance
 FIN 615 Financial Markets and Institutions
 FIN 625 Securities Analysis
 FIN 660 Advanced Financial Management
 FIN 681 Special Topics
- International Business (BU9995)**
 ACC 675 International Accounting
 MGT 550 International Management: A Cultural Perspective
 MKT 520 International Business
 ECO 508 International Trade or ECO 509 International Monetary Economics or departmental independent study
 FIN 540 International Finance
- Management—Human Resource (BU9994)**
 MGT 609 Human Resource Management
 MGT 618 Staffing Organizations
 MGT 620 Compensation Management
 MGT 625 Management in Unionized Settings
 MGT 628 Human Resource Development
- Management—Organizational Development (BU9993)**
 MGT 601 Diagnostic and Quantitative Methods in Organizations
 MGT 602 Theory and Techniques of Organizational Development
Choose three of the following four:
 MGT 615 Organization Design and Strategy
 MGT 628 Human Resource Development
 MGT 638 Building Continuous Improvement Teams
 MGT 648 Communication and Organizational Development
- Marketing (BU9992)**
Choose five of the following seven:
 MKT 520 International Business (3)
 MKT 630 Sales Operation Management (3)
 MKT 640 Promotions Management (3)
 MKT 650 Channels of Distribution and Logistics (3)
 MKT 665 Seminar in Buyer Behavior (3)
 MKT 670 Advanced Methods in Marketing Research (3)
 MKT 675 Market Planning and Forecasting (3)
- Management Information Systems (BU9991)**
 ORI 614 Systems Analysis
 ORI 616 Technology of Management Information Systems
 ORI 620 Data Networks
 ORI 626 Business Database Applications
 ORI 696 Systems Development Projects
- Strategic Quality Management (BU9990)**
 COB 650 Strategic Quality Management
 MKT 620 Customer-Driven Quality
Select three of the following:
 ACC 642 Strategic Cost Management (SCM)
 COB 655 Innovation and Development Leadership Process
 MGT 638 Building Continuous Improvement Teams
 MGT 650 Leadership of the Strategic Quality Management Firm
 POM 577 Tools for Strategic Quality Management (currently offered as ORI 577)

Electives may be taken at any time during the core phase of the program as long as prerequisites are met.

MASTER OF SCIENCE IN ACCOUNTING (MSA)

Mohsen Sharifi
Department Head

Thomas Cianciolo
Director
436 Gary M. Owen Building
487-3320

The MSA program is designed to provide a balanced broad education and an in-depth understanding of the theoretical and practical concepts of accounting. There are several areas of concentration available and students are given the opportunity to relate accounting topics to other disciplines, as they develop the broad base of knowledge necessary to create and use accounting information systems. The MSA program meets American Institute of CPA's recommendations and Michigan State Board of Accountancy requirements.

ADMISSION CRITERIA

Degree Admission

In the admission process, previous academic performance, written statement of personal goals, interview with the MSA director, and Graduate Management Admission Test score* are significant factors considered by the MSA Program Committee. Generally, as a minimum, the applicant must have an undergraduate grade point average of 3.0 overall (on a 4.0 scale) and a GMAT score of 500 or above.

In addition, each applicant must submit two letters of recommendation to the chairman of the MSA Program Committee. One of the letters should come from a college level instructor and the other from a past or present employer. The committee will also consider any other information that the applicant may care to supply (e.g., extracurricular activities).

Conditional Admission

Conditional admission also is possible for some applicants who do not meet the GPA criteria for regular admission. The applicant should contact the chairman of the MSA Program Committee in the Department of Accounting department to discuss this form of admission.

**The Graduate Management Admission Test should be taken at the earliest convenient date to avoid delays in the processing of one's application to the MSA program.*

PROGRAM REQUIREMENTS

Program Design

Upon admission to the MSA program, each student is required to prepare a program of study leading to the MSA degree. The program is reviewed with the student by the MSA Program Committee (or its representative) to ascertain that the program is suitable for the student's background and career goals. The program of course work becomes the student's degree requirement when accepted by the student and the MSA Program Committee. Subsequent changes in course work must be approved by the MSA Program Committee.

Foundation/Prerequisite Courses (33 credit hours)

Students must complete course work in each of the following foundation areas unless they have satisfactorily completed the undergraduate equivalent.

<i>Foundation</i>	<i>Undergraduate Equivalent</i>
ACC 501 (3)	Principles of Accounting (6)
MKT 510 (3)	Principles of Marketing (3)
ORI 502 (3)	Business Information Systems (3)
LAW 503 (3)	Legal Environment of Business (3)

ECO 500 (3) Principles and Institutions of Economics (6)
 ORI 503 (3) Production and Operations Management (3)

In addition the student must complete the following:

ACC 340 Intermediate Accounting I (3)
 ACC 341 Intermediate Accounting II (3)
 ACC 342 Managerial Cost Accounting (3)
 ACC 356 Accounting Information Systems (3)

Some students may find it necessary to complete a mathematics course in calculus and statistics if they have not taken these in their undergraduate program. Math 504 Mathematics and Statistics for MBAs will satisfy this requirement.

COURSE REQUIREMENTS

Core Courses (30 credit hours)

The MSA program requires the completion of 30 semester hours of course work divided into required core courses and elective courses as follows:

Required core courses 18 hours
 #ACC 544 Theory of Individual Taxation 3
 ACC 696 Accounting Theory, Research and Policy 3
 MGT 567 Business Communication: Specialized
 Organizational Report Writing 3
 #MGT 605 Organizational Theory and Behavior 3
 #MGT 696 Management Strategy and Policy 3
 #ORI 602 Techniques in Business Research 3

#Students having equivalent courses may be required to substitute for these courses with others in the areas of Accounting, Finance, Information Systems, Management, and Marketing. The determination is normally made by a MSA director/advisor.

Restricted electives 12 hours
 ACC 540 Advanced Accounting I (3)
 ACC 541 Advanced Accounting II (3)
 ACC 610 Accounting System Design and Installation (3)
 ACC 620 Advanced Managerial Accounting (3)
 ACC 644 Tax Research Methods, Practice and Problems (3)
 ACC 650 Internal Auditing (3)
 ACC 651 Advanced Internal Auditing (3)
 ACC 665 Accounting Theory and Corporate Financial Reporting (3)
 ACC 667 Professional Auditing (3)
 ACC 672 Estate Tax Planning (3)
 ACC 674 International Taxation (3)
 ACC 675 International Accounting (3)
 ACC 685 Business Tax Planning (3)
 ACC 695 Seminar (3)
 ACC 699 Independent Study (3)

NOTE: Students planning to take the CPA examination must elect an auditing course (ACC 667 Professional Auditing) and a governmental accounting course (ACC 540 Advanced Accounting I).

150-HOUR ACCOUNTING PROGRAM

COMBINED MSA AND BBA DEGREES

ADMISSION REQUIREMENTS

Following are the minimal standards for admission to the 150-Hour Program. Generally, each item should be satisfied, though the candidate's overall record is considered most significant. Thus, a slight deficiency in one criterion may be compensated by the candidate's strengths in other areas. Special circumstances, particularly improvement in recent performance, will be considered on their merits by the 150-Hour Program Policy Committee. Transfer credits and grades will be evaluated in terms of Eastern Michigan University equivalency.

Initial admission is dependent on:

1. Completion of 90 semester hours of undergraduate coursework including the College of Business requirements, Basic Studies, and ACC 341.
2. Cumulative grade point average of 3.00 on a 4.00 scale.
3. The candidate's written statement of personal goals.
4. Interview with the 150-Hour program director/advisor.

Admission to the graduate level of the 150-Hour program requires:

1. Completion of 120 semester hours of undergraduate coursework including course content noted under initial admission above and the undergraduate components (i.e., required and restricted electives).
2. Graduate Management Admission Test score of 500 (must be taken during the 4th year so the candidate's score is received before admission to the 5th year).
3. Application to the University Graduate School with payment of fee.

If the candidate is an accounting undergraduate from another four-year accredited school and plans to complete the graduate level program at EMU, he/ she must meet the minimum requirements set for graduate level admission noted above, in addition to the bachelor's degree. The candidate is encouraged to apply to EMU at the beginning of his/her senior year and take the Graduate Management Admission Test during that same year.

For more information, please contact the Director of Graduate Business Programs, 401 Gary M. Owen Building, (313) 487-4444.

MASTER OF SCIENCE IN COMPUTER-BASED INFORMATION SYSTEMS (MSIS)

Asrat Tessema
 Department Head

Wafa Khorshid
 Coordinator of Advising
 411 Gary M. Owen Building
 487-1232

The MSIS is a program of study for students seeking a solid background in systems analysis, management of computer related activities, design of information systems, modeling and simulation, and database management.

The emphasis is on information systems and not computer science.

ADMISSION CRITERIA

Admission to the MSIS program is granted to those graduates of regionally accredited colleges and universities whose grades and Graduate Management Admission Test (GMAT) scores indicate an aptitude for advanced study in computer-based information systems.

Degree Admission

Degree admission will be granted to students who have completed the GMAT with a score of 450 or higher and who have either (a) a cumulative undergraduate grade point average of 2.75; or (b) an undergraduate grade point average of 3.0 for the last half of the undergraduate study.

Conditional Admission

Students whose undergraduate grade point average is above 2.5 but below the 2.75 requirements may qualify for conditional admission.

Conditionally admitted students must maintain a "B" (3.0) average in foundation and the first 12 hours of adviser-approved core courses. Students who successfully meet the probationary requirements will be granted regular admission.

Non-Degree Student Status

Students holding non-degree student status must have special permission to enroll in undergraduate or graduate business courses.

Foundation/Prerequisite Courses (27 credit hours)

Students must complete course work in each of the following foundation areas unless they have satisfactorily completed the undergraduate equivalent.

<i>Foundation</i>	<i>Undergraduate Equivalent</i>
ORI 565 (3)	Applied Statistical Linear Models (3)
ORI 510 (3)	Programming and Data Structures
ACC 501 (3)	Principles of Accounting (6)
FIN 502 (3)	Principles of Finance (3)
ECO 500 (3)	Principles and Institutions of Economics (6)
LAW 503 (3)	Legal Environment of Business (3)
MKT 510 (3)	Principles of Marketing (3)
ORI 503 (3)	Production and Operations Management (3)
MGT 490 (3)	Business Policy* (3)

Some students may find it necessary to complete a mathematics course in calculus and statistics if they have not taken these in their undergraduate program. MTH 504 Mathematics and Statistics for MBAs will satisfy this requirement.

**To be taken upon completion of the foundation/prerequisite courses.*

COURSE REQUIREMENTS

Core Courses (30 credit hours)

The MSIS requires a minimum of 30 hours of course work in addition to any foundation or prerequisite course requirements. The program consists of the following:

Required core in Information Systems..... 27 hours

ORI 610 Programming and Language Design	3
ORI 614 Systems Analysis	3
ORI 620 Data Networks	3
ORI 624 Operating Systems and Management of Computing Resources	3
ORI 625 Software Engineering Management	3
ORI 645 Database Management Systems	3
ORI 655 Decision Support Systems	3
ORI 696 Systems Development Projects	3
MGT 605 Organizational Theory and Behavior	3

Restricted elective 3 hours*

Select one course from the following:

ORI 604 Quantitative Methods II (3)
ORI 630 Linear Programming and Extensions (3)
ORI 636 Forecasting Models (3)
ORI 640 Operations Management (3) or other approved 600-level College of Business courses (3).

ORI 602/603/605 may not be included in the program of study.

MASTER OF SCIENCE IN HUMAN RESOURCE MANAGEMENT AND ORGANIZATIONAL DEVELOPMENT (MS-HR/OD)

Nick P. Blanchard
Acting Department Head
Coordinator of Advising
466 Gary M. Owen Building
487-3240

In recent years, growing emphasis on human resource management and organizational development has emerged in all types of organizations. Instead of concentrating only on the financial, the material and the mechanical aspects of the productive organi-

zation, attention has been increasingly directed toward developing human assets. Production and service oriented businesses, governmental agencies at all levels, health care institutions, volunteer service associations and professional firms of all types have become increasingly sensitive to the human resource potential in their organizations.

Part of this trend has been stimulated by the demands of an ever changing environment in which businesses must function. In addition, a new, more socially aware, generation of managers and employees are looking for more than material rewards from their work. Another part of this emphasis stems from the pragmatic recognition that at the organizational level there should be concern for establishing a climate of problem solving around shared goals. As businesses look for new strategies to increase their competitive edge, they will look to trained human resource managers and organizational development specialists to help them find ways to maximize the contributions of their human resources.

GOALS OF THE HR/OD PROGRAM

To prepare professionals who will understand and be able to plan, implement and manage change processes whether the position is internal to an organization (managerial or staff support) or as an external consultant.

To prepare professionals who will understand the need of a match between organizational and human resource needs and be able to implement systems related to structure, process and human resources.

To prepare professionals who can understand and apply human resource and organizational development techniques.

To prepare professionals who recognize the interrelationships among the fields of human resource management and organizational development and because of this recognition can use HR to improve OD and OD to improve HR.

To contribute to the knowledge base of behavioral and organizational theory and practice.

To provide the community with access to the expertise of faculty and students.

HR/OD ADMISSION CRITERIA

Degree Admission

Applications for admission to the HR/OD program must be received in the Graduate School Office and reviewed by the HR/OD Advisory Committee. Criteria for possible degree admission to the HR/OD program include:

- GPA Requirement:** You must have either
 - a cumulative undergraduate grade point average of 2.75 (on a 4.0 scale); or
 - a grade point average of 3.0 for the last half of undergraduate study; or
 - a 3.5 cumulative grade point average from a completed master's degree program.
- GMAT Requirement:** You must have completed the Graduate Management Admission Test with a score of 450 or higher.
- Interview Requirement:** You must arrange an interview with an HR/OD faculty member.

Admission will not be denied on the basis of the interview. The purpose is to provide a realistic preview of the HR/OD program and to clarify the expectations of potential students of our program.

Conditional Admission

Conditional admission may be granted to those students whose grade point average and GMAT scores combine in a manner that exceeds our minimum index formula criteria. This criteria is a score of 1,000 using an applicant's undergraduate grade point

average, and 1,150 using grade point average from a completed master's degree program. The index formula is 200 times the GPA plus the GMAT score. Applicants must score at least 410 on the GMAT to be eligible for conditional admission and must also satisfy item 3 as described under the regular admission criteria.

Conditionally admitted students must maintain a "B" (3.0) average in foundation courses and the first 12 hours of adviser-approved core courses. Students who successfully meet the conditional requirements will be granted regular admission. Conditionally admitted students must have an adviser's permission to enroll in courses.

Non-Degree Student Status

Students holding non-degree student status must have special permission to enroll in undergraduate or graduate business courses.

Foundation/Prerequisite Courses (27 credit hours)

<i>Foundation</i>	<i>Undergraduate Equivalent</i>
ACC 501 (3)	Principles of Accounting (6)
ECO 500 (3)	Principles and Institutions of Economics (6)
FIN 502 (3)	Principles of Finance (3)
LAW 503 (3)	Legal Environment of Business (3)
MGT 490 (3)	Business Policy (3)
MKT 510 (3)	Principles of Marketing (3)
ORI 501 (3)	Introductory Probability and Statistics for Business (3)
ORI 502 (3)	Business Information Systems (3)
ORI 503 (3)	Production and Operations Management (3)

COURSE REQUIREMENTS

Core Courses (30 credit hours)

Students may elect a human resource management or organizational development specialization track within the HR/OD program. Both tracks consist of a core of 30 hours of required courses. Core courses required for all students include:

- MGT 601 Diagnostic and Quantitative Methods in Organizations (3)
- MGT 602 Theory and Techniques of Organizational Development (3)
- MGT 605 Organizational Theory and Behavior (3)
- MGT 609 Human Resource Management (3)
- MGT 688 Practicum in Human Resource Management/Organizational Development (3) or MGT 690, 691, and 692 Thesis (6)

Students will elect to pursue either the human resources or organizational development track.

The courses for the human resources management track are:

- MGT 618 Staffing Organizations (3)
- MGT 628 Human Resource Development (3)
- MGT 620 Compensation Management (3)
- MGT 625 Management in Unionized Settings (3)

The courses for the organizational development track are:

- MGT 615 Organization Design and Strategy (3)
- MGT 628 Human Resource Development (3)
- MGT 638 Building Continuous Improvement Teams (3)
- MGT 648 Communication and Organizational Development (3)

1. Students who have successfully completed an undergraduate course in organizational theory and behavior should substitute an elective for MGT 605 Organizational Theory and Behavior.
2. Students who have successfully completed an undergraduate course in human resources management/personnel administration or equivalent should substitute an elective for MGT 609 Human Resource Management.
3. Students who elect the six hour thesis in place of MGT 688 will take only four of five electives.

4. The fifth elective should be selected in consultation with the HR/OD adviser. Generally MGT 694 Human Resource Management/Organizational Development Strategy and Policy is recommended.

ACCOUNTING

Mohsen Sharifi
Department Head
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487-3320

OPEN ONLY TO STUDENTS ON GRADUATE DEGREE
ADMISSION

ACCOUNTING COURSES

ACC 501 Accounting Principles. 3 hrs
For students who have not had undergraduate accounting. Introductory course in accounting principles and techniques used to measure business transactions and to prepare financial statements. *Required of graduate students who have not completed a minimum of six hours of basic accounting.*

ACC 540 Advanced Accounting I. 3 hrs
Specialized topics in accounting including not-for-profit accounting, professional ethics for accountants, SEC reporting, revenue recognition, financial statement analysis, and segment and interim reporting.
Prereq: ACC 341 Intermediate Accounting II or department permission.

ACC 541 Advanced Accounting II. 3 hrs
Specialized topics in accounting with major emphasis on conceptual aspects and reporting of consolidated financial statements, international accounting challenges, and foreign currency reporting issues.
Prereq: ACC 341 Intermediate Accounting II or department permission.

ACC 544 Theory of Individual Taxation. 3 hrs
Introduction of the principles of taxation as they relate to individuals in the United States. Among topics covered are: the tax legislative process, income and loss realization, and recognition and tax planning issues.
Prereq: ACC 501 or department permission.

OPERATIONS RESEARCH AND INFORMATION SYSTEMS COURSES (BEGINNING JULY 1, 1994, THESE COURSES WILL HAVE THE PREFIX "DS")

**ORI 501 Introductory Probability and Statistics for
Business.** 3 hrs
The development of fundamental probability concepts and statistical techniques emphasizing their applications to business decision-making. Includes the study of probability distributions, sampling, point and interval estimation, and hypothesis testing.
Prereq: MTH 118-119 Mathematical Analysis for Social Sciences I-II or equivalent.

ORI 565 Applied Linear Statistical Models. 3 hrs
An introduction to linear models with an emphasis on business applications. Topics include multiple linear regression models, analysis of variance and multivariate data analysis. Computer packages will be used. Projects and written reports are required. *Not open to students with credit in ORI 465 Applied Linear Statistical Models.*
Prereq: ORI 265 Business Statistics I or ORI 501.

OPEN ONLY TO STUDENTS ADMITTED TO GRADUATE PROGRAMS IN THE COLLEGE OF BUSINESS

ACCOUNTING COURSES

ACC 605 Administrative Controls. 3 hrs
Areas covered include cost analysis, cost allocation to profit and investment centers, profit planning, cash flow analysis, inventory control, control of decentralized operations. Both text and cases are used. *Not open to those students who have taken a cost accounting course.*

ACC 610 Accounting System Design and Installation. 3 hrs
Provides the fundamentals of developing and analyzing accounting systems to produce efficient recording, optimum data processing procedures, and appropriate analysis and interpretation for management. Case studies are used.
Prereq: ACC 605 or ACC 620.

ACC 615 Corporate Financial Reporting. 3 hrs
Study of authoritative pronouncements on accounting principles which guide reporting financial position, results of operations and changes in fund flows. May include case studies or analysis of published financial reports.
Prereq: Six hours of intermediate accounting.

ACC 620 Advanced Managerial Accounting. 3 hrs
Covers concepts of management control through accounting, accounting for organizational objectives, profit and investment centers, budgeting, project planning, and control.
Prereq: Satisfy requirements for ACC 605.

ACC 642 Strategic Cost Management (SCM). 3 hrs
The role of cost management in strategic quality management. Cost management systems for continuous improvement: conceptual design, accounting models, performance measurement, and investment management.
Prereq: ACC 605, or COB 650, or permission of instructor.

ACC 644 Tax Research Methods, Practice, and Problems. 3 hrs
Introduction of tax research methods including identification of tax issues, efficient use of tax resources, and effective communication of the research process.
Prereq: ACC 544.

ACC 650 Internal Auditing. 3 hrs
Introduction to the profession of internal auditing. Includes professional standards, techniques, scientific methods, reporting, operational auditing, and internal audit management.
Prereq: ACC 501 or permission of instructor.

ACC 651 Seminar in Applied Internal Auditing. 3 hrs
Application of the theory and standards of internal auditing by use of in-class learning modules.
Prereq: ACC 650 or department permission.

ACC 665 Theory of Accounting. 3 hrs
A study of the objectives, history and development of financial accounting theory; introduces advanced accounting problems in the areas of inventory accounting, intangibles, consolidations, partnership accounting, leases, pensions and prior period adjustments. ACC 665 is a capstone course which integrates the theoretical concepts and practical applications of the accounting discipline.
Prereq: ACC 615 or six hours of intermediate accounting with department permission.

ACC 667 Professional Auditing. 3 hrs
A study of auditing concepts, objectives and procedures, and of the literature as it relates to current audit problems.
Prereq: ACC 615 or six hours of intermediate accounting.

ACC 672 Estate Tax Planning. 3 hrs
Study of the federal taxation of estates, gifts and trusts, particularly as they affect family financial planning, and the preparation of federal estate tax, gift tax and fiduciary tax returns.
Prereq: ACC 344 Tax Accounting or ACC 544

ACC 674 International Taxation. 3 hrs
The basic concepts that relate to U.S. taxation of multinational transactions. The provisions that apply to "in-bound" transactions (foreign transactions on U.S. soil) and "out-bound" transactions (U.S. transactions on foreign soil) are examined.
Prereq: Open only to graduates on a degree admission.

ACC 675 International Accounting. 3 hrs
Introduction to accounting in an international environment. Includes the study of environmental factors, performance evaluation, financial reporting and specific accounting and auditing problems.
Prereq: ACC 605 Administrative Controls or permission of instructor.

ACC 685 Business Tax Planning. 3 hrs
Conceptual coverage of the tax system, taxable and tax-reporting business entities, and principles of taxation for the purpose of identifying the tax planning opportunities in business decisions.
Prereq: ACC 344 Tax Accounting or ACC 544.

ACC 695 Seminar. 3 hrs
Study of selected problems in accounting. A contemporary issue seminar.
Prereq: ACC 615 Corporate Financial Reporting or department permission.

ACC 696 Accounting Theory, Research, and Policy. 3 hrs
A capstone course emphasizing and developing an understanding of the many interrelated applications of accounting in organizations and in the broader setting of financial markets.
Prereq: Department permission.

ACC 699 Independent Study. 3 hrs
Directed study or problems in accounting not otherwise treated in department courses.
Prereq: Completion of MSA or MBA tool core and department permission.

**OPERATIONS RESEARCH AND INFORMATION SYSTEMS
COURSES**
(BEGINNING JULY 1, 1994, THESE COURSES WILL HAVE
THE PREFIX "DS")

ORI 602 Techniques in Business Research. 3 hrs
This course is a review and extension of statistical techniques used by business people to collect and analyze data for making business decisions. Includes confidence intervals, hypothesis testing, correlation analysis, regression modeling, and analysis variance. Computer packages and written report. *Not applicable to MSIS degree.*
Prereq: ORI 501 or MTH 504; and ORI 502 or equivalent.

ORI 605 Managerial Economics and Decision Analysis. 3 hrs
Application of economic theory to problems facing business management. Emphasis on economics as a business tool that facilitates decision making. Topics considered include optimization techniques, uncertainty, demand, production, cost, and anti-trust economics. *Not applicable to MSIS degree.*
Prereq: ECO 501, ECO 502. or equivalent.; ORI 602

ORI 634 Stochastic Models. 3 hrs
An introduction to stochastic models. Topics include Markov models, queuing models, stochastic programming and renewal

theory. Applications of these models in various operating systems are emphasized.
Prereq: ORI 630 or equivalent.

ORI 636 Forecasting Models. 3 hrs
An introduction for forecasting models. Topics include naive methods, smoothing methods, decomposition techniques, regression, and ARIMA models. Use of these models in making forecasts in business and industry is considered.
Prereq: ORI 565 or equivalent.

ORI 638 Simulation and Modeling. 3 hrs
Introduction to digital simulation techniques as they apply to business. The course presents the basic concepts involved in simulation, describes applications of simulation to business problems and discusses technical problems associated with the use of simulation. Emphasis is on the design and operation of computer models.
Prereq: ORI 501 or ORI 502.

ORI 669 Business Conditions: Analysis and Forecasting. 3 hrs
Macroeconomic activity as a major determinant of firm operations. Short-term economic forecasting, econometric models, opportunistic models, economic indicators. Forecasting business investment, housing, consumer purchases, other GNP components. Seasonal variation and methods of seasonal adjustment.
Prereq: ORI 605.

FINANCE AND COMPUTER INFORMATION SYSTEMS

Asrat Tessema
Department Head
412 Gary M. Owen Building
487-2454/2455

OPEN ONLY TO STUDENTS ON GRADUATE DEGREE
ADMISSION

FINANCE COURSES

FIN 502 Financial Principles. 3 hrs
Course provides an introduction to finance. Non-finance majors will gain an appreciation of the role of financial markets and institutions in our economy, and the responsibilities, concerns and methods of analysis employed by corporate financial managers. Students pursuing a concentration in the finance area should view this as a first course in corporate finance and an introduction into investments, financial markets, and institutions.

FIN 540 International Finance. 3 hrs
The course covers international aspects of financial investment, capital budgeting, risk analysis, joint ventures and acquisitions, forecasting and protecting against exchange rate changes, capital structure problems of multinational corporations, methods of financing, banking, and financial reporting.
Prereq: FIN 502.

FIN 590/591/592 Special Topics. 1/2/3 hrs
An in-depth study of a specialized area in finance.
Prereq: Department permission.

INSURANCE COURSE

INS 586 Risk and Risk Management. 3 hrs
Study of the nature of risk and the principles and methods used in risk management. Emphasis on use of insurance in handling business risks.
Prereq: FIN 502.

OPERATIONS RESEARCH AND INFORMATION SYSTEMS COURSES

(BEGINNING JULY 1, 1994, THESE COURSES WILL HAVE THE PREFIX "IS")

ORI 502 Business Information Systems. 3 hrs
This course is an introduction to concepts of information, business problem components and systems, computers and tools available for problem solving on computers. In addition, analysis of requirements for business information systems, design and implementation are studied. A high level programming language is used for implementation. Prior experience in a language is not required.
Prereq: MTH 118 Mathematical Analysis for Social Sciences I or MTH 504.

ORI 510 Programming and Data Structures. 3 hrs
Basic concepts of computers, problem-solving, and algorithmic descriptions. Concepts of programming languages. Choice of a language for a given environment. Data structures design and programs.

(BEGINNING JULY 1, 1994, THIS COURSE WILL HAVE THE PREFIX "POM")

ORI 503 Production and Operations Management. 3 hrs
Coverage of the design, operation and control functions in manufacturing and service organizations. Topics include product de-

sign, process design, facilities location and layout, capacity planning, job design, product scheduling, material management, and process control.

Prereq: ORI 501 or MTH 504.

OPEN ONLY TO STUDENTS ADMITTED TO GRADUATE PROGRAMS IN THE COLLEGE OF BUSINESS

FIN 615 Financial Markets and Institutions. 3 hrs
Course provides an analytical foundation for understanding the need for, and characteristics of financial markets. The role of commercial banks and non-bank financial intermediaries is developed in the broader context of the saving-investment process in an economy.

Prereq: FIN 502.

FIN 620 Financial Administration Policies. 3 hrs
The course uses the case method of instruction to focus on problems in corporate financial management. The analysis of financial decisions and the formulation of financial policy are stressed. The course covers working capital management, capital budgeting and financing. Special topics include investment banking, mergers and acquisitions, and leasing.

Prereq: FIN 502.

FIN 625 Securities Analysis. 3 hrs
This course addresses the major issues of interest to investors and portfolio managers including the optimal allocation of wealth among assets, the valuation of risky assets and the measurement of investment performances of various financial instruments, such as common stocks, bonds, convertibles and options.

Prereq: FIN 502.

FIN 660 Advanced Financial Management. 3 hrs
This course develops conceptual foundations for making intelligent corporate financial analysis. Advanced concepts in modern corporate finance are examined including issues arising from risky corporate debt, the theory of optimal capital structure, agency theory and economic effects of taxation. Special topics include raising external capital, dividend policy and share re-purchases.

Prereq: FIN 620.

FIN 679/680/681 Special Topics. 1/2/3 hrs
An in-depth study of a specialized area in finance.

Prereq: FIN 620.

FIN 697/698/699 Independent Study. 1/2/3 hrs
Directed study of problems in finance not otherwise treated in department courses.

Prereq: Department permission.

OPERATIONS RESEARCH AND INFORMATION SYSTEMS COURSES

(BEGINNING JULY 1, 1994, THESE COURSES WILL HAVE THE PREFIX "POM")

ORI 603 Quantitative Methods I. 3 hrs
Business decision making, complex problems of the modern business enterprise. Quantification and measurement, statistical decision making, linear programming, game theory, inventory control, replacement decisions and various techniques of statistical optimization. *Not applicable to MSIS degree.*

Prereq: ORI 602.

ORI 604 Quantitative Methods II. 3 hrs
Transportation networks, queuing theory, Bayesian inference, regression and correlation analysis, in addition to various discrete mathematical programming topics of contemporary interest.

Prereq: ORI 603 or department permission.

ORI 630 Linear Programming and Extensions. 3 hrs
An introduction to the theory, computational techniques, and business applications of linear programming. Topics include solution techniques; duality theorem; sensitivity analyses; Gomory's integer programming algorithm; transportation, transshipment, and assignment models; and zero-sum game models.

Prereq: MTH 118 Mathematical Analysis for Social Sciences I or MTH 122 Elementary Linear Algebra or equivalent.

ORI 632 Non-Linear Programming. 3 hrs
An introduction to the theory, computational algorithms, and business applications of various types of nonlinear programming models. Topics include separable programming, classical theory or optimization, searching techniques, goal programming, branch and bound and dynamic programming.

Prereq: ORI 630 or equivalent.

ORI 640 Operations Management. 3 hrs
This course will investigate the use of management science techniques to analyze and solve various problems related to the design, operation and control of operating systems. Operating systems are broadly defined here to include service organizations. Topics included are process planning, location and layout of production facilities, forecasting of demand, aggregate planning, inventory control, loading and sequencing jobs on facilities, statistical quality control and management information systems.

Prereq: ORI 603 or department permission.

(BEGINNING JULY 1, 1994, THESE COURSES WILL HAVE THE PREFIX "IS")

ORI 610 Programming and Language Design. 3 hrs
Short review of programming in Pascal or C. Short review of data structures. Overview of language processors. Formal grammar. Lexical scanning, parsing, code generation, and applications.

Prereq: ORI 510.

ORI 614 Systems Analysis. 3 hrs
This course covers concepts, tools, and techniques for modeling of business activities and data. Analysis and design methodologies are covered.

Prereq: ORI 510.

ORI 616 Technology of Management Information Systems. 3 hrs
Managing technology of information systems within organizations. The specifications and configuration of computer-based systems. Methods for costing system hardware and software and for assessing computer performance.

Prereq: ORI 502 or equivalent.

ORI 620 Data Networks. 3 hrs
Introduce the student to the concepts, goals, structures, and design of data communications and computer networks.

Prereq: ORI 502 or ORI 510.

ORI 624 Operating Systems and Management of Computing Resources. 3 hrs

Aspects of the management of computer information systems resources. Includes a comprehensive review of issues associated with operation systems design and implementation. The course reviews the management of other resources such as information center staffing, services, and issues related to an effective information center.

Prereq: ORI 510.

ORI 625 Software Engineering Management. 3 hrs
Provide students with an understanding of the principles and techniques for developing reliable software delivered on schedule,

within budget, and in a maintainable condition. Instruction in analyzing, designing, and building business-oriented software systems.

Prereq: ORI 614.

ORI 626 Business Database Applications. 3 hrs
Explores the elementary theories and applications of database design techniques and models including relational, hierarchical, and network models. Provides in-depth experience with database management implementations on managerial decision-making.

Prereq: ORI 502 or equivalent.

ORI 628 Advanced Data Structures. 3 hrs
The techniques, concepts, and theory of the storage of data within computer systems will be studied.

Prereq: ORI 610.

ORI 645 Database Management Systems. 3 hrs
Study of different storage organization and retrieval techniques; database design techniques and processes; logical and physical database design; relational, network, and hierarchical database organizations.

Prereq: ORI 614.

ORI 655 Decision Support Systems. 3 hrs
The study of one important programming language and its application to several expert systems. Students will design and implement an expert system using a variety of knowledge-based software and engineering techniques.

Prereq: ORI 510.

ORI 675 Language Processors. 3 hrs
Applications of techniques of language processors to the problems involved in writing application programs, interactive computer systems and query languages, etc.

Prereq: ORI 625.

ORI 679/680/681 Special Topics. 1/2/3 hrs
This course will be offered periodically to review selected contemporary topics in quantitative analysis, business computer systems and/or managerial and business economics.

Prereq: Completion of MBA or MSIS core.

ORI 690/691/692 Thesis. 1/2/3 hrs
Students will develop and defend an original research proposal in the area of information systems. Upon the conclusion, students will prepare and defend a written report of their findings in the form of a master's thesis.

Prereq: Completion of all required MSIS courses and department permission.

ORI 695 Seminar. 3 hrs
This capstone course integrates management information systems (MSIS) with fundamental areas of business. The impact of M.I.S. in the organization is analyzed in terms of current design and implementation techniques and follow-up evaluation of business systems. The student writes an original research paper in the area of management information systems.

Prereq: All MSIS required and restricted elective courses must be completed prior to this course.

ORI 696 Systems Development Projects. 3 hrs
To provide the student with experience in analyzing, designing, implementing and evaluating industry-related information systems problems. Students are assigned one or more system development projects. The project involves part of all of the system development cycle.

Prereq: Completion of all MSIS required and restricted elective courses.

ORI 697/698/699 Independent Study. 1/2/3 hrs
An intensive study of a problem or group of problems under the direction of a University faculty member.
Prereq: Department permission.

PRODUCTION OPERATIONS MANAGEMENT COURSE

POM 577 Tools for Strategic Quality Management. 3 hrs
(Currently offered as ORI 577)
The course consists of lectures, discussions, cases and examples, and presentations by students of a research project related to management by fact of strategic quality management in the work-place.

MANAGEMENT

Nick P. Blanchard
Acting Department Head
466 Gary M. Owen Building
487-3240

OPEN ONLY TO STUDENTS ON GRADUATE DEGREE
ADMISSION

MANAGEMENT COURSES

MGT 501 Management: Concepts, Principles, and Practice. 3 hrs
The basic managerial functions are studied primarily from the perspective of the process design, but the behavioral, management science and other disciplinary schools of thought are also carefully examined. *Open only to graduate students who have not had a basic management course.*

MGT 550 International Management: A Cultural Perspective. 3 hrs
This course will examine management practices within the international business environment, both from individual national perspectives and from the global perspective of the multinational corporation.
Prereq: MGT 501 or instructor's permission.

MGT 567 Business Communication: Specialized Organizational Report Writing. 3 hrs
Course to train students (already admitted to a graduate degree program) to write reports suited to organizational needs and environments. Provides professional and managerial focus on designing reports for business, industry, education, health care, and government. Develops skills in design, editing, and analysis of reports.

MGT 568 Managerial Communication. 3 hrs
A survey of the research and literature to familiarize the student with theory, concepts, and methods relevant to administrative communication.
Prereq: Graduate student and one course in management.

MGT 576 Corporate Social Policy. 3 hrs
A study of interaction between business organizations and their economic, political, social, and legal environments. Ethical issues relevant to corporate decision-making will be the focus of the analysis of social policy.

MGT 580 Management of Organizational Behavior. 3 hrs
A survey and synthesis of behavioral science theories relevant to management of business and non-business organizations. *This course is not open to students enrolled in a College of Business program.*
Prereq: MGT 501 or equivalent.

MGT 590/591/592 Special Topics. 1/2/3 hrs
Selected topic(s) from the field of management.

OPEN ONLY TO STUDENTS ADMITTED TO GRADUATE
PROGRAMS IN THE COLLEGE OF BUSINESS

MANAGEMENT COURSES

MGT 601 Diagnostic and Quantitative Methods in Organizations. 3 hrs
The study and application of diagnostic and quantitative methods for problem diagnosis, implementation, and evaluation of the organizational development process and human resource management practices.
Prereq: MGT 605, ORI 501.

MGT 602 Theory and Techniques of Organizational Development. 3 hrs

This class examines the theoretical basis of the field of organizational development. Change interventions at the individual, group, and organizational level are covered along with consultation skills.
Prereq: MGT 605.

MGT 604 Management Communication Theory and Practice. 3 hrs

A survey of the research and literature to familiarize the student with theory, concepts, and methods relevant to administrative communication.

Prereq: Graduate student and one course in management.

MGT 605 Organizational Theory and Behavior. 3 hrs

The objective is to apply social science concepts to organizational structure and design. Case studies are used to relate theory and behavior.

MGT 609 Human Resource Management. 3 hrs

Current activities and theory relevant to human resource management function are described, including impact of changes related to government intervention and other environmental impacts.

MGT 615 Organization Design and Strategy. 3 hrs

To provide in-depth understanding of organizations' ability to survive, grow, and adapt in relation to internal and environmental pressures. Analytical and problem skills are practiced also in such areas as structure, conflict, strategy and use of power.

Prereq: MGT 605 and MGT 602.

MGT 618 Staffing Organizations. 3 hrs

This course will train students to staff organizations. Students will obtain skills in human resource planning, recruitment, job analysis, selection techniques, and evaluation (validation).

Prereq: MGT 609.

MGT 620 Compensation Management. 3 hrs

Study of the concepts and practices of compensation administration with emphasis on current theories of compensation and motivation.

Prereq: MGT 605 and MGT 609.

MGT 625 Management in Unionized Settings. 3 hrs

Presents the background necessary to examine top management strategic decision-making regarding unions as well as day-to-day union worker-management interaction and introduces methods and skills necessary for change in management-union relationships.

Prereq: MGT 605 and MGT 609.

MGT 628 Human Resource Development. 3 hrs

Course is designed to educate students in training needs analysis and program design, implementation of training programs, training evaluation procedures, human resource cost-effectiveness plans, job design techniques.

Prereq: MGT 605 and MGT 609 or equivalent.

MGT 638 Building Continuous Improvement Teams. 3 hrs

A historical overview and consideration of the newly developed field of organizational development in the private and public sectors as a means of increasing employee satisfaction and productivity in the work place.

Prereq: MGT 605.

MGT 648 Communication and Organizational Development. 3 hrs

The development of communication understanding and skills as required in organizational management and interaction by internal and external change agents.

Prereq: A course in communication or department permission.

MGT 650 Leadership of the Strategic Quality Management Firm. 1/2/3 hrs

This course introduces the students to the strategic concepts for leading a strategic quality management firm. Cross-functional considerations between development, marketing, operations, human resources, financial controls, and international functions are covered.

Prereq: MBA foundation courses.

MGT 679/680/681 Special Topics. 1/2/3 hrs

Selected topic(s) from the field of management.

MGT 688 Practicum in Human Resource Management/Organizational Development. 3 hrs

The opportunity to participate in a human resource management and/or organizational development project in an active organization under the close guidance of a practicing consultant. *Students who have credit in MGT 690/691/692 may not take this course.*

Prereq: MGT 605, MGT 628, and MGT 648.

MGT 690/691/692 Thesis. 1/2/3 hrs

Students will develop and defend an original research proposal in the area of human resource management and/or organizational development, collect and analyze data, and prepare and defend a written report of their findings. *Students who have credit in MGT 688 may not take this course.*

Prereq: Department permission.

MGT 694 Human Resource Management/Organizational Development Strategy and Policy. 3 hrs

The development of integrated human resource management and organizational development policies and strategies and application to both live and written case studies.

Prereq: Completion of all the HRMIOD core.

MGT 695 Seminar: Management. 3 hrs

A study of selected management issues and problems. Specific topics vary from term to term.

Prereq: MGT 605.

MGT 696 Seminar: Management Strategy and Policy. 3 hrs

The development of overall strategy and supportive policies of the firm operating under competitive conditions, from the point of view of general management. Improvement of decision-making skills through case analyses of actual situation. Offered fall and winter semesters only.

Prereq: Completion of MBA operational and tool core.

MGT 697/698/699 Independent Study. 1/2/3 hrs

An intensive study of a problem or group of problems under the direction of a University faculty member.

Prereq: MBA or HRMIOD core, MGT 605, and department permission.

COLLEGE OF BUSINESS COURSES

COB 650 Strategic Quality Management. 3 hrs

This course provides the student an interdisciplinary introduction to strategic quality management. The course covers customer driven quality strategies applied by participative leadership teams to continuously improve products and services.

Prereq: MBA foundation courses and MGT 605.

COB 655 Innovation and Development Leadership Process. 3 hrs

This course develops the leadership processes necessary to manage large innovation and development projects. The management processes are covered to achieve innovation from project teams within budget and timing.

Prereq: MBA foundations courses and COB 650.

COB 679/680/681 Special Topics. 1/2/3 hrs
 Course covers selected topics from the field of business.
Prereq: Department permission.

COB 695 Seminar. 3 hrs
 A study of selected business issues and methods. Specific topics will vary from term to term.
Prereq: Approval of instructor.

MARKETING

H. Robert Dodge
 Department Head
 469 Gary M. Owen Building
 487-3323

OPEN ONLY TO STUDENTS ON GRADUATE DEGREE
 ADMISSION

MARKETING COURSES

MKT 510 Marketing. 3 hrs
 The development of skills in the analysis and resolution of management problems related to the marketing process; economic, psychological, and sociological characteristics of demand for various products; marketing research; channels of distribution; advertising; personal selling; pricing policies and regulation of marketing.
Open only to graduate students who have not had a basic marketing course.

MKT 520 International Business. 3 hrs
 Analysis of the global economic, political, cultural, and geographic environments and their impact on market entry. Strategies of multi-national firms and survey of changes in marketing, finance, human resources, and production policies resulting from international environmental differences.
Prereq: MKT 510 or equivalent.

MKT 590/591/592 Special Topics. 1/2/3 hrs
 The courses involve daily visitations to various types of domestic and/or foreign business enterprises where discussions are held in seminars concerning marketing and other business affairs. Subsequent seminar sessions are held by the instructor at a classroom arranged prior to the trip.

LAW COURSES

LAW 503 Legal Environment of Business. 3 hrs
 The nature and operation of the American legal system; legal constraints on business activities. Law as an expression of social and political forces and as an instrument of economic and political change. *Not open to students having had LAW 293 Legal Environment of Business.*

LAW 530 Modern Commercial Law. 3 hrs
 Designed for students desiring a detailed knowledge of modern business law. Provisions of the Uniform Commercial Code are emphasized. Aspects of the law of sales, negotiable instruments including effects of different endorsements, secured transactions, commercial financing and bankruptcy, bailments, bills of lading, and letters of credit.
Prereq: Previous credit in law.

LAW 590/591/592 Special Topics. 1/2/3 hrs

LAW 595 Seminar. 3 hrs
 A study of selected business law issues and topics which may vary from term to term.
Prereq: LAW 503 or equivalent.

OPEN ONLY TO STUDENTS ADMITTED TO GRADUATE
 PROGRAMS IN THE COLLEGE OF BUSINESS

MARKETING COURSES

MKT 610 Marketing Policies and Problems. 3 hrs
 Analysis of current marketing problems and their implications relative to the firm's marketing mix and external economic, so-

cial, cultural, legal and political environments. *Offered fall and winter semesters only.*

Prereq: MKT 510 or equivalent.

MKT 620 Customer-Driven Quality. 3 hrs

Defining and measuring quality from the viewpoint of the customer. Topics include: the philosophy of customer orientation, measuring quality and satisfaction, expectations, complaining behavior, benchmarking.

Prereq: MKT 510.

MKT 630 Sales Operation Management. 3 hrs

An intensive investigation of the sales function and its relationship to the total marketing program. Topics considered include setting sales objectives, formulation of sales strategy, development of sales organization, relationships with distributors and dealers, public policy as it relates to the sales function, analytical tools for forecasting sales, qualitative and quantitative measures of sales performance, control of sales operations, and integration of sales and other marketing functions. Reviews of the literature in the sales field and cases stressed.

Prereq: MKT 610.

MKT 640 Promotions Management. 3 hrs

An integrative decision oriented course emphasizing the strategic function of an effective program of corporate promotions employing mass communications, personal selling, sales promotion, publicity, and public relations.

Prereq: MKT 610.

MKT 650 Channels of Distribution and Logistics. 3 hrs

Identification and analysis of problems involved in the development and operation of channels of distribution. Issues of trade structure and methods of cooperation among channel members are discussed from legal and managerial points of view. Specific analytical tools are developed for the individual firms in analyzing spatial arrangements of markets, plant and warehouse location, inventory systems, and selections of carrier alternatives. Lecture, discussion and cases.

Prereq: MKT 610.

MKT 665 Seminar in Buyer Behavior. 3 hrs

A seminar devoted to the study of consumer and industrial buying behavior. Emphasis is given to the exploration and understanding of appropriate theories, measurement techniques, and applications of theory to marketing strategy.

Prereq: MKT 510.

MKT 670 Advanced Methods in Marketing Research. 3 hrs

This course outlines the application of research methods to aid in marketing decision making. Included are approaches to problem definition, secondary data review, questionnaire development, data collection, data analysis and managerial interpretation, and the reporting of research findings. This course will also provide a detailed look at a computer-based statistical package (e.g., SPSS-X).

Prereq: MKT 610.

MKT 675 Market Planning and Forecasting. 3 hrs

Development of student skills and techniques for strategic marketing planning and forecasting. Concepts relating to the mission, opportunity analysis, objectives, goals, and programs will be explored. Individual planning and forecasting projects and exercises will be emphasized.

Prereq: MKT 610.

MKT 679/680/681 Special Topics. 1/2/3 hrs

Selected topic(s) from the field of marketing.

Prereq: MKT 610.

MKT 695 Seminar. 3 hrs

The purpose of this seminar is to develop both an understanding of and a point of view toward some of the major problems of marketing which are dealt with briefly or not at all in required course work. Topics vary from year to year in accordance with the needs and interests of the students.

Prereq: MKT 610.

MKT 697/698/699 Independent Study. 1/2/3 hrs

An intensive study of a problem under the direction of graduate faculty members.

Prereq: MKT 610.

LAW COURSE

LAW 697/698/699 Independent Study. 1/2/3 hrs

Students select a problem or group of problems to be researched or studied in depth under the direction of a designated faculty member.

Prereq: Department permission.

COLLEGE OF EDUCATION

Jerry Robbins, Dean
Robbie Johnson, Associate Dean
Donna Schmitt, Associate Dean
117 Boone Hall
487-1414

DEPARTMENTS

Health, Physical Education, Recreation, and Dance
Leadership and Counseling
Special Education
Teacher Education

HEALTH, PHYSICAL EDUCATION, RECREATION, AND DANCE

Patric L. Cavanaugh
Department Head
237 Warner
487-4388

MASTER OF SCIENCE (PHYSICAL EDUCATION)

The primary aim of the master's degree in physical education is to assist graduates in the proper utilization of all their classroom and practical experiences in such a way as to afford optimum effectiveness in teaching.

MODEL

The development of educators who are committed to their ongoing professional growth and are aware of the challenges of democracy in our culturally diverse society. These educators will assert leadership, apply and practice scholarship, and exercise reflective thinking to meet the needs of learning communities.

OBJECTIVES

Upon completion of the master's degree, students will be able to:

- utilize philosophy in establishing the objectives, methods, curricular activities, and techniques of evaluation which they should use in the physical education program;
- develop a curriculum for either elementary school or secondary school physical education and utilize appropriate methods to achieve its goals;
- utilize current procedures for evaluating student progress in achieving the objectives of the physical education program;
- utilize sound administrative techniques in solving typical administrative problems in the area of physical education;
- interpret current research as it applies to their own teaching;
- acquire knowledge in greater depth in the areas of teaching selected by the individual student;
- acquire skills, knowledge, and experience in areas which extend beyond their undergraduate preparation that will enhance their abilities to teach more effectively.

ADMISSION REQUIREMENTS

- Meet Graduate School requirements.
- Hold an undergraduate degree from an accredited institution.
- Have an undergraduate major in physical education or the equivalent.
- Have a minimum overall of 2.50 undergraduate grade point average.
- Submit three professional letters of reference.
- Have an interview with the department Graduate Faculty Committee.
- Submit a score on the Verbal and Quantitative portions of the Graduate Record Examinations, taken within five years of the time of application.

RETENTION AND EXIT REQUIREMENTS

After completion of approximately fifteen credit hours, the graduate adviser will review each student's progress. The following factors will be included in the interim evaluation:

- Graduate grade point average.

- Courses completed, i.e., sequence of courses, required courses, etc.
- Planned program for degree completion, i.e., choice of thesis or independent study, etc.

Requirements for degree completion will include:

- Minimum 3.0 grade point average.
- Successful completion of either an independent study or a thesis.
- Successful completion of an oral or written comprehensive examination.

DEGREE REQUIREMENTS

Other degree requirements include:

- Must have earned a minimum of 30 semester hours of graduate credit applicable to the program.
- Must have completed a minimum of 20 semester hours of acceptable graduate credit in HPERD. Each candidate must take eight required classes in the core program and complete the total hours through electives.
- Must receive the recommendation of the coordinator of advising and department head.

CURRICULUM REQUIREMENTS

Candidates will have the responsibility of scheduling conferences with their graduate HPERD adviser to complete the following:

- Core Courses (16 hours)
 - PED 568 Physical Fitness
 - PED 570 Critical Analysis of Physical Education
 - PED 578 Motor Learning and Development
 - PED 585 Physical Education in Elementary Schools or PED 586 Physical Education in Secondary Schools
 - PED 587 Philosophy of Physical Education
 - PED 588 Administrative Problems in Physical Education
 - PED 677 Research Techniques
 - PED 698 Independent Study
- Electives (eight to 14 hours)
 - Areas of concentration may be elected in the different programs of physical education or athletics.
- Cognates (zero to six hours)
 - Courses may be elected outside HPERD with permission of the academic adviser.

ATHLETIC COURSES

ATH 510 Administration of Athletics. 2 hrs
Problems related to interscholastic and intercollegiate athletic programs; for administrators, supervisors, coaches, and others having a part in the control of athletics.

ATH 511 Advanced Techniques in Coaching Swimming: Stroke Technique. 1 hr
A course to provide the scientific and technical background to coach and teach competitive swimming strokes.

ATH 512 Advanced Techniques in Coaching Swimming: Training Methods. 1 hr
A course to provide the practical and scientific background for a swimming coach to design a competitive training program or a physical educator to make aquatics a meaningful fitness tool.

ATH 513 Coaching Women's Gymnastics. 2 hrs
A lecture-demonstration course in the problems and techniques of advanced coaching theories of women's gymnastics.
Prereq: One course in gymnastics or permission of instructor.

ATH 514 Judging Women's Gymnastics. 2 hrs
A lecture-demonstration course in the problems and techniques of judging women's gymnastics.
Prereq: One course in gymnastics or permission of instructor.

ATH 590/591/592 Special Topics. 1/2/3 hrs
Experimental course(s) designed to investigate specific topics of concern in the specialization areas of study in athletics.
Prereq: Department permission.

ATH 595 Workshop. 2 hrs
A specialized workshop in the area of athletics with the central theme to be announced.

ATH 611 Advanced Techniques of Coaching Football. 1 hr
A lecture-demonstration course in the problems and techniques of advanced coaching theories of football.

ATH 612 Advanced Techniques of Coaching Track and Field. 1 hr
A lecture-demonstration course in the problems and techniques of advanced coaching theories of track and field.

ATH 613 Advanced Techniques of Coaching Basketball. 1 hr
A lecture-demonstration course in the problems and techniques of advanced coaching theories of basketball.

ATH 614 Advanced Techniques of Coaching Baseball. 1 hr
A lecture-demonstration course in the problems and techniques of advanced coaching theories of baseball.

ATH 615 Officiating and Coaching Volleyball. 2 hrs
A course designed for the individual who plans to coach and/or officiate volleyball. The class is structured to identify volleyball techniques, strategies, and coaching problems as well as officiating procedures, rule interpretation and responsibility of coach to official and vice versa.

ATH 616 Advanced Techniques of Coaching Tennis. 1 hr
A course designed to identify and discuss tennis techniques, strategies, and coaching problems.

ATH 619 Problems in Training for Athletes. 2 hrs
Problems in the physical preparation of athletes for competition; treatment and rehabilitation following injuries.

ATH 679/680/681 Special Topics. 1/2/3 hrs
Experimental course(s) designed to investigate specific topics of concern in the specialization areas of study in athletics.
Prereq: Department permission.

ATH 694 Seminar. 2 hrs
A specialized seminar in the area of athletics with the central theme to be announced.

HEALTH EDUCATION COURSES

HED 545 Sex Education. 2 hrs
Designed to provide a period of concentrated study and discussion about sex education for teachers, nurses, school administrators, clergy, and interested representatives of community agencies.

HED 546 Alcohol Use and Abuse. 2 hrs
Designed to improve the quality of teaching in alcohol education and the quality of rehabilitative efforts by public and private agencies concerned with alcohol problems. Attempts to develop an understanding of the physiological, psychological, and sociological factors related to the use of alcohol. Specifically, it is concerned with developing constructive attitudes toward the alcohol problem and dispelling prejudices, misunderstandings, and myths which obscure facts.

HED 590/591/592 Special Topics. 1/2/3 hrs
Experimental course(s) designed to investigate specific topics of concern in the specialization areas of study in health education.
Prereq: Department permission.

HED 595 Workshop. 2 hrs
A specialized workshop in the area of health education with the central theme to be announced.

HED 640 Basic Concepts of the School Health Program. 2 hrs
To provide school personnel with an opportunity to study and understand the function of the total school health program with special emphasis upon the classroom teacher.

HED 643 Problems in Community Health. 2 hrs
Community health problems and the forces operative in their solution; the role of the educators dealing with the health problems of their environment.
Prereq: HED 640.

HED 645 Problems in Sex Education. 2 hrs
A course designed to help school personnel improve and implement comprehensive sex education programs in the schools, K-12. The focus is on improvement of skills and techniques in teaching and program development.

HED 647 School Health Trends. 2 hrs
Review of recent literature and research in the areas of health service and health instruction; national trends in school health.
Prereq: HED 640.

HED 650 Administration of the School Health Program. 2 hrs
For principals, supervisors, coordinators, athletic directors, and other personnel involved with the administration and leadership in school health programs. Current administrative theory in the implementation and improvement of school programs.
Prereq: HED 640.

HED 679/680/681 Special Topics. 1/2/3 hrs
Experimental course(s) designed to investigate specific topics of concern in the specialization areas of study in health education.
Prereq: Department permission.

HED 694 Seminar. 2 hrs
A specialized seminar in the area of athletics with the central theme to be announced.

PHYSICAL EDUCATION COURSES

PED 505 Basic Statistics. 2 hrs
Statistical procedures, distribution, measures of central tendency, measures of dispersion and correlation.

PED 506 Test Construction. 2 hrs
Types of written tests and examinations; construction, selection, and interpretation of results.

PED 521 Legal Liability of Educators and Athletic Coaches. 2 hrs
An elective course designed to provide an opportunity for students to explore the provisions of state legislation, common law, governmental immunity, and the legal defenses to the tort of negligence as they relate to the avoidance of being successfully named as a defendant in civil litigation alleging professional negligence.
Prereq: Graduate standing or permission of the Graduate School.

PED 561 Supervision of Physical Education. 2 hrs
Problems, relationships, and procedures in the supervision of physical education programs.

PED 562 Facility Planning and Development. 2 hrs
Terminology, standards for planning, construction, use and maintenance of facilities in health, physical education, recreation, and athletics.

PED 565 Problems in Intramural and Extramural Sports. 2 hrs
Organization and administration of intramural and extramural sports in junior and senior high schools; practical aspects of programming for groups and individuals.

PED 566 Sport in American Society. 2 hrs
A study of significance of sport in American society with emphasis upon sport in the context of American culture, sport and social institutions in American society, socialization and sport, and some projections concerning the future of American sport.

PED 568 Physical Fitness. 2 hrs
Current theories and practices in the development of physical fitness in our society; evaluation of school programs.

PED 570 Critical Analysis of Physical Education. 2 hrs
The expanding of physical education and the physical educator; an analysis of research in the foundation sciences and in philosophy.

PED 578 Motor Learning and Development. 2 hrs
A study of the development of motor skills in children as related to their age and growth patterns with an investigation of major theories and research in learning as applied to motor skills.

PED 579 Physical Education for Mentally Impaired. 2 hrs
Physical education curriculum and programming for the mentally impaired. Content includes program goals, assessment, prescription, teaching, and program evaluation. Emphasis will be placed on adapting materials and utilizing alternative teaching strategies to individualize instruction.

PED 580 Comparative Physical Education. 2 hrs
The historical heritage of physical education from early Greek studies of aims, objectives, and programs of ancient and modern cultures.

PED 581 Physical Education for Students with Disabilities. 2 hrs
Physical education curriculum and programming for the impaired student. Content includes program goals, assessment, prescription teaching, and program evaluation. Emphasis will be placed on adapting materials and utilizing alternative teaching styles to individualize instruction in both main-streamed and segregated teaching situations.

PED 585 Physical Education in Elementary Schools. 2 hrs
Curriculum development, teaching methods, program planning, and evaluation for the physical educator and the elementary school teacher; purposes and principles of organization and development of a physical education program for elementary schools.

PED 586 Physical Education in Secondary Schools. 2 hrs
Developing a physical education curriculum for secondary schools; problems involved in supervision.

PED 587 Philosophy of Physical Education. 2 hrs
The development of concepts of physical education and their impact on the society in which we live.
Prereq: Major/Minor.

PED 588 Administrative Problems in Physical Education. 2 hrs
The case study approach to the understanding of problems in physical education and athletics; planning, organizing, developing, staffing, coordinating, and budgeting programs.
Prereq: Major/Minor.

PED 589 Advanced Physical Testing. 2 hrs
The application and interpretation of advanced physical tests in the areas of health, physical education, recreation and athletics.
Prereq: Major/Minor.

PED 590/591/592 Special Topics. 1/2/3 hrs
Experimental course(s) designed to investigate specific topics of concern in the specialization areas of study in physical education.
Prereq: Department permission.

PED 595 Workshop. 2 hrs
A specialized workshop in the area of physical education with the central theme to be announced.

PED 606/607/608 Colloquium. 1/2/3 hrs

PED 630 Basic Electrocardiography. 3 hrs
A two-hour lecture course on the basics of electrocardiography including EKG leads, EKG waves, time intervals, rate, normal rhythm, cardiac arrhythmias, basic axis determination, hypertrophy, ischemia, injury, infarction, blocks, exercise EKGs, pacemaker rhythm, and drug effects on the EKG.

PED 637 Techniques for Graded Exercise Testing. 3 hrs
Students will demonstrate appropriate knowledge of functional anatomy, exercise physiology, patho-physiology, and electrocardiography in order to administer graded exercise tests. Students will demonstrate their ability by helping to screen participants, administering tests, recording data, implementing emergency procedures, and summarizing data.

PED 640 Advanced Exercise Physiology. 2 hrs
A course designed to emphasize the cardio-respiratory and muscular adaptations that occur in the human during physical activity, especially as it relates to the preventive and rehabilitative aspects of exercise.
Prereq: PED 200 Anatomy and Physiology and PED 300 Physiology of Exercise.

PED 665 Sport Psychology. 2 hrs
This course will attempt to familiarize the student, whether coach, athlete, or teacher, with scientific psychology as it relates to sport. The complex nature of optimal performance requires that an integrated psychological and physiological approach be employed. Therefore, theoretical and empirical evidence from the fields of applied psychology, applied physiology, and sports medicine will be used to help the teacher-coach be more effective.

PED 668 Sport Training and Physical Fitness. 2 hrs
A study of current literature pertinent to the administration, exercise evaluation and implementation of adult and school fitness programs. Components of the physical training process and its importance to various sports are also examined.

PED 670 Current Problems in Physical Education. 2 hrs
Identification, discussion, and analysis of current problems and issues which confront the physical educator.

PED 677 Research Techniques. 2 hrs
Research in a variety of settings; reviewing published research, participating in research, presenting a plan for a research problem.

PED 679/680/681 Special Topics. 1/2/3 hrs
Experimental course(s) designed to investigate specific topics of concern in the specialization areas of study in physical education.
Prereq: Department permission.

PED 686/687/688/689 Internship. 1/2/3/4 hrs
A directed field experience in a department-approved agency or institution under the direction of certified personnel. Arrangements must be approved by adviser prior to registration.
Prereq: Department permission.

PED 690/691/692 Thesis. 1/2/3 hrs
A culminating experience for electing Master degree candidates.
Prereq: Department permission.

PED 694 Seminar. 2 hrs
A specialized seminar in the area of physical education with the central theme to be announced.

PED 697/698/699 Independent Study. 1/2/3 hrs
An intensive study of a problem under the direction of a University faculty member.
Prereq: PED 677 or equivalent.

LEADERSHIP AND COUNSELING

Martha W. Tack
Department Head
34 Boone Hall
487-3249

The Department of Leadership and Counseling offers the two following program areas: educational leadership and guidance and counseling. The educational leadership program awards the Master of Arts degree, the Specialist in Arts degree and the institution's first doctoral degree, the EdD. The guidance and counseling program offers both the Master of Arts degree and the Specialist in Arts degree.

Both programs have the flexibility and content to provide education to a broad range of professionals seeking training for leadership, counseling, and college student personnel services in diverse agencies and organizations. The specific requirements and class offerings follow.

EDUCATIONAL LEADERSHIP PROGRAMS

William M. Hetrick
EDL Doctoral Program Coordinator and Coordinator of Advising
13 Boone Hall
487-0255

The educational leadership programs leading to the Master of Arts degree, the Specialist in Arts degree, and the Doctor of Education degree, as well as individual courses, are of interest and assistance to professional educators generally. For prospective or practicing administrators, the programs provide basic administrative course offerings as well as opportunities to specialize in administration for elementary, middle, and secondary schools, central office, and higher education levels.

In addition, persons preparing for leadership positions in the many other areas of education (e.g., adult education, business management, career education, community education, personnel, school and community relations, administration of vocational and technical education, etc.) will find an appropriate selection of courses. Many of the courses offered are excellent electives for students pursuing advanced degrees in other departments.

Program formats have been designed to provide flexibility in course selection to accommodate each student's unique experiences and future career goals. Course selections should reflect the student's career aspirations and Michigan administrative certification requirements. The program is usually planned to prepare the student for a specific educational administrative position. More complete information may be obtained by contacting the advising coordinator.

MASTER OF ARTS (LEADERSHIP)

MODEL

The development of leaders with the knowledge, skills, and attitudes for helping to build learning communities within a culturally diverse society.

ADMISSION REQUIREMENTS

The faculty within the Educational Leadership program believes that it is important to take a holistic approach when considering the admission of students. Since past practice indicates that no one measure is an accurate assessment of a student's potential, it becomes critically important to use a variety of admission

criteria in assuring that the admission process is free of any racial or cultural bias. Because of this, the program relies on reviewing the following data that make up a student's admission portfolio before determining whether or not that student should be admitted.

- A. Students must have graduated from a regionally accredited program.
- B. All applicants must have submitted scores on the analytical, quantitative, and verbal tests of the Graduate Record Examination (GRE). The GRE scores may not be more than five years old.
- C. International students must submit scores on the Test of English as a Foreign Language (TOEFL) of 550 (total) or the Michigan English Language Ability Battery (MELAB) of 80. They must also submit a minimum score of 230 on the Test of Spoken English (TSE). These tests are to have been taken within the past five years.
- D. Students applying for their first master's degree must have an undergraduate gradepoint average (GPA) of 2.5 overall or a GPA of 2.75 in the second half of the undergraduate program. Students who are applying for a second master's degree must have a GPA of 3.0 or better on their previous graduate degree. Applicants for specialist degrees must have a 3.3 (B+) gradepoint average on the completed master's degree or a favorable score on the Miller Analogies test.
- E. All applicants for the master's degree must submit positive recommendations from two professional supervisors and/or supervising professors which will give indications of the quality of their professional work. (Forms will be sent once the Program receives a student's application from the Graduate School.) Applicants for the specialist degree must have three favorable recommendations from supervisors. (Applicants are to use EDL's "Confidential Appraisal Forms.")
- F. All students will submit a one-page resume which will detail their work history and their educational experiences.
- G. On their graduate application, students must complete the *Graduate Admission and Academic Statement* section describing the reason for requesting admission. This prepared statement will be reviewed as an indicator of writing ability.
- H. Hold a valid teaching certificate or sign a waiver.

ADMISSION PROCESS

The admission process for the master's degree is as follows.

- A. The Graduate School will receive and gather all required documents, except the EDL "Confidential Appraisal Forms." Completed applications which contain test scores, the required gradepoint averages, a copy of the teaching certificate or waiver, and the resume will be forwarded to the coordinator of advising for the educational leadership program. At that time, the "Confidential Appraisal Forms" will be sent to candidates. Such applications shall be "admitted pending department review."
- B. Upon receipt of the completed "Confidential Appraisal Forms," applications will be reviewed by the Faculty Review Committee. Those applications which include acceptable gradepoint averages, the resume, recommendations, test scores, and goal statements will be admitted, assigned an adviser, and invited for an advising interview. Applications may be found "questionable" because of a combination of low gradepoint average, fair or poor recommendations, poor writing ability, and/or statements which are inconsistent with the student's goals as an administrator.
- C. These "questionable" applications will be reviewed by the full faculty, giving special consideration to the student's age, life experiences, verbal skills, writing skills, educational background, gradepoint averages, and scores on the Graduate Record Examination.

- D. Those applications which are accepted will be notified as in B above. The other applications will be returned to the Graduate School to be notified by the Graduate Dean.
- E. If a student wishes to appeal the admission decision, he or she will follow the steps indicated below.
 1. Students who are not admitted by the Graduate School may appeal on the basis of additional positive information and evidence about their ability to succeed in the graduate program in educational leadership. This evidence will be reviewed by the faculty, giving special consideration to the student's age, life experiences, verbal skills, and educational background. Included as part of this review will be scores on the GRE and/or Miller Analogies Test (MAT).
 2. Additional evidence and the original application will be forwarded to the EDL coordinator of advising.
 3. The full faculty will review and make the final recommendation for admission to the Graduate School. The faculty may invite the appellant for an interview to assist in making the final recommendation.
 4. If accepted, the student will be notified and assigned as in B above. Students not accepted will be notified by the EDL coordinator of advising and the Dean of the Graduate School.

RETENTION REVIEW REQUIREMENTS

A retention review will be conducted by the Faculty Review Committee and coordinated by the EDL coordinator of advising. Students who have not met the following criteria will be identified and requested to meet with their academic advisers.

1. A minimum GPA of at least 3.25 in required EDL courses.
2. An overall interpersonal skills rating of "average" or above in both EDL 510 and 514. (See the "Leadership Candidate Evaluation Form" below.)
3. An overall academic skills assessment of "average" or above in any educational leadership class.

RETENTION PROCESS

The objective of this retention plan is to assure that students have an opportunity to review the appropriateness of their career choice and to receive assistance in achieving their master's degree in educational leadership should they choose to continue in the field. The retention review will be conducted by the EDL coordinator of advising with the Faculty Review Committee.

1. Each semester, faculty who teach EDL 510 and 514, in addition to assigning grades, will complete a "Leadership Candidate Evaluation Form" for each student and will assign a value of "outstanding, above average, average, below average, or seriously lacking" on each of the 12 generic leadership skills listed. These forms will be filed in the student's folder.
2. In addition, the "Leadership Candidate Evaluation Form" must be completed for students who receive less than a "B" in any educational leadership class. Faculty may complete the "Leadership Candidate Evaluation Form" for any student in any class, if they choose to do so. These forms will be filed in the student's folder.
3. Each semester the Graduate School will review the gradepoint average (GPA) of each student completing 12 hours (which must include EDL 510 and 514). The EDL coordinator of advising will examine the files of all students who did not achieve the required GPA and recommend review by the Faculty Review Committee.
4. The folders, with the evaluation forms for this group of students, will then be reviewed by the Faculty Review Committee. If the Committee agrees that the record of each student indicates performance below graduate or program

standards, the student and his or her adviser will be notified in writing.

5. The EDL coordinator of advising will send a letter to each identified student requesting him or her to meet with his or her adviser to discuss career goals and the need for assistance. If the need for assistance is established, a plan will be developed. For example, if difficulties exist with skill or concept acquisition, the student may be required to audit a class.

EXIT REQUIREMENTS

- A. Prior to application for graduation, a student must submit a portfolio to the adviser containing a paper on an identified area of educational leadership theory or practice. The paper must have the signature of an EDL instructor indicating approval for inclusion.
- B. Each student will include a comprehensive paper on a current issue/practice in educational leadership in the portfolio. In addition, the student must make an oral presentation of the contents of the paper to the adviser and one other regular EDL program faculty member. In this paper the student must demonstrate problem-solving, leadership, communication, technological, human relations, research, and analytical skills as well as professionalism and ethics.
- C. A third paper developed in any other class on the student's master's degree program demonstrating communication skills and intellectual facility must be submitted by the student for the file. The paper must have the instructor's signature indicating approval for inclusion.
- D. Students must have a GPA of 3.0 or better.

EXIT PROCESS

- A. One semester prior to graduation, students must obtain from the Educational Leadership program office a form describing the materials they will need for approval of graduation. During this particular semester, the materials identified must be assembled in the student's portfolio.
- B. During the last semester, the required portfolio is submitted to the adviser.
- C. The academic adviser will review and discuss the portfolio with the student and make a recommendation to the Faculty Review Committee.
- D. The Faculty Review Committee will give final approval for graduation to the Graduate School or return the portfolio to the adviser for further review.

CURRICULUM REQUIREMENTS

Following admission and prior to initial registration for classes, the student should consult with a program adviser, who will assist in the development of an official program of study. Candidates for the master's degree in educational leadership must satisfactorily complete all work on the program of study (i. e., a minimum of 30 semester hours of graduate credit). The requirements outlined below provide the basic guidelines within which students' programs are developed.

Core Requirements

20 semester hours in educational leadership courses selected with the approval of the adviser and reflecting State of Michigan requirements for administrative certification.

For *building-level administrator* (i. e., elementary principal or secondary principal), the following courses must be completed:

EDL 510 Educational Organization
 EDL 512 Community Education
 EDL 513 Education and Community Relations
 EDL 514 Educational Leadership
 EDL 515 Supervision of Instruction
 EDL 517 Evaluation of Educational Services
 EDL 612 Economics of Public Education
 EDL 617 Administration of Educational Personnel
 EDL 630 Legal Aspects of Administration
 And one of the following:
 EDL 618 Elementary School Principalship
 EDL 620 Senior High School Principalship

For *chief school business officials' certification*, these 22 credit hours are required:

EDL 510 Educational Organization
 EDL 514 Educational Leadership
 EDL 517 Evaluation of Educational Services
 EDL 610 Accounting for School Administrators
 EDL 612 Economics of Public Education
 EDL 616 Educational Facilities Planning
 EDL 617 Administration of Educational Personnel
 EDL 624 School Business Management
 EDL 630 Legal Aspects of Administration
 EDL 650 Advanced School Finance
 EDL 680 Special Topics: Administrative Use of Computers

For *central office certification*, 30 hours are required; these 30 hours include the 20 core hours required for building-level certification and any additional 10 hours of educational leadership course credit approved by the student's adviser. Typically, people seeking central office certification will complete all of their supportive area course work in educational leadership; therefore, upon completion of the master's degree, the student will have completed 28 of the required 30 educational leadership hours. After the master's degree is finished, the student will need to enroll in one additional class in educational leadership for 2 semester hours in order to meet certification requirements.

Basic Concentration (16 hours)

Each student at the master's degree level must complete at least 16 hours of EDL coursework to satisfy degree requirements in the major field. These 16 hours are specified for students who wish to meet certification requirements (as outlined previously). Students who do not wish to complete requirements for certification are required to complete EDL 510 and EDL 514; the remaining 12 hours of EDL coursework will be selected by the student and adviser, based on the student's professional goals.

Supportive Area (10 hours)

EDP 677 Research Techniques (2)

Other supportive courses may be selected from educational leadership courses, other College of Education courses, or courses outside the College of Education. These courses should support the student's professional objectives and be approved by an adviser. Students pursuing central office certification will complete 8 of the 10 semester credit hours in educational leadership coursework; the additional 2 semester hours required for endorsement must be completed after the master's degree program requirements are fulfilled.

Residency Requirement

6 semester hours must be taken on campus or at the Flint Center in order to meet residency requirements.

SCHOOL COUNSELOR ENDORSEMENT

Students in educational leadership who would like to also obtain school counselor endorsement should discuss this

goal with their program adviser prior to enrolling in classes or developing a program of study.

STATE OF MICHIGAN ADMINISTRATIVE CERTIFICATION

The State of Michigan requires all public school administrators to hold valid administrative certification. This certification consists of five possible endorsements: elementary principalship, secondary principalship, chief school business official, central office, and superintendent. Administrators must hold the endorsement appropriate to the job for which they are employed.

Eastern Michigan University's educational leadership program is authorized to recommend all five endorsements. All candidates for endorsement must hold a master's degree, have a valid teaching certificate appropriate for the area of endorsement or a waiver for chief school business official, have three years of successful teaching at a level that matches the endorsement sought, and have had or currently hold admission to the educational leadership program at Eastern Michigan University. In addition to these conditions, the candidate must meet the following requirements:

Elementary Principalship - 20 hours of approved educational leadership classes. (See information about the Master's degree program.)

Secondary Principalship - 20 hours of approved educational leadership classes. (See information about the master's degree program.)

Chief School Business Official - 22 hours of approved educational leadership classes.

(See information about the master's degree program.)

Central Office - 30 hours of approved educational leadership classes

(See information about the master's degree program.)

Superintendent - 40 hours of approved educational leadership classes.

(See information about the specialist degree program.)

Candidates may apply for each endorsement for which they qualify. Information and application forms can be obtained by contacting the Coordinator of Administrative Certification, educational leadership program, 13 Boone Hall, (313) 487-0255.

SPECIALIST IN ARTS (LEADERSHIP)

MODEL

The development of leaders with the knowledge, skills, and attitudes for helping to build learning communities within a culturally diverse society.

ADMISSION REQUIREMENTS

- A. Admission requirements for a specialist candidate are as follows:
 1. Compliance with the specialist degree admission requirements of the Graduate School.
 2. A valid master's degree from an accredited graduate school.
 3. A 3.3 ("B+") graduate gradepoint average in the completed master's degree.
 4. A valid teaching certificate or a waiver. (See adviser for waiver provisions.)
 5. A year or more of successful teaching or administrative experience, or equivalent acceptable to the adviser.
 6. Three favorable recommendations from supervisors. (The prospective student will use the educational leadership program's "Confidential Appraisal Form.")

7. Scores from the General Test (Quantitative, Verbal, and Analytical) of the Graduate Record Examination that are not more than five years old.
8. International students must submit scores on the Test of English as a Foreign Language (TOEFL) of 550 (total) or the Michigan English Language Ability Battery (MELAB) of 80. They must also submit a minimum score of 230 on the Test of Spoken English (TSE). These tests are to have been taken within the past five years.
9. All students will submit a one-page résumé which will detail their work history and their educational experiences.
10. On their graduate application, students must complete the *Graduate Admission and Academic Statement* section describing the reason for requesting admission. This prepared statement will be reviewed as an indicator of writing ability.

ADMISSION PROCESS

The admission process for the specialist degree is as follows.

- A. The Graduate School will receive and gather all required documents, except the EDL "Confidential Appraisal Forms." Completed applications which contain test scores, the required gradepoint averages, and the résumé will be forwarded to the coordinator of advising for the educational leadership program. At that time, the "Confidential Appraisal Forms" will be sent to candidates. Such applications shall be "admitted pending department review."
- B. Upon receipt of the completed "Confidential Appraisal Forms," applications will be reviewed by the Faculty Review Committee. Those applications which include acceptable gradepoint averages, the résumé, recommendations, test scores, and goal statements will be admitted, assigned an adviser, and invited for an advising interview. Applications may be found "questionable" because of a combination of low gradepoint average, low test scores, fair or poor recommendations, poor writing ability, and/or statements which are inconsistent with the student's goals as an administrator.
- C. These "questionable" applications will be reviewed by the full faculty, giving special consideration to the student's age, life experiences, verbal skills, writing skills, educational background, gradepoint averages, and scores on the Graduate Record Examination.
- D. Those applications which are accepted will be notified as in B above. The other applications will be returned to the Graduate School to be notified by the Graduate Dean.
- E. If a student wishes to appeal the admission decision, he or she will follow the steps indicated below.
 1. Students who are not admitted by the Graduate School may appeal on the basis of additional positive information and evidence about their ability to succeed in the graduate program in educational leadership. This evidence will be reviewed by the faculty, giving special consideration to the student's age, life experiences, verbal and writing skills, and educational background. Included as part of this review will be scores on the GRE.
 2. Additional evidence and the original application will be forwarded to the EDL coordinator of advising.
 3. The full faculty will review and make the final recommendation for admission to the Graduate School. The faculty may invite the appellant for an interview to assist in making the final recommendation.
 4. If accepted, the student will be notified and assigned as in B above. Students not accepted will be notified by the EDL coordinator of advising and the Dean of the Graduate School.

RETENTION REVIEW REQUIREMENTS

A retention review will be conducted by the Faculty Review Committee and coordinated by the EDL coordinator of advising. Students who have not met the following criteria will be identified and requested to meet with their academic advisers.

1. A minimum GPA of at least 3.3 in required educational leadership courses.
2. An overall interpersonal skills rating of "average" or above in EDL 710 and 712. (See the "Leadership Candidate Evaluation Form" below.)
3. An overall academic skills assessment of "average" or above in any educational leadership class.

RETENTION PROCESS

The objective of this retention plan is to assure that students have an opportunity to review the appropriateness of their career choice and to receive assistance in achieving their Specialist in Arts degree in educational leadership should they choose to continue in the field. The retention review will be conducted by the EDL coordinator of advising with the Faculty Review Committee.

1. Each semester, faculty who teach EDL 710 and 712, in addition to assigning grades, will complete a "Leadership Candidate Evaluation Form" for each student and will assign a value of "outstanding, above average, average, below average, or seriously lacking" on each of the 12 generic leadership skills listed. These forms will be filed in the student's folder.
2. In addition, the "Leadership Candidate Evaluation Form" must be completed for students who receive less than a "B" in any educational leadership class. In addition, faculty may complete the Leadership Candidate Evaluation Form for any student in any class, if they choose to do so. These forms will be filed in the student's folder.
3. Each semester the EDL coordinator of advising will examine the files of all students who did not achieve the required GPA and recommend review by the Faculty Review Committee.
4. The folders, with the evaluation forms for this group of students, will then be reviewed by the Faculty Review Committee. If the Committee agrees that the record of each student indicates performance below graduate or program standards, the student and his or her adviser will be notified in writing.
5. The EDL coordinator of advising will send a letter to each identified student requesting him or her to meet with his or her adviser to discuss career goals and the need for assistance. If the need for assistance is established, a plan will be developed. For example, if difficulties exist with skill or concept acquisition, the student may be required to audit a class.

CULMINATING EXPERIENCE

The culminating experience for the specialist degree will be an oral examination (maximum of one hour) over the student's field-based research study and the student's internship experiences as set forth in his/her written log. The examination will be scheduled during the student's last semester in the program and following the completion of both the internship and the field-based research study. The examination will be conducted by the Director of the Intern Program, the director of the field-based research study, and the student's adviser.

CURRICULUM

The specialist degree program requires a minimum of 32 semester hours beyond the master's degree. Students who have earned their master's degree from other departments at Eastern Michigan University or at other institutions will be required to

remove master's degree level deficiencies. Students work closely with their advisers in developing programs that will prepare them for their career goals and for Michigan administrative certification.

Candidates for the specialist degree in educational leadership must satisfactorily complete all work on the program of study, including the following:

A minimum of 62 semester hours of graduate credit applicable to the program (32 semester hours beyond the 30 semester hour master's degree program). The requirements outlined below provide the basic guidelines within which the student's programs are developed.

- A. Completion of a master's degree in educational leadership or equivalent coursework.
- B. Concentration Area (16 hours)
 - EDL 710 Leadership Theory (2 hours) and 14 hours of educational leadership electives. These courses in educational leadership are selected with approval of the adviser and reflect the student's professional needs and objectives as well as Michigan certification requirements.
- C. Applied Research (10 hours)
 - EDL 712 Analysis of Research in Administration (2 hours)
 - EDL 713 Field-Based Research (4 hours)
 - EDL 789 Internship (4 hours)
- D. Cognates (6 hours)

These courses are elected from either educational leadership or other University departments and should complement the program goal. If the student did not complete an introductory statistics course during his or her master's degree program, he or she will be required to take EDP 621 Statistical Applications in Educational Research (2 credit hours) as a requirement for completion of the SpA degree.

- E. Residency Requirements
 - 16 hours of on-campus credit or 12 hours on campus and 4 hours at the Flint Center will fulfill residency requirements for the specialist degree.
- F. An overall GPA of 3.3 (B+) is required for graduation.
- G. Administrative Certification

Course work completed at the specialist level will enable students interested in school administration to qualify for Michigan superintendent's certification. Students at the specialist level who desire administrative certification must have satisfied the 20 hours of core requirements set forth at the master's level or take these as deficiencies. Central office certification includes these 20 hours plus any 10 additional educational leadership hours. Chief school business official's certification entails completion of 22 designated educational leadership hours. Superintendent's certification requires the 20 core hours plus 20 additional educational leadership hours including EDL 625.

ADDITIONAL PROGRAM INFORMATION

Course Substitutions/Program Changes

Changes in the student's official program and substitution of courses must be approved by the adviser prior to registration. With the approval of the student's adviser, one course may be substituted from another area for a course in the educational leadership core if the course is administrative in nature. Such a course cannot carry more than three hours of credit.

Courses Outside the Program

A suggested list of courses has been prepared by the EDL Program. Other courses may be used in this area if they are approved by the student's adviser.

Internships

Information is available from the director of the intern program. Internship placements should be arranged at least one year in advance.

Field-based Research

EDL 713 is offered only during the fall and winter semesters. Students must contact the department at least two semesters prior to registration for the class to reserve a place in the class.

DOCTOR OF EDUCATION (LEADERSHIP)**MODEL**

The development of leaders with the knowledge, skills, and attitudes for helping to build learning communities within a culturally diverse society.

ADMISSION REQUIREMENTS

The doctoral program requirements as stated in the Graduate Bulletin are the basis for admission and completion of the doctorate in educational leadership. Please refer to the appropriate section of the Graduate Bulletin for details. To be eligible for admission to the doctoral program in educational leadership at Eastern Michigan University, the applicant must meet the following departmental requirements.

For Students with a Master's Degree

- A. An earned master's degree from an accredited university with a minimum gradepoint average of 3.75 on a 4.0 scale for full admission.

*For Students with a Specialist Degree***B. Option 1:**

The Educational Leadership (EDL) program faculty expect doctoral applicants to meet the admission criteria specified below. However, by utilizing a holistic approach to admission, the inability to meet one specific criterion will not eliminate an individual from consideration. The expectations for admission to the doctoral program in educational leadership at Eastern Michigan University are as follows:

1. Completion of the Specialist in Arts (SpA) degree from Eastern Michigan University.
2. A score of 1500 on the General Test (quantitative, analytical, and verbal scores) of the Graduate Record Examination (GRE). A minimum score of 1250 is required.
3. A 3.75 GPA on all graduate work completed.
4. Prior or current experience in an administrative/leadership position.
5. Satisfactory performance during a personal interview with faculty.
6. Outstanding references from professionals with whom the applicant has worked.

Upon admission, the student is eligible to apply 32 semester hours of credit toward completion of the 60-hour doctoral program; the determination of which hours can be counted will rest with the student's doctoral adviser.

Option 2:

Students who hold the Specialist in Arts (SpA) or the Educational Specialist (EdS) degree from an accredited institution of higher education (other than Eastern Michigan University) are eligible to be considered for admission to the doctoral program. These individuals are expected to meet the same admission requirements as specified for individuals completing the EMU specialist degree (i.e., 2-6 in Option 1).

Upon admission to the doctoral program, students holding the specialist degree from another institution may request that a maximum of 15 semester hours be applied toward the 60 hours required for completion of the EdD. The doctoral adviser will evaluate the transcript and determine which courses can be used.

Additional Requirements

- C. The educational leadership program requires an applicant to submit the following materials for review:
1. A valid teaching certificate or waiver; (See adviser for waiver provisions.)
 2. A departmental application form;
 3. An essay (approximately 500 words in length) describing the student's background, goals, and commitment to the field of educational leadership;
 4. A letter of endorsement and an evaluation form completed by each of the following:
 - a. The student's immediate supervisor,
 - b. A peer, and
 - c. A past supervisor or professor.

ADMISSION PROCESS

The admission process for the doctoral degree is as follows.

- A. The Graduate School will receive the Graduate School application form, test scores, and the required transcripts and, if appropriate, will admit the student to study at Eastern Michigan University. All other application materials will be sent directly to the EDL doctoral program coordinator.
- B. Upon receipt of the completed applications by the deadline date established by the faculty (usually around February 15), the credentials will be reviewed by the educational leadership program (EDL) faculty, and selected people will be invited to complete a personal interview with the EDL Program faculty.
- C. Personal interviews will be conducted by the faculty and the 10 candidates with evidence of the greatest potential to succeed in the doctoral program will be selected annually and notified of their admission by the doctoral program coordinator.
- D. If a student wishes to appeal the admission decision, he or she will follow the steps indicated below.
 1. Students who are not admitted to the doctoral program may appeal on the basis of additional written positive information and evidence about their ability to succeed in the doctoral program in educational leadership. This evidence will be reviewed by the educational leadership program faculty, giving special consideration to the student's age, life experiences, verbal and writing skills, and educational background. After reviewing the additional materials, the faculty may request an interview with the candidate. Based on the information available, the EDL program faculty will make a recommendation about admission to the Head of the Department of Leadership and Counseling.
 2. After reviewing additional evidence presented, the recommendation of the faculty in the EDL Program, and the availability of positions in the particular doctoral class, the Department Head will render a judgment about admission.
 3. If the student remains dissatisfied with the decision, he or she may appeal to the Dean of the College of Education for admission; the decision of the Dean of the College of Education shall be final.

RETENTION REVIEW REQUIREMENT

A retention review will be conducted at the end of the doctoral students' first academic year by each student's doctoral adviser. Students who have not met the following criteria will be identified and requested to meet with their doctoral advisers.

1. A minimum GPA of at least 3.5 in required educational leadership courses.
2. An overall interpersonal skills rating of "average" or above in EDL 810 and 794. (See the "Leadership Candidate Evaluation Form" below.)

RETENTION PROCESS

The objective of this retention plan is to identify students who need additional assistance in order to complete the doctoral program successfully. The retention review will be conducted by student's doctoral adviser, with assistance provided by the EDL doctoral program coordinator and the Department Head.

1. Faculty who teach EDL 810 and EDL 794, in addition to assigning grades, will complete a "Leadership Candidate Evaluation Form" for each doctoral student and will assign a value of "outstanding, above average, average, below average, or seriously lacking" on each of the 12 generic leadership skills listed. These forms will be filed in the student's folder.
2. In addition, the "Leadership Candidate Evaluation Form" must be completed for doctoral students who receive less than a "B+" in any educational leadership class. These forms will be filed in the student's folder.
3. At the end of the doctoral students' first academic year, the EDL program faculty will review the files of all doctoral students; if concerns surface about any student, the doctoral adviser will schedule a meeting to discuss problems, concerns, and issues; if a need for assistance is established, a plan will be developed by the student and the adviser.

INTERNSHIP

The application of conceptual, technical, and human relations skills essential to successful educational leadership (i.e., the testing of theory against prevailing practice) is best observed and explored when there is direct involvement in administration. Students, serving as administrative interns, complete a minimum of 200 clock hours of service at the internship site in an area related to their career goals. The internship is supervised by an experienced educational administrator and the director of the intern program in the educational leadership program.

The internship is normally completed as the final experience of the Specialist in Arts degree program. For students who do not wish to qualify for the Sp.A. degree, the internship must be finished prior to the completion of the comprehensive qualifying examination.

In addition to completion of the planned program of study, each student in the EdD program must complete a residence experience and a comprehensive qualifying examination. These important aspects of the doctoral program are described below.

RESIDENCE REQUIREMENT

The residence requirement must be completed after admission is granted to the EdD program, and the faculty in the educational leadership program expect the student to become a member of a community of scholars during the residence experience. In order to satisfy this requirement, students must enroll in a total of 16 semester hours of on-campus course work, exclusive of dissertation research during two successive semesters in a 12-month period and must be available to participate in all activities planned for students who are in residence (i. e., 8 semester credit hours in each semester in residence). A second residency option is offered for the benefit of the doctoral student who wishes to continue his/her employment while working on the doctoral degree. Specifically, the doctoral requirement for residence following the specialist degree may also be met by completion of 12 semester hours within a one-year period, exclusive of dissertation research. Compliance with the aforementioned would be met as follows:

Fall	Winter	Spring/Summer
2 Courses	2 Courses	2 Courses
(four semester hrs. at present)	(four semester hrs. at present)	(four semester hrs. at present)

Only course work on the University's main campus satisfies the residency requirements.

COMPREHENSIVE QUALIFYING EXAMINATION

Students involved in the Ed.D. program will take a 14-hour comprehensive qualifying examination (i. e., 12 hours written and 2 hours oral), as a means of demonstrating their ability to integrate a wealth of information into a meaningful whole. Each student will be expected to show subject mastery of the major (educational leadership) and the cognate in terms of the literature base, concepts, philosophy, research, and issues/problems. Each student also must provide evidence that he or she can analyze and synthesize information as well as draw appropriate conclusions.

The written examination will cover two days. During the first day, all students will write on common questions selected from 1) theories of educational leadership, 2) ethics, and 3) community education and school/community relations. On day two, two hours will be spent on a question from the student's cognate area. In addition, students will write on four other questions for one hour each selected from 1) supervision, evaluation, and staff development; 2) school finance; 3) collective negotiations; 4) human relations skills; 5) curriculum; and 6) educational law. The "common" portion of the examination will be developed and read by the educational leadership program's Doctoral Examination Committee, and the individual portion of the examination will be developed and read by the student's doctoral committee.

The second part of the examination will be a two-hour oral examination during which any areas of the student's written examination may be pursued in greater depth by members of the doctoral committee.

Failure on the written portion of the comprehensive qualifying examination (either partially or totally) will cause the student's performance in the program to be reviewed by the doctoral committee, in consultation with the Department Head. The doctoral committee will then recommend that either the student be dismissed from the doctoral program, be permitted to withdraw from the program, or be allowed to retake the examination (either partially or totally) after a remediation plan has been developed and implemented. Re-examination may not take place until at least six months have elapsed but must occur within one year. The results of the second examination are final. After the second written attempt, if the student's doctoral committee chooses to do so, the members may ask the student to participate in an intensive oral examination. If, after the oral examination, the doctoral committee members maintain that the student has not achieved the level of proficiency needed by a professional in the field of educational leadership, the recommendation will be made to the Graduate Dean that the student be dismissed from the Ed.D. program.

CURRICULUM

A doctoral student's individualized course of study is normally expected to encompass at least 60 semester hours of course work beyond the master's degree. The exact number of hours will be determined by the student's program adviser, based on a review of previous graduate transcripts, the student's professional and personal aspirations, and Ed.D. degree requirements as set forth by the Graduate School and the Department of Leadership and Counseling. Therefore, some plans of study will have only 60 semester hours while others may include additional hours (either courses designed to remove deficiencies or classes focused on enhancing opportunities for leadership success) at the discretion of the program adviser and doctoral committee members. The typical program of study will be divided into the following five components:

Component	Semester hours required
Major (Educational Leadership)	20
Cognate	10
Research	10
Dissertation Research	16
Internship	4

Major (Educational Leadership)

The 20 hours in the major are composed of educational leadership courses identified by the student and his/her program adviser. When the candidate completes the Specialist in Arts in educational leadership, 16 of the 20 hours are satisfied. The 16 hours include EDL 710 Leadership Theory (2 hours) plus 14 hours of electives. Paramount in making selections about these courses are degree requirements and the student's career, personal, certification, and professional goals. In addition the student must take the following two courses at the doctoral level: EDL 794 Seminar: Administration and Supervision and EDL 810 Ethics and Policy Analysis for Educational Leaders. Upon completion of this individualized program of study in the major, the student will have the requisite knowledge needed to fill a leadership role in a preferred area of service.

Cognate

The adaptability of the program is again apparent in the opportunity for doctoral students and program advisers to construct a cognate which contributes significantly to a student's development as a professional educator and administrator. A cognate is an area of specialization developed through completion of a sequence of related courses that are designed to add depth to the student's doctoral program. In order to provide maximum flexibility in meeting individual student needs, the 10-hour cognate may be completed in any one or a combination of graduate academic units, departments, schools, or colleges of the University that offer a sufficient number of advanced graduate courses. A representative of the cognate area will serve as a member of the student's doctoral committee.

Research

The third major segment of the doctoral program is designed to enable the student to accomplish the following:

- A. Demonstrate competence in research design, analysis, and the use of research tools.
- B. Conduct useful research.
- C. Operate as an informed consumer of educational research.

In order to meet these outcomes, the program of study includes 10 semester hours of course work in research. Upon completion of the specialist degree by the candidate, 6 of the 10 hours are satisfied. (If the student did not complete an introductory statistics course during his or her master's degree programming, he or she will be required to complete EDP 621 Statistical Applications in Educational Research (2 credit hours) as a requirement for the Sp.A. degree.) These include:

EDL 712 Analysis of Research in Administration (2 credit hours), and
EDL 713 Field-Based Research (4 credit hours).

In addition, the doctoral student must take:

EDP 651 Inferential Statistics (2 credit hours), and
EDP 652 Multivariate Statistics (2 credit hours).

Dissertation Research

Each student in the Ed.D. program will be required to complete a dissertation, a document representing an original research effort. The dissertation will focus on an area of particular interest to the student and the dissertation chair; and the research may be conducted using a variety of research designs (causal-comparative, experimental, etc.) as well as approaches (quantitative or qualitative). Overall, the doctoral student must register for a mini-

um of 16 semester credit hours of dissertation research; but he or she may not enroll in dissertation research until he or she has passed the comprehensive qualifying examination and has been admitted to candidacy by the Graduate School. It should be noted that this stipulation does not preclude the student's working with the dissertation chair in formulating ideas about the specific research topic. However, the approval of the dissertation proposal cannot occur until after the student has passed the comprehensive qualifying examination. In completing the first 2 semester hours of dissertation research, the student will be required to attend a dissertation research seminar.

When the dissertation is completed, the student will present the written document to the dissertation committee for approval. In a two-hour oral examination/defense, the student will answer questions related to the dissertation research and will defend his or her work. At the conclusion of the oral examination, the dissertation committee will determine 1) if the written document meets doctoral standards of quality and rigor and 2) if the student has successfully defended the research conducted. This process of review and revision will occur until the doctoral committee approves both the written document and the student's oral defense of his or her research.

GUIDANCE, COUNSELING, AND COLLEGE STUDENT PERSONNEL PROGRAMS

John W. Waidley,
G&C Coordinator of Advising
13 Boone Hall
487-3270

Graduate study in guidance and counseling consists of the Specialist in Arts degree program, the Master of Arts degree program, and service course offerings for classroom teachers and graduate students in related fields.

The master's degree program provides entry-level competencies and proficiencies for such positions as elementary school counselors, secondary school counselors, community agency counselors, and college student personnel workers. For more information, contact the coordinator of advising.

The specialist's degree program of studies provides individuals with advanced competencies, enabling them to assume professional counseling and leadership positions. The advanced program of graduate studies is directed to those persons aspiring for greater effectiveness in their current employment and advancement in various community and educational settings which require professional counseling skills and knowledge.

MASTER OF ARTS (GUIDANCE AND COUNSELING)

A master's degree program consists of these two major components: a major concentration in guidance and counseling and appropriate courses in cognate areas. Students pursuing graduate study in the school counseling endorsement for elementary or secondary school counselors in Michigan follow the program outline, "School Counselor Program." Students pursuing graduate study in the college student personnel area follow the program outline, "College Student Personnel Program." Students pursuing graduate study in the area of community counseling follow the program outline entitled "Community Counseling."

The specific admission requirements of each program are outlined under the appropriate program description.

MODEL

The school counselor as a caring professional whose focus is on the relationships needed to facilitate the development of students for effective living in a changing global society.

SCHOOL COUNSELOR ENDORSEMENT PROGRAM

ADMISSION REQUIREMENTS

- A. Students must have graduated from a regionally accredited institution.
- B. All applicants must have submitted scores on the analytical, quantitative, and verbal sections of the General Test of the Graduate Record Examination (GRE). The GRE scores may not be more than five years old.
- C. Foreign students must submit scores on the Test of English as a Foreign Language (TOEFL) of 550 (total) or The Michigan English Language Ability Battery (MELAB) of 80. They must also submit a minimum score of 230 on the Test of Spoken English (TSE). These tests must have been taken within the past five years.
- D. Students applying for their first master's degree must have an undergraduate GPA of 2.5 overall or a GPA of 2.75 in the second half of the undergraduate program. Students who are

applying for a second master's degree must have a GPA of 3.30 or better on their previous graduate degree.

- E. All applicants must submit positive recommendations from two professional supervisors and/or supervising professors which will give indication of the quality of their professional work and their potential for counseling. (Forms will be sent with the application.)
- F. All students will submit a one-page résumé which will detail their work history and their experiences related to counseling.
- G. On their graduate application, students must submit the prepared statement on the *Graduate Admission and Academic Statement* form describing the reason for requesting admission. This statement will be reviewed as an indicator of writing ability.
- H. Students applying for admission to the school counselor endorsement program must submit evidence of a valid teaching certificate.

ADMISSION PROCESS

- A. The Graduate School receives and gathers all required documents except the recommendation forms that are collected by the department. Completed applications which include test scores, required grade point averages, and the résumé are to be forwarded to the G&C coordinator of advising. Such applications shall be "Admitted pending Department review."
- B. Recommendation forms are available directly from the Department of Leadership and Counseling's main office and two completed forms should be returned to the G&C coordinator of advising.
- C. Applications are reviewed by the G&C coordinator of advising and one member of the Faculty Review Committee. (See G below.) Students whose applications include acceptable grade point averages, résumé, recommendations, test scores, and goal statements will be admitted, assigned to an adviser, and invited for an advising interview. Each student will complete the Personal Data Sheet and bring it to the advising interview.
- D. Applications may be found "questionable" because of a combination of low grade point averages, fair or poor recommendations, low test scores, and/or goal statements which are unclear or inconsistent with school counseling.
- E. These "questionable" applications will be reviewed by the full Faculty Review Committee, giving special consideration to the student's age, life experiences, verbal skills, writing skills, educational background, grade point averages, and scores on the Graduate Record Examination.
- F. Applicants whose records are accepted by the Committee will be notified as in C above. The other applications will be returned to the Graduate School to be notified by the Graduate Dean.
- G. The G&C coordinator of advising and two other faculty members constitute the Faculty Review Committee. The committee is chaired by the G&C coordinator of advising.

APPEAL

- A. Students who are not admitted by the Graduate School or the Faculty Review Committee may appeal on the basis of *additional positive information and evidence about the student's ability to succeed in the graduate program* in guidance and counseling. This evidence will be reviewed by the Faculty Review Committee, giving special consideration to the student's age, life experiences, verbal skills, writing skills, and educational background. Evidence must, however, include a minimum combined (verbal and quantitative) score of 800 or better on the Graduate Record Examination or 37 or better on the Miller Analogies Test.
- B. Additional evidence and the original application will be forwarded to the G&C coordinator of advising.

- C. The full Faculty Review Committee will review and make the final recommendation for admission to the Graduate School. The Committee may invite the appellant for an interview to assist in the final recommendation.
- D. If accepted, the student will be notified and assigned as in the admission process, as in C above. Students not accepted will be notified by the G&C coordinator of advising and the Dean of the Graduate School.

Students seeking counselor endorsement of their teaching certificates must provide evidence of their valid Michigan teaching certificates at the time of admission. These students are eligible to apply for counselor endorsement of their teaching certificates at the completion of their graduate programs of study.

RETENTION REVIEW REQUIREMENTS

A retention review will be conducted by the G&C coordinator of advising based upon the following criteria.

- A. A GPA of at least 3.25 in required core courses.
- B. An Interpersonal Skills Assessment of "acceptable" or above in both G&C 505 Counselor Development: Basic Skills and G&C 510 Counselor Development: Counseling Process.
- C. Work samples and/or term papers rated acceptable or above.

RETENTION PROCESS

The retention review will be conducted by the G&C coordinator of advising with the Faculty Review Committee.

- A. Each semester faculty who teach G&C 505 Counselor Development: Basic Skills and G&C 510 Counselor Development: Counseling Process, in addition to assigning grades, may complete a Counselor Evaluation Form for each student and will assign a value of "strong," "acceptable," or "questionable" in relation to the demonstrated interpersonal and academic skills needed to qualify as a counselor. A Counselor Evaluation Form must be completed for all students assigned a "questionable" value. These forms will be filed in the student's folder.
- B. In addition, faculty in other core classes *must* complete the form for students who receive less than a "B" in the course. Faculty members *may* complete the form for any student they perceive as having difficulty. These forms are filed in the student's folder.
- C. Each semester the G&C coordinator of advising will review the GPA of students completing 12 hours, which must include G&C 505 Counselor Development: Basic Skills and G&C 510 Counselor Development: Counseling Process. The coordinator will identify all students who did not achieve a GPA of 3.0 or have "questionable" reports on interpersonal or academic skills.
- D. The records of this group of students will be reviewed by the Faculty Review Committee. If the Committee agrees that the record of a student indicates performance below graduate or program standards, the Committee will notify each student that he or she must meet with his or her academic adviser to discuss a plan for remediation.
- E. The student will meet with the academic adviser to discuss the need for remediation and, where necessary, to make such a plan. For example, if difficulties exist with skill or concept acquisition, the student may be required to audit a class. If personal problems or characteristics are thought to interfere with performance, the student may be encouraged to enter counseling.

EXIT REQUIREMENTS

- A. Prior to application for graduation, students must submit a portfolio containing the following items:

- 1. A paper on an identified area of school counseling theory or practice. It is suggested that this paper be developed in G&C 612 The School Counselor; however, it may be developed in another course in the school counseling core, depending on the student's needs and interests.
 - 2. Evidence of an acceptable case study and tape review. (See B below.)
- B. Each student will present a case study which demonstrates his or her analytical skills, communication skills, planning skills, and facilitative skills. This case study must include an audio or video tape which also demonstrates facilitative and counseling skills. These submissions will be reviewed by the student's practicum supervisor and one other regular G&C Program faculty member.
 - C. A second paper developed in any other class on the student's master's degree program which demonstrates communication skills and intellectual facility must be submitted by the student for the file. This paper must have the instructor's signature to show his or her approval for inclusion.
 - D. Students must have a grade point average of 3.0 or better.
 - E. Students must have "CR" in G&C 686 Counseling Practicum I.
 - F. Students must achieve a minimum score (to be determined) on a well standardized test, should it become required by the Michigan Department of Education.

EXIT PROCESS

- A. One semester prior to graduation, students must obtain from the Guidance and Counseling Program office a form describing the materials they will need for approval of graduation. During this particular semester, the materials identified must be assembled in the student's portfolio.
- B. During the student's last semester, he or she will submit the required portfolio to his or her adviser.
- C. The academic adviser will review and discuss the portfolio with the student and make a recommendation to the Faculty Review Committee.
- D. The Faculty Review Committee will give final approval for graduation to the Graduate School or return the portfolio to the adviser for further review.

CURRICULUM

The following outline describes the general program requirements leading to a minimum of 32 semester hours of graduate study for those students seeking training and endorsement as elementary or secondary school counselors:

- A. Major Concentration in Guidance and Counseling (20-26 hours)
 - 1. Required Courses
 - G&C 500 Helping Relationships: Basic Concepts and Services
 - G&C 505 Counselor Development: Basic Skills
 - G&C 510 Counselor Development: Counseling Process
 - G&C 520 Standardized Group Testing
 - G&C 530 Career Development and Information Services
 - G&C 540 Group Process I
 - G&C 610 Theories of Counseling
 - G&C 612 The School Counselor
 - G&C 620 Individual Appraisal in Guidance and Counseling
 - G&C 686 Counseling Practicum I
 - 2. Elective Courses
 - These guidance and counseling courses are selected with the approval of the adviser and reflect the student's professional needs and objectives.
- B. Cognate Areas (6-12 hours)

1. Required Course
EDP 677 Research Techniques or its equivalent
2. Elective Courses
These cognate courses provide a knowledge and understanding of human development and behavior, the work setting, or meet career-related objectives and are selected with the approval of the adviser.

COLLEGE STUDENT PERSONNEL PROGRAM

ADMISSION REQUIREMENTS

- A. Students must have graduated from a regionally accredited institution.
- B. All applicants must have submitted scores on the analytical, quantitative, and verbal sections of the General Test of the Graduate Record Examination (GRE). The GRE scores may not be more than five years old.
- C. Foreign students must submit scores on the Test of English as a Foreign Language (TOEFL) of 550 (total) or The Michigan English Language Ability Battery (MELAB) of 80. They must also submit a minimum score of 230 on the Test of Spoken English (TSE). These tests must have been taken within the past five years.
- D. Students applying for their first master's degree must have an undergraduate GPA of 2.5 overall or a GPA of 2.75 in the second half of the undergraduate program. Students who are applying for a second master's degree must have a GPA of 3.0 or better on their previous graduate degree.
- E. All applicants must submit positive recommendations from two professional supervisors and/or supervising professors which will give indication of the quality of their professional work and their potential for counseling. (Forms will be sent with the application.)
- F. All students will submit a one-page résumé which will detail their work history and their experiences related to counseling.
- G. On their graduate application, students must submit the prepared statement on the Graduate *Admission and Academic Statement* form describing the reason for requesting admission. This statement will be reviewed as an indicator of writing ability.

ADMISSION PROCESS

- A. The Graduate School receives and gathers all required documents except the recommendation forms that are collected by the department. Completed applications which include test scores, required grade point averages, and the résumé are to be forwarded to the G&C coordinator of advising. Such applications shall be "Admitted pending Department review."
- B. Recommendation forms are available directly from the Department of Leadership and Counseling's main office and two completed forms should be returned to the G&C coordinator of advising.
- C. Applications are reviewed by the G&C coordinator of advising and one member of the Faculty Review Committee. (See G below.) Students whose applications include acceptable grade point averages, résumé, recommendations, test scores, and goal statements will be admitted, assigned to an adviser, and invited for an advising interview. Each student will complete the Personal Data Sheet and bring it to the advising interview.
- D. Applications may be found "questionable" because of a combination of low grade point averages, fair or poor recommendations, low test scores, and/or goal statements which are unclear or inconsistent with counseling.
- E. These "questionable" applications will be reviewed by the full Faculty Review Committee, giving special consideration to the student's age, life experiences, verbal skills, writing skills, educational background, grade point averages, and scores on the Graduate Record Examination.
- F. Applicants whose records are accepted by the Committee will be notified as in C above. The other applications will be returned to the Graduate School to be notified by the Graduate Dean.
- G. The G&C coordinator of advising and two other faculty members constitute the Faculty Review Committee. The committee is chaired by the G&C coordinator of advising.

APPEAL

- A. Students who are not admitted by the Graduate School or the Faculty Review Committee may appeal on the basis of *additional positive information and evidence about the student's ability to succeed in the graduate program* in guidance and counseling. This evidence will be reviewed by the Faculty Review Committee, giving special consideration to the student's age, life experiences, verbal skills, writing skills, and educational background. Evidence must, however, include a minimum combined (verbal and quantitative) score of 800 or better on the Graduate Record Examination or 37 or better on the Miller Analogies Test.
- B. Additional evidence and the original application will be forwarded to the G&C coordinator of advising.
- C. The full Faculty Review Committee will review and make the final recommendation for admission to the Graduate School. The Committee may invite the appellant for an interview to assist in the final recommendation.
- D. If accepted, the student will be notified and assigned as in the admission process, as in C above. Students not accepted will be notified by the G&C coordinator of advising and the Dean of the Graduate School.

RETENTION REVIEW REQUIREMENTS

A retention review will be conducted by the G&C coordinator of advising based upon the following criteria.

- A. A GPA of at least 3.25 in required core courses.
- B. An Interpersonal Skills Assessment of "acceptable" or above in both G&C 505 Counselor Development: Basic Skills and G&C 510 Counselor Development: Counseling Process.
- C. Work samples and/or term papers rated acceptable or above.

RETENTION PROCESS

The retention review will be conducted by the G&C coordinator of advising with the Faculty Review Committee.

- A. Each semester faculty who teach G&C 505 Counselor Development: Basic Skills and G&C 510 Counselor Development: Counseling Process, in addition to assigning grades, may complete a Counselor Evaluation Form for each student and will assign a value of "strong," "acceptable," or "questionable" in relation to the demonstrated interpersonal and academic skills needed to qualify as a counselor. A Counselor Evaluation Form must be completed for all students assigned a "questionable" value. These forms will be filed in the student's folder.
- B. In addition, faculty in other core classes *must* complete the form for students who receive less than a "B" in the course. Faculty members *may* complete the form for any student they perceive as having difficulty. These forms are filed in the student's folder.
- C. Each semester the G&C coordinator of advising will review the GPA of students completing 12 hours, which must include G&C 505 Counselor Development: Basic Skills and

G&C 510 Counselor Development: Counseling Process. The coordinator will identify all students who did not achieve a GPA of 3.0 or have "questionable" reports on interpersonal or academic skills.

- D. The records of this group of students will be reviewed by the Faculty Review Committee. If the Committee agrees that the record of a student indicates performance below graduate or program standards, the Committee will notify each student that he or she must meet with his or her academic adviser to discuss a plan for remediation.
- E. The student will meet with the academic adviser to discuss the need for remediation and, where necessary, to make such a plan. For example, if difficulties exist with skill or concept acquisition, the student may be required to audit a class. If personal problems or characteristics are thought to interfere with performance, the student may be encouraged to enter counseling.

EXIT REQUIREMENTS

All students must assemble a graduation portfolio. This portfolio must be submitted to the academic adviser during the student's final semester. The student and his or her adviser will review and discuss the portfolio. If mutually acceptable, the adviser's recommendation will be forwarded to the Faculty Review Committee for final approval. The Faculty Review Committee may examine portfolios of students where acceptance is questionable.

Students are advised to keep their portfolio as part of their continuing record of professional development. Following are the materials which must be included in the portfolio.

- A. A paper on an identified area of college student development theory or practice. It is expected that this paper be developed in G&C 695 Seminar: College Student Personnel as part of the required action-based research project.
- B. Evidence of a successful field-based experience.
- C. At least one additional paper developed in any other class on the student's master's degree core which the instructor agreed was of portfolio quality. G&C 550 Student Personnel Services in Higher Education and G&C 551 Contemporary College Students are suggested.
- D. Students must have a GPA of 3.0 or better.
- E. Students must have a "CR" in G&C 689 Field Work in Guidance, Counseling, and Student Personnel. The student may want to include the his or her final report in the portfolio.

EXIT PROCESS

- A. One semester prior to graduation, students must obtain from the Guidance and Counseling Program office a form describing the materials they will need for approval of graduation. During this particular semester, the materials identified must be assembled in the student's portfolio.
- B. During the student's last semester, he or she will submit the required portfolio to his or her adviser.
- C. The academic adviser will review and discuss the portfolio with the student and make a recommendation to the Faculty Review Committee.
- D. The Faculty Review Committee will give final approval for graduation to the Graduate School or return the portfolio to the adviser for further review.

CURRICULUM

The following outline describes the general program requirements leading to a minimum of 32 semester hours of graduate study for those students seeking training and education as college student personnel professionals in higher education settings:

- A. Major concentration in college student personnel (20-22 hours)
1. Required Courses (16 hours)
 - G&C 505 Counselor Development: Basic Skills

G&C 510 Counselor Development: Counseling Process
 G&C 520 Standardized Group Testing
 G&C 530 Career Development and Information Services
 G&C 540 Group Process I
 G&C 550 Student Personnel Services in Higher Education
 G&C 551 Contemporary College Students
 G&C 689 Field Work in Guidance, Counseling, and Student Personnel (department permission required)

2. Elective Courses (4-6)

These elective courses in the College Student Personnel Program reflect the student's professional needs and objectives and are selected with the approval of the adviser.

B. Cognate Courses (10-12)

1. Required Courses (4 hours)

EDL 613 Introduction to Higher Education
 EDP 677 Research Techniques or equivalent

2. Recommended Courses (6-8 hours)

These courses will be selected with the approval of the adviser from such program areas as educational leadership, educational psychology, communications, psychology, sociology, economics, management, and marketing.

COMMUNITY COUNSELING PROGRAM

This expanded master's degree program is designed to prepare students to work specifically as counselors in community settings. The program is accredited by the Council for Accreditation of Counseling and Related Educational Programs (CACREP), a specialized accrediting body recognized by the Council on Postsecondary Accreditation (COPA). CACREP grants accredited status to graduate-level programs in the professional counseling field. Students graduating from this program are eligible for professional counselor licensure in Michigan.

ADMISSION

Admission to the Community Counseling Program is selective. Screening of applications occurs once a year, beginning in September, for admission during the following winter. To be considered for admission, the following are required:

- A. A completed application for admission to the Graduate School, including submission of scores on the analytical, quantitative, and verbal sections of the General Test of the Graduate Record Examination (GRE). The GRE scores may not be more than five years old.
- B. An undergraduate GPA of 2.75 overall, or 3.0 in the second half of the undergraduate program OR a GPA of 3.3 on another advanced degree OR a combined score of 1250 on the analytical, quantitative, and verbal tests of the GRE.
- C. For international students, minimum scores of 550 on the Test of English as a Foreign Language (TOEFL) or 80 on The Michigan English Language Ability Battery (MELAB) and 230 on the Test of Spoken English (TSE). The scores cannot be more than five years old.
- D. Submission of a one-page letter of intent, focusing on the applicant's motivation and rationale for seeking admission to the program as well as professional goals and objectives.
- E. Submission of a one-page résumé describing the applicant's educational, career, and/or life experience relevant to the program.

The faculty committee rates each applicant on the above criteria, and applicants are ranked based on their total scores. A group of applicants is selected for the second phase of the screening process, which involves (1) a day-long sequence of activities in which the applicant participates in several small group activities as well as an individual interview; and (2) the submission of three letters of recommendation. Final admission decisions are

made by the faculty committee after reviewing letters of recommendation and discussing the applicant's participation in individual and group activities and interviews.

APPEAL

Students who are not admitted by the Graduate School or the Faculty Review Committee may appeal on the basis of *additional positive information and evidence about the student's ability to succeed in the graduate program* in guidance and counseling. This evidence will be reviewed by the Faculty Review Committee, giving special consideration to the student's age, life experiences, verbal skills, writing skills, and educational background. Evidence must, however, include a minimum combined score of 1250 verbal, quantitative, and analytical sections of the Graduate Record Examination. The Committee may invite the applicant for an interview to assist in the final recommendation.

RETENTION PROCESS

The retention review will be conducted by the G&C coordinator of advising with the Faculty Review Committee.

1. Each semester faculty who teach G&C 505 Counselor Development: Basic Skills and G&C 510 Counselor Development: Counseling Process, in addition to assigning grades, may complete a Faculty Evaluation Form for each student which will assign a value of "strong," "acceptable," or "questionable" in relation to the demonstrated interpersonal skills and academic skills needed to qualify as a community counselor. These forms will be filed in the student's folder.
2. In addition, faculty in other core classes *must* complete the form for students who receive less than a "B" in the course. Faculty *may* complete the form for any student they perceive as having difficulty. These forms will be filed in the student's folder.
3. Each semester the G&C coordinator of advising will review the GPA of students completing 12 hours, which must include G&C 505 Counselor Development: Basic Skills and G&C 510 Counselor Development: Counseling Process. The coordinator will identify all students who did not achieve a GPA of 3.0 or have "questionable" reports on interpersonal skills or academic skills.
4. The records of this group of students will be reviewed by the Faculty Review Committee. If the Committee agrees that the record of a student indicates performance below graduate or program standards, the Committee will notify each student that he or she must meet with his or her academic adviser to discuss a plan for remediation.
5. The student will meet with the academic adviser to discuss the need for remediation and, where necessary, to make such a plan. For example, if difficulties exist with skill or concept acquisition, the student may be required to audit a class. If personal problems or characteristics are thought to interfere with performance, the student may be encouraged to enter counseling.
6. Admission to Counseling Practicum I.

The student must be on a planned program in order to apply for Counseling Practicum I; students are expected to take Counseling Practicum I midway through their programs. The successful completion of the counselor development sequence (Basic Skills, Counseling Process, and Group Counseling I) is a prerequisite for admission to Counseling Practicum I. In addition, the guidance and counseling faculty evaluate the readiness of all applicants with whom they have had contact. Any applicant who receives a negative evaluation from one faculty member is discussed by the group. Faculty evaluations of student readiness are based on the following criteria, all of which are expected outcomes of the counselor development sequence:

The ability to use basic counseling skills necessary to work with individuals.

The ability to listen and convey understanding.

Respect for individual differences.

Respect for the thoughts and feelings of others.

Openness to personal growth and development.

No personal problems or issues that *interfere* with the ability to be helpful to a client.

If a student is denied admission to Counseling Practicum I, a remediation plan is developed. For example, if difficulties exist with skill or concept acquisition, the student may be required to audit a class. If personal problems or characteristics are thought to interfere with performance, the student may be encouraged to enter counseling. When the student feels ready to reapply for Counseling Practicum I, a re-evaluation of readiness occurs.

7. Successful completion of Counseling Practicum I and approval for Counseling Practicum II.

Successful completion of Counseling Practicum I, as determined by the faculty adviser, is required for admission to Counseling Practicum II. In order to successfully complete Counseling Practicum I, and thus be admitted into Counseling Practicum II, the student must demonstrate the following:

- The ability to use individual counseling, assessment, and information skills and competencies, as appropriate.
- The ability to use basic counseling skills necessary to work with individuals.
- The ability to establish a facilitative counseling relationship.
- The ability to begin and end a counseling session effectively.
- The ability to begin and end the counseling process effectively.
- The ability to identify and help the client explore significant themes.
- The ability to identify clients with whom the counselor cannot work effectively and to make appropriate referrals.
- The ability to use feedback and to benefit from supervision.
- The ability to synthesize and present pertinent information about clients in weekly reports.
- The ability to work with people and values different from one's own.
- Awareness of the profession's ethical code as evidenced by ethical behavior.

If the student does not complete Counseling Practicum I successfully, the practicum supervisor and the student's adviser will meet with the student to discuss this issue and to help the student explore other options. Possible courses of action include giving the student "no credit," and thus terminating the student from the program; recommending that the student withdraw from the course and take it at a later time when the student is better prepared; giving the student an "incomplete" so that the student can continue in Counseling Practicum I until the minimum competencies are demonstrated.

8. Successful completion of Counseling Practicum II and admission to internship.

Successful completion of Counseling Practicum II, as determined by the faculty adviser, is required for admission to internship. In order to successfully complete Counseling Practicum II, and thus be admitted to the internship experience, the student must demonstrate the following:

The ability to consistently demonstrate the competencies expected in Counseling Practicum I, as listed above.

The ability to use basic group facilitation skills, including the use of basic counseling skills in a group setting, the establishment of a facilitative group atmosphere, and the ability to begin and end a group session.

The ability to integrate ideas and beliefs about counseling process and outcome into a personal style.

The ability to speak clearly about goals, process, and outcome.

Congruence about articulated beliefs and demonstrated performance.

9. Successful completion of internship.

Successful completion of the internship experience is determined by the faculty adviser in conjunction with the on-site supervisor. In order to successfully complete the internship, the student must demonstrate the following:

The ability to conduct an intake interview, as determined by the internship site.

The ability to assess/clarify client problems and develop a treatment plan based on that assessment.

The ability to implement the treatment plan appropriately.

The ability to work cooperatively with other professionals.

The ability to present case material clearly and to use case consultation.

The ability to keep accurate case notes and files as required by the internship site.

EXIT REQUIREMENTS

1. Prior to application for graduation, students must submit a portfolio containing the following items:
 - a. A paper on an identified area of counseling theory or practice. It is suggested that this paper be developed in G&C 694 Seminar: Counseling in the Community. The paper may be developed, however, in another course in the community counseling core depending on the student's needs and interests.
 - b. A second paper developed in any other class on the student's master's degree program which demonstrates communication skills and intellectual facility must be submitted by the student for the file, which the instructor agreed was of portfolio quality. This paper must have the instructor's signature on the cover sheet to show his or her approval for inclusion.
2. Students must have a grade point average of 3.0 or better.
3. Students must successfully complete *all* course work and their required internship courses. Specific skills described above must be achieved in each of the practica courses before applying for the internship. Completion of the internship experience is determined by the faculty supervisor in conjunction with the on-site supervisor. In order to successfully complete the internship, the student must demonstrate, by means of case records, audio tapes, video tapes, and/or supervisor reports, acquisition of the following skills:
 - The ability to conduct an intake interview, as defined by the internship site.
 - The ability to assess/clarify client problems and develop a treatment plan based on that assessment.
 - The ability to implement the treatment plan appropriately.
 - The ability to work cooperatively with other professionals.
 - The ability to present case material clearly and to use case consultation.
 - The ability to keep accurate case notes and files as required by the internship site.

EXIT PROCESS

1. One semester prior to graduation, students must obtain from the Guidance and Counseling Program office a form describing the materials they will need for approval of graduation. During this particular semester, the materials identified must be assembled in the student's portfolio.
2. During the student's last semester, he or she will submit the required portfolio to his or her adviser.
3. The academic adviser will review and discuss the portfolio with the student and make a recommendation to the Faculty Review Committee.
4. The Faculty Review Committee will give final approval for graduation to the Graduate School or return the portfolio to the adviser for further review.

PROGRAM REQUIREMENTS

The following outline describes the general program requirements leading to a maximum of 48 semester hours of graduate study for those students seeking training and education as community counselors.

- A. Major Concentration in Guidance and Counseling (36-42 hours)
 1. Required Courses (34 hours)
 - G&C 500 Helping Relationships: Basic Concepts and Services
 - G&C 505 Counselor Development: Basic Skills
 - G&C 510 Counselor Development: Counseling Process
 - G&C 520 Standardized Group Testing
 - G&C 530 Career Development and Information Services
 - G&C 540 Group Process I
 - G&C 571 Cross Cultural Counseling
 - G&C 610 Theories of Counseling
 - G&C 622 Case Studies: Assessment and Intervention
 - G&C 631 Dynamics of Life Development
 - G&C 640 Group Process II
 - G&C 686 Counseling Practicum I
 - G&C 687 Counseling Practicum II
 - G&C 694 Seminar: Counseling in the Community
 - G&C 786-789 Internship
 2. Elective Courses (2-10 hours)

These guidance and counseling courses reflect the student's professional needs and objectives and anticipated work environment and are selected with the adviser's approval.
- B. Cognate Courses (6-12)
 1. Required Course (2 hours)
 - EDP 677 Research Techniques or its equivalent
 2. Elective Courses (4-10 hours)

The student must have sufficient background in human growth and development. If the student does not have such a background, courses in human development, abnormal psychology, personality theory, etc. must be taken. Other courses are selected with the adviser's approval to help meet career-related objectives.

SPECIALIST IN ARTS (GUIDANCE AND COUNSELING)

ADMISSION REQUIREMENTS

Admission decisions are thoughtfully and sensitively weighed by counselor education faculty in the of Leadership and Counseling department. Judgments are based on the Guidance and Counseling program's need to maintain professional standards and a careful review of applicant credentials. Requirements include the following:

- A. An accepted application from the Graduate School on file in the Guidance and Counseling Program.
- B. Scores from the Graduate Record Examination (GRE) taken within the past five years.
- C. A 3.3 graduate grade point average in the student's previous master's degree program.
- D. Successful positive evaluation of the following required materials:
 - 1. A one-page statement of interest and purpose for desiring the Sp.A. degree. This statement should accompany the Graduate School application. If it was not submitted, it should be provided to the Guidance and Counseling Program as soon as the student receives the first correspondence from the G&C coordinator of advising.
 - 2. A résumé confined to one page. This statement should also accompany the Graduate School application. Similarly, if it was not submitted, it should be provided to the Guidance and Counseling Program as soon as the student receives the first correspondence from the G&C coordinator of advising.
 - 3. Three recommendation (two from counseling faculty and one from a supervisor), which are to be submitted upon the request of the G&C coordinator of advising.
- E. Successful evaluation of the applicant's behavior and statements in an interview process. The time and place of the interview with selected members of the G&C faculty will be arranged by the G&C coordinator of advising.

APPLICATION PROCESS

Admission to the Sp.A. in guidance and counseling is a two-stage process, and applicants proceed through them as follows:

Stage I: Application Review

- A. Applicants are admitted to the Graduate School after making proper application which includes a statement of purpose for wanting the degree and a one-page résumé of related counseling experience. Records are sent to the G&C coordinator of advising. Recommendations, letters of support, and any missing materials will be requested of the applicant. Recommendation forms are available directly from the department office and should be returned to the coordinator of advising.
- B. The Guidance and Counseling program faculty will screen all applications containing the required materials on the basis of the statement of purpose, résumé, and letters of support.

Stage II: Interview

Individuals whose applications are acceptable will be invited to an interview with two or more of the guidance and counseling faculty.

APPEAL

Students who are not admitted by the Graduate School on the basis of their GPA may appeal on the basis of a minimum combined (verbal, quantitative, and analytical) score of 1250 or better on the Graduate Record Examination.

PROGRAM REQUIREMENTS

The Specialist of Arts in Guidance and Counseling requires a minimum of 32 semester hours beyond the master's degree. Advanced study in guidance and counseling is designed to build on existing counseling skills and competencies, to strengthen and broaden the student's counseling background, and to increase opportunities for counseling experience. Fully admitted specialist students are expected to work closely with an adviser of their choice in an effort to develop a program that will provide the depth of skills and competencies necessary to conduct counseling in a professional manner.

MID-PROGRAM CHECK (RETENTION)

After a student has completed 12 semester hours toward the program, a mid-program check will be conducted by the G&C coordinator of advising for the purpose of monitoring students and assuring that the students are progressing as expected. The review will be based upon the following criteria:

- A. A GPA of at least 3.3 in required core courses.
- B. Work samples and/or research papers rated acceptable or above in two guidance and counseling courses taken in the first 12 hours in the program.
- C. Ratings of "acceptable" or above on two Faculty Evaluation Forms on file in the student's folder. It is the responsibility of the student to identify the faculty members who will complete the academic portion of the Faculty Evaluation Form.
- D. Students must successfully complete G&C 687 Counseling Practicum II. Not all students for the Sp.A. degree have had Counseling Practicum I. Therefore, the mid-program check is based upon successful completion of Counseling Practicum I or II. Exit requirements require successful completion of both and the internship if required.
 - 1. Students who have not had G&C 686 Counseling Practicum I in their master's degree program must complete Counseling Practicum I and gain approval for Counseling Practicum II. To achieve this the student must receive satisfactory ratings on all criteria listed below. The Practicum supervisor will complete the Faculty Evaluation Form used for the Community Counseling Program for this course which rates students satisfactory on the following criteria:
 - The ability to use the basic counseling skills necessary to work with individuals.
 - The ability to establish a facilitative counseling relationship.
 - The ability to begin and end a counseling session effectively.
 - The ability to begin and end the counseling process effectively.
 - The ability to identify and help the client explore significant themes.
 - The ability to identify clients with whom the counselor cannot work effectively and to make appropriate referrals.
 - The ability to use feedback and to benefit from supervision.
 - The ability to synthesize and present pertinent information about clients in weekly reports.
 - The ability to work with people and values different from one's own.
 - Awareness of the profession's ethical code as evidenced by ethical behavior.

- 2. Students who have successfully completed G&C 686 Counseling Practicum I must, in turn, successfully complete G&C 687 Counseling Practicum II.

Successful completion of G&C 687 Counseling Practicum II, as determined by the faculty supervisor, is required for admission to the internship for those who desire to become licensed professional counselors. Students who do not wish this licensure must, however, successfully complete G&C 687 Counseling Practicum II to continue in the program.

In order to complete G&C 687 Counseling Practicum II successfully, the student must receive satisfactory ratings on all criteria listed below. The Practicum supervisor will complete the Faculty Evaluation Form used for the Community Counseling Program for this

course which rates students satisfactory on the following criteria:

The ability to demonstrate consistently the competencies expected in Counseling Practicum I, as listed above. (See Point 1.)

The ability to use basic group facilitation skills, including the following: the use of basic counseling skills in a group setting, the establishment of a facilitative group atmosphere, and the ability to begin and end a group session.

The ability to integrate ideas and beliefs about the counseling process and outcome into a personal style.

The ability to speak clearly about goals, process, and outcome.

Congruence between articulated beliefs and demonstrated performance.

E. Actions to be taken.

1. If the student does not complete Counseling Practicum I or II successfully, the Practicum supervisor and the student's adviser will meet with the student to discuss this issue and to help the student explore other options. Possible courses of action include giving the student "no credit," and thus terminating the student from the program; recommending that the student withdraw from the course and take it at a later time when he or she is better prepared; and giving the student an "incomplete" so that he or she can continue in Counseling Practicum I until the minimum competencies are demonstrated.
2. If the file indicates that a student has not met academic requirements, the records of this student will be reviewed by the Faculty Review Committee. If the Committee agrees that the record indicates performance below program standards, the Committee will notify each student that he or she must meet with his or her academic adviser to discuss plans for improvement.
3. The student will meet with his or her academic adviser to discuss the need for remediation and, where necessary, to make such a plan. For example, if difficulties exist with skill or concept acquisition, the student may be required to audit a class. If personal problems or characteristics are thought to interfere with performance, the student may be encouraged to enter counseling.

EXIT REQUIREMENTS

- A. Two acceptable research papers developed in advanced courses (600-level or above) in the Guidance and Counseling Program demonstrating communication skills and intellectual proficiency in some aspect of counseling related to the student's career goals must be on file in the student's folder. These papers must have the instructor's signature to show his or her approval for inclusion.
- B. Students must have a grade point average of 3.3 or better.
- C. Students must have "CR" in G&C 687 Counseling Practicum II and an internship if required, and have a "satisfactory" rating on criteria listed above.
- D. Students must achieve a minimum score on a well standardized test, should one become available.

EDUCATIONAL LEADERSHIP COURSES

EDL 510 Educational Organization. 2 hrs
Organization of American public schools; authority, functions, and relationships of federal, state, and local governments to education; methods of organization within school districts; non-graded organizational patterns. *Open to non-majors and majors.*

EDL 511 Community Organization. 2 hrs
An understanding of the community as a social group. Emphasis on community analysis, leadership, criteria of a good community, principles of change and action. *Open to non-majors and majors.*

EDL 512 Community Education. 2 hrs
The basic principles and philosophy of community education; its current status and relationship to education. *Open to non-majors and majors.*

EDL 513 Education and Community Relations. 2 hrs
Interpreting the educational institution to the community with emphasis on improving relationships between the two. Means of communicating with many publics and means of getting community feedback. *Open to non-majors and majors.*

EDL 514 Educational Leadership. 2 hrs
Explanation of the process and function of various leadership positions including current practices, theories, and concepts of administration. *Open to non-majors and majors.*

EDL 515 Supervision of Instruction. 2 hrs
Development of those attitudes and skills necessary for administrators as they plan and maintain effective, positive instructional programs; analysis and design of appropriate educational opportunities for all students. *Open to non-majors and majors.*

EDL 516 School Law for Teachers. 2 hrs
Legal principles underlying day-to-day teaching activities; how laws operate and legal principles develop. *Open to non-majors only.*

EDL 517 Evaluation of Educational Services. 2 hrs
Problems, principles, and procedures involving the evaluation of facilities, personnel, programs, and services. Development, application, and analysis of evaluation instruments. *Open to non-majors and majors.*

EDL 590/591/592 Special Topics. 1/2/3 hrs
Experimental course(s) designed to investigate specific topics of concern in the specialization areas of study in educational leadership.
Prereq: Department permission.

EDL 610 Accounting for School Administrators. 2 hrs
Principles, theory, and procedures of public school fund accounting; accounting principles as applied to various kinds of public school funds; financial statements and reports; internal accounting control; payroll accounting; business papers and procedures. *Open to non-majors and majors.*

EDL 611 Introduction to Adult Education. 2 hrs
A general overview of the topic of adult education to students for introductory purposes and a basis for further concentration and study in selected advanced areas of adult education. This course should be a prerequisite for advanced study and includes philosophy; history; identification of adult objectives; knowledge of adult learners; contemporary status, trends, and issues in adult education. *Open to non-majors and majors.*

EDL 612 Economics of Public Education. 2 hrs
An examination of the basic economic, fiscal, and legal theories of support for education, tax structures, state aid formulas, federal aid, and school budgets. *Open to non-majors and majors.*

EDL 613 Introduction to Higher Education. 2 hrs
An introduction to the study of higher education, including two- and four-year colleges and universities. The course is designed for persons interested in developing an understanding of the background, growth, purposes, and practices of higher education in the United States. *Open to majors and non-majors.*

- EDL 614 Law for Higher Education.** 2 hrs
An examination of the major legal aspects of the administration of institutions of higher learning. *Open to non-majors and majors.*
- EDL 615 Collective Negotiations in Education.** 2 hrs
An analysis of issues which may be encountered by school administrators and teachers in collective negotiations in education. *Open to non-majors and majors.*
- EDL 616 Educational Facilities Planning.** 2 hrs
Problems and procedures revealed through a plant-planning chronology that includes hiring the architect, the attorney's role, site acquisition, involving citizens, utilizing staff, the bond issue, designing and constructing the building. Emphasis will be placed on renovating, closing, and alternative uses for existing buildings. *Open to non-majors and majors.*
- EDL 617 Administration of Educational Personnel.** 2 hrs
Development of an understanding of the issues, problems, and practices involved in the administration of personnel programs in education. An in-depth exploration of the basic principles of staff administration and high-level morale. For prospective and practicing administrators.
Prereq: Six hours of credit in educational leadership.
- EDL 618 Elementary School Principalship.** 2 hrs
The examination of the elementary school principal's role in improving curriculum and instruction; in the establishment of effective, routine operations in an elementary school; in establishing avenues for change by an awareness of innovations, materials, technologies, and research that are relevant to elementary school education.
Prereq: Six hours of credit in educational leadership.
- EDL 619 Middle School/Junior High School Administration.** 2 hrs
An examination of the characteristics of the middle school/junior high school and the organization necessary to provide those experiences and instruction necessary to assist early adolescents in making the transition from childhood dependence to adult independence, including approaches to instruction, scheduling procedures, exploratory and enrichment studies, evaluation methods, staff development, student services, and community relations.
Prereq: Six hours of credit in educational leadership.
- EDL 620 Senior High School Principalship.** 2 hrs
Educational leadership in the secondary school, including approaches to school-community relations, curriculum, instruction, special services, buildings and equipment, pupil relations, personnel relations, scheduling, staff development, and innovative practices.
Prereq: Six hours of credit in educational leadership.
- EDL 621 Community School Administration.** 2 hrs
Principles and techniques of administering community education.
Prereq: EDL 512.
- EDL 622 Organization and Administration of the Community College.** 2 hrs
An understanding of the two-year college; its legal bases, external and internal constraints, functional patterns, administrative staff roles and responsibilities, faculty organization and authority, and student participation in organizational structure. *Open to non-majors and majors.*
- EDL 623 Adult Education Administration.** 2 hrs
An in-depth study of the leadership necessary to administer and manage adult education programs in the public and private sector. Provision of practical knowledge of adult education administration.
Prereq: EDL 611 or permission of the instructor.
- EDL 624 School Business Management.** 2 hrs
School business procedures, budgeting, construction, purchasing, salary schedules, school indebtedness, and insurance problems.
Prereq: EDL 612.
- EDL 625 Public School Superintendency.** 2 hrs
In-depth studies in practical knowledge and skills required to carry out effectively the responsibilities of the chief executive officer of a modern school system.
Prereq: Six hours of credit in educational leadership.
- EDL 630 Legal Aspects of Administration.** 2 hrs
Operation of laws; development of legal principles; federal and state relationships to education; authority relationships to education; authority and liability of school boards, administrators, and teachers; negligence; discipline and control. *Open to non-majors and majors.*
- EDL 631 Human Relations Skills for Educational Leaders.** 2 hrs
An overview of the need for and functions of various human relations in the leadership of educational institutions. Development of an understanding and practice of specific interactive strategies necessary for such leadership. *Open to non-majors and majors.*
- EDL 640 Organizational Theory.** 2 hrs
Various theories, approaches, and methods of organizing educational institutions. Concern with design, purposes, processes, problems, and issues of organizational structuring and change. Examination of organizational environment and informational organization. *Open to non-majors and majors.*
- EDL 650 Advanced School Finance.** 2 hrs
Designed to acquaint students with specific areas of school finance, with a focus on the capital outlay program, the school bond market, the bond prospectus, model state foundation programs, risk management, insurance, investments, and the development of sound debt management policies.
Prereq: EDL 612.
- EDL 679/680/681 Special Topics.** 1/2/3 hrs
Special experimental offerings of the Educational Leadership program.
Prereq: Will be determined on the basis of the topic being offered.
- EDL 682/683/684/685 Workshop.** 1/2/3/4 hrs
Special topics of educational leadership designed to maximize student participation. Emphasis on the workshop method of teaching and learning. Topics to be selected. (See current schedule.)
Prereq: Will be determined on the basis of the workshops being offered.
- EDL 686/687/688/689 Internship.** 1/2/3/4 hrs
Training in administration through actual supervised experience. Arrangements must be approved by adviser and Director of the Intern Program prior to registration. Enrollments limited. *Credit no credit.*
Prereq: Department permission. Majors only.
- EDL 694/695/696 Seminar.** 1/2/3 hrs
Broad or special topics of educational leadership. Topics to be selected. (See current schedule.)
Prereq: Will be determined on the basis of the seminar being offered.
- EDL 697/698/699 Independent Study.** 1/2/3 hrs
An intensive study of a problem under the direction of a University faculty member. *Credit/no credit.*
Prereq: Approval of adviser, 10 hours in educational leadership, and department permission.

EDL 710 Leadership Theory. 2 hrs
Theories and models of administration and leadership; general theories and research in leader behavior.
Prereq: Admission to the specialist or doctoral program in educational leadership.

EDL 712 Analysis of Research in Administration. 2 hrs
Emphasis on contributions of research in the behavioral sciences to educational leadership. Critical readings of the research of psychologists, sociologists, political scientists, and others that have special meaning in understanding such concepts as leadership, organization, power, authority, communication, innovation, and decision making.
Prereq: Six hours in educational leadership and EDP 677.

EDL 713 Field-Based Research. 4 hrs
Development and completion of a field-based research study.
Credit/no credit.
Prereq: EDL 712, EDP 677, and department permission.

EDL 779/780/781 Special Topics. 1/2/3 hrs
Intensive study of a topic of current relevancy.
Prereq: Will be determined on the basis of the topic being offered.

EDL 786/787/788/789 Internship. 1/2/3/4 hrs
Provision of an opportunity for the graduate student, teacher, or administrator to develop administrative skills by working under the direction of an experienced administrator. Arrangements must be approved by adviser and Director of the Intern Program prior to registration. *Open to majors only. Credit/no credit.*
Prereq: Department permission.

EDL 790/791/792 Thesis. 1/2/3 hrs
Intensive study of a problem or group of problems under the direction of a faculty member.
Prereq: Approval of adviser and departmental requirements for thesis.

EDL 794/795/796 Seminar. 2/3/4 hrs
Intensive study of selected problems in administration and supervision.
Prereq: Six hours toward the specialist in arts degree.

EDL 797/798/799 Independent Study. 1/2/3 hrs
Intensive study of a problem under the direction of a faculty member. *Credit/no credit.*
Prereq: Approval of adviser, 10 hours in educational leadership, and department permission.

EDL 810 Ethics and Policy Analysis for Educational Leaders. 2 hrs
This course will equip students with analytical skills for confronting ethical issues in business, education, research, nursing, and government. Opportunities for critical thinking about ethical problems in professional settings will be provided. Selected school board and governmental policies will be analyzed from an ethical base using diverse views of professional moral duties as a screening device.
Prereq: Admission to the doctoral program in educational leadership.

EDL 895 Dissertation Research Seminar. 2 hrs
This seminar is designed for the doctoral student who has identified the topic for his or her dissertation research and will focus on the production and evaluation of proposals for the doctoral dissertation. *Graded on a credit/no credit basis.*
Prereq: Admission to candidate status and permission of dissertation chair.

EDL 896/897/898/899/900 Dissertation Research. 1/2/4/8/12 hrs
These courses are designed for the doctoral student who is working on his or her dissertation research. Enrollment in the various

courses will reflect the student's effort on the dissertation in a given semester. *Only 16 dissertation credit hours (including EDL 895) can be applied toward the doctoral degree program. Credit/no credit.*

Prereq: Admission to candidate status and successful completion of EDL 895.

GUIDANCE AND COUNSELING COURSES

G&C 500 Helping Relationships: Basic Concepts and Services. 2 hrs
An introduction to concepts and principles used in helping relationships and an overview of services offered by helping professionals. The course provides experiences in interpersonal relations and opportunities for self-development. *Open to majors and non-majors.*

G&C 501 Guidance in the Elementary School. 2 hrs
Survey of the unique contributions of guidance to the work of the classroom teacher and other staff in the elementary school. Exploration of relationships between guidance, instruction, and administration in the elementary school. *Open to majors and non-majors.*

G&C 505 Counselor Development: Basic Skills. 2 hrs
Designed to train prospective counselors for competencies in beginning counseling skills. Assessment of individual potential for counseling. Clarification of expectations for program, professional, and school counselor endorsement, and counselor licensure requirements; exploration of career opportunities. *Open to majors and non-majors.*

G&C 510 Counselor Development: Counseling Process. 2 hrs
Designed to assist counselor trainees in understanding the counseling process. Provision of opportunities for continued training and integration of counseling skills. Examination of various counseling theories. Introduction to consulting skills and processes.
Prereq: G&C 500 and G&C 505.

G&C 515 Crisis Intervention. 2 hrs
Focus on crisis intervention from a theoretical and practical perspective. Emphasis on defining the nature of crisis; on intervention in specific crisis reactions resulting from such events as rape, loss, illness, and so on.; and on intervening with suicidal clients and other clients in crisis. Practice in intervention through role-plays.
Prereq: G&C 505 or equivalent.

G&C 520 Standardized Group Testing. 2 hrs
Designed to familiarize students with various standardized group tests used in guidance and personnel programs. Emphasis on the development of schoolwide testing programs and on the interpretation and use of test results.
Prereq: G&C 500 and EDP 677.

G&C 530 Career Development and Information Services. 2 hrs
An introduction to the psychology, sociology, and economics of work. Presentation of career development and decision-making theories and application to career counseling programs. Examination of informational services including sources, organization, and evaluation of educational and occupational information.
Prereq: Six semester hours in guidance and counseling courses or permission of instructor.

G&C 540 Group Process I. 2 hrs
Designed to develop competencies in basic group facilitation skills and to identify verbal and non-verbal behaviors and group interactive processes. Provision of opportunities for participation in a small group. Presentation of information on the development and rationale for groups.
Prereq: G&C 500 and G&C 505.

G&C 550 Student Personnel Services in Higher Education.

2 hrs

Overview of student personnel services in higher education, their evolution and growth, educational significance, administrative aspects, and a survey of the various student services. Emphasis on the student affairs in the educative process of students in colleges and universities, including junior and community colleges.

Prereq: G&C 500.

G&C 551 Contemporary College Students.

2 hrs

An examination of the changing undergraduate lifestyle, attitudes, and characteristics. Focus on the dimensions of career education, outcomes/benefits of higher education, and the student as a learner. Attention to both the traditional and non-traditional college populations in two- and four-year institutions.

Prereq: Open to guidance and counseling majors and graduate students in related fields.

G&C 571 Cross Cultural Counseling.

2 hrs

Development of basic understandings and skills needed to counsel persons who have cultural, ethnic, or linguistic backgrounds different from the student's own background.

Prereq: G&C 505 or equivalent or permission of instructor.

G&C 572 Counseling Parents.

2 hrs

Focus on the significant parent counseling programs and techniques in current use. Provision of opportunities to utilize learned counseling and communication skills in assisting parents to develop effective parenting skills compatible with their cultural, ethnic, religious, interpersonal, and social orientations.

Prereq: Graduate level status; and G&C 505 or permission of instructor.

G&C 573 Counseling Older Persons.

2 hrs

Students will learn methods and strategies needed to help older persons face the crises, concerns, adaptations, and the changes associated with aging. Inclusion of an experimental component for teaching modifications in counseling skills needed to work with older persons.

Prereq: G&C 505 or permission of instructor

G&C 587/588/589 Cooperative Education.

1/2/3 hrs

A cooperative education experience integrating classroom theory with a paid work experience in an area directly related to the student's field of study. Placements must be approved by the Coordinator of Cooperative Education and the Leadership and Counseling department. *Credit/no credit.*

Prereq: Department permission.

G&C 590/591 Special Topics.

1/2 hrs

Special courses and seminars dealing with contemporary topics and issues in the guidance and counseling field. Designed primarily for graduate students and practitioners in the helping professions. Topics to be selected. (See current schedule.)

Prereq: Will be determined on the basis of special topics being offered.

G&C 595 Workshop.

2 hrs

Workshops dealing with selected areas within the guidance and counseling field such as the self-concept, career education, psychological education, and other relevant topics of interest.

Prereq: Open to guidance and counseling majors and graduate students in related fields.

G&C 610 Theories of Counseling.

2 hrs

The rationale, historical development, and research underlying selected theories of counseling with emphasis on the implication of each theory for practice. Development of a theoretical basis for the student's own counseling practice.

Prereq: Ten semester hours in guidance and counseling.

G&C 612 The School Counselor.

2 hrs

Development of skills and techniques for working effectively with students, kindergarten through grade 12; development of consulting and coordinating skills for working with teachers, parents, administrators, referral agencies, and other personnel staff.

Prereq: Ten hours in guidance and counseling or permission of instructor.

G&C 620 Individual Appraisal in Guidance and Counseling.

2 hrs

Testing and non-testing procedures, techniques, and the processes of psycho-educational appraisal and their application to counseling, guidance, and personnel work. Emphasis on the relevance of individual assessment to an increase in self-understanding.

Prereq: G&C 510 and G&C 520.

G&C 622 Case Studies: Assessment and Intervention.

2 hrs

An opportunity for advanced students to make an intensive study/analysis of selected counseling cases to enhance competencies in case description; problem appraisal/assessment; diagnostic classification; intervention strategies as well as case consultation and presentation skills.

Prereq: Ten semester hours in guidance and counseling.

G&C 631 Dynamics of Life Development.

2 hrs

A study of life transitions and their impact on personal, social, and vocational development. Examination of theoretical concepts and recent research findings on adult development will be examined. Exploration of practical program applications for individual and group counseling.

Prereq: G&C 530 or permission of instructor.

G&C 632 Vocational Rehabilitation Counseling.

2 hrs

History and organization of the state/federal program of voluntary rehabilitation and the role of the state agency; legislation and laws pertaining to the role of the agency; role of the agency as represented by the counselor in the field; principles and practices of rehabilitation counseling; theories of vocational rehabilitation counseling and relationships to other counseling schools; exploration of the state program's referral sources and methods of case finding, case management method; diagnostics and evaluation for eligibility; standards and practice of determining eligibility for the program; individualized written rehabilitation plans, standards and practice; service delivery, placement, and follow-up standards; inter-agency relationships and agreements; current practices in rehabilitation; case studies; counseling needs of disabled individuals; role of the counselor in the community.

Prereq: G&C 530.

G&C 640 Group Process II.

2 hrs

Advanced opportunity for students to develop further group skills and to expand their awareness of interactions in a group. Assessment of the student's own potential as a group counselor through small group participation.

Prereq: G&C 540 or equivalent.

G&C 650 Organization and Administration of Guidance Services.

2 hrs

A study of the philosophy and principles of guidance as implemented into practice. Examination of the organization and administration of the various guidance services and the guidance functions of various school staff members.

Prereq: Ten semester hours in guidance and counseling.

G&C 660 Community Resources in Counseling.

2 hrs

Identification, analysis, and development of the community resources needed by counselors who work in a variety of settings. Focus on skills in identifying, referring, and receiving client

referrals. Presentations by representative community agencies in class or on-site during class time.

Prereq: G&C 505 and G&C 510, or permission of instructor.

G&C 679/680/681 Special Topics. 1/2/3 hrs

Special courses and seminars dealing with contemporary topics and issues in the guidance and counseling field. Designed primarily for graduate students and practitioners in the helping professions. Topics to be selected. (See current schedule.)

Prereq: Will be determined on the basis of special topics being offered.

G&C 686 Counseling Practicum I. 2 hrs

An introduction to supervised counseling experiences. Involvement with clients in a variety of counseling relationships through assisting individuals with personal, educational, and vocational goals and decisions. Systematic analysis of counseling effectiveness through a process of self, peer, and supervisor evaluation. *Credit/no credit.*

Prereq: Permission of guidance and counseling faculty.

G&C 687 Counseling Practicum II. 2 hrs

An advanced course in supervised counseling experiences. Involvement in diverse counseling relationships designed to facilitate higher levels of counseling effectiveness. Provision also of group counseling experiences. *Credit/no credit.*

Prereq: Permission of guidance and counseling faculty.

G&C 688 Supervision of Counseling Practicum. 2 hrs

The opportunity for advanced trainees to supervise students in a counseling practicum experience. Development of beginning competencies in supervision through critiquing of tapes, leading group discussions, and evaluating the growth of beginning counselors. *Credit/no credit.*

Prereq: Permission of guidance and counseling faculty.

G&C 689 Field Work in Guidance, Counseling, and Student Personnel. 2 hrs

On-the-job experiences under professional supervision that afford the student practical experiences in counseling and student personnel in settings such as elementary and secondary schools, colleges and universities, social and community agencies, or other approved settings. *Credit/no credit.*

Prereq: Permission of guidance and counseling faculty.

G&C 692 Seminar in College Student Personnel. 2 hrs

This course is designed to provide students an opportunity to synthesize ideas from previous coursework and practical experiences in student affairs. An integration of student development theories, current issues in the field, and an action-based research project will be the focus of the course.

Prereq: G&C 550, G&C 551. Coreq: G&C 689 (must be taken concurrently or have been completed previously).

G&C 694 Seminar: Counseling in the Community. 2 hrs

An opportunity to explore various aspects of community counseling including counselors' roles, professional issues faced by counselors in community settings, and strategies for working with diverse clients. Emphasis on looking at concerns of different client populations and ways of addressing these concerns both individually and programmatically. Opportunities for in-depth study of an area of interest.

Prereq: Ten hours in guidance and counseling.

G&C 697/698/699 Independent Study. 1/2/3 hrs

In these classes students have an opportunity to explore topics of interest in an intensive and independent manner. Topics must be selected and an independent study pursued with the approval and

supervision of a member of the faculty in guidance and counseling. *Credit/no credit.*

Prereq: Permission of the adviser, ten hours in Guidance and Counseling, and department permission.

G&C 786/787/788/789 Internship. 2/3/4/6 hrs

An intensive field-based experience for candidates in the master's degree program in community counseling and the specialist degree program in counseling. Integration of advanced competencies and knowledge with professional supervision. Placements in a variety of community agency, school, college, or institutional settings. Application for the internship and approval for placement prior to registration. Six hundred hours in the setting required for the community counseling program. *Credit/no credit.*

Prereq: Ten semester hours of advanced studies course work and/or department permission.

SPECIAL EDUCATION

Kathleen S. Quinn
Department Head
215 Rackham
487-3301

Joan Quinlan
Administrative Manager
Coordinator of Advising
230 Rackham
487-3302

Gary Navarre
Adviser
Specialist's Degree
227 Rackham
487-0026

Carole W. Gorenflo
Adviser
Speech-Language Pathology
123 Rackham
487-4412

Michael Beebe
Adviser
Learning Disabilities
225 Rackham
487-0028

Henry Gottwald
Adviser
Mentally Impaired
123 Rackham
487-0026

Florence VanVoorhees, Joseph Coyner
Advisers
Emotionally Impaired
233, 219 Rackham
487-0028, 487-0356

Dorothea French
Adviser
Hearing Impaired
118 Rackham
487-4413 (V/FDD)

George Barach
Adviser
Visually Impaired
238 Rackham
487-0028

Roberta Anderson
Adviser
Physically or Otherwise Health Impaired
487-0028

The Department of Special Education at Eastern Michigan University offers graduate programs leading to a Master of Arts degree, a Specialist of Arts degree and/or state endorsement/approval in most fields of specialization in special education. Persons participating in these programs may utilize a variety of approaches and experiences in fulfilling the needed requirements. These avenues of learning may include course work, field studies, workshops, independent study, internships, practica, seminars, and/or research projects.

Graduate study in the Department of Special Education includes the following program options:

1. Non-degree post baccalaureate study for certified teachers seeking initial or additional special education endorsements and/or approvals. Students must be admitted to the Graduate School and the Special Education Department to pursue endorsement/approval sequences.
2. Master of Arts degree in Special Education with a concentration in
 - Emotionally Impaired
 - Mentally Impaired
 - Physically and Otherwise Health Impaired
 - Visually Impaired
 - Hearing Impaired
 - Special Education - General
3. Master of Arts degree in Special Education with a concentration in Learning Disabilities (available only to teachers already with endorsement in one area of special education);
4. Master of Arts degree in Special Education-Speech/Language Pathology, a continuation of the basic program described in the undergraduate catalogue;
5. Specialist of Arts degree in Special Education, with concentration in special education administration or curriculum development;

OBJECTIVES

The goal of graduate work within the Department of Special Education is for the student to develop further as a knowledgeable professional who is a caring, reflective decision maker in a culturally diverse society. The objectives for this student are:

1. to develop a humane, comprehensive, viable, and scientifically defensible philosophical foundation that will guide personal and professional behavior;
2. to extend and refine knowledge of disabilities and to apply this new knowledge base to understanding more fully the implications of disabilities to individuals with disabilities, their families and society;
3. to improve existing skills and to acquire new skills in the identification, diagnosis, and use of prescriptive teaching methods associated with various disabilities;
4. to understand, compare, analyze, and synthesize a variety of therapeutic, curricular, and continuum of service models, instructional systems, and theoretical constructs used in the care and treatment of persons with disabilities;
5. to acquire a working knowledge of the way philosophical positions, psychosocial and cultural factors, economic events, legal mandates, and political forces impinge upon and shape benefits, rights, services, and programs for persons with disabilities;
6. to become proficient in spoken and written communication and able to adapt level appropriately in student, parent and professional communication;
7. to acquire the knowledge, reflective decision-making ability and other skills necessary to perform in a variety of leadership, administrative, and supervisory roles in providing services and programs for persons with disabilities; and
8. to understand, conduct and use research for problem solving and professional growth.

COURSES OF GENERAL INTEREST

In addition to the more specific courses that are offered for special education majors, the graduate program offers a number of general courses that are open to regular classroom teachers and other non-majors. These courses are designed to provide the

student with a better understanding of the child with problems who might be found in any classroom.

DISMISSAL FROM PROGRAM POLICY

A student may be subject to dismissal from graduate endorsement or degree programs in this department if the student:

1. Does not maintain a 3.0 ("B") cumulative grade point average overall and in special education courses for two successive enrollment periods;
2. Does not demonstrate by performance reasonable aptitude, maturity, stability, skill, and understanding necessary for success in the professional field of special education;
3. Does not demonstrate by performance the ability to build adequate interpersonal and professional relationships.

A student identified as being at risk for dismissal from the endorsement or degree programs will have the opportunity to meet with faculty in the program area to develop a plan for correction of any deficiency. The opportunity to correct deficiencies usually will not be extended beyond two enrollment periods.

The continuance or termination decision will be made by the faculty in the program area. Students may request a meeting with the faculty to apprise them of extenuating circumstances. The faculty decision will be final. The decision will be transmitted to the student in writing by the department. If the student is dismissed from the department's program, the Graduate School will be notified to change the admission status from degree admission status to that of a non-degree student.

ENDORSEMENT/APPROVAL SEQUENCE

Certified teachers wishing to qualify for teaching in the area of special education, may enroll in an endorsement sequence at the graduate level. The first endorsement sequence for a teacher holding non-special education teaching credentials includes a combination of graduate and undergraduate courses. The completion of the endorsement sequence will permit a student to teach in a specific area of disability at either the elementary (K-8) or the secondary (7-12) level. Each endorsement sequence accommodates the requirements established by the Michigan Department of Education - Special Education rules.

Endorsements are available in the areas of Emotionally Impaired, Mentally Impaired, Visually Impaired, Hearing Impaired, and Physically and Otherwise Health Impaired. Endorsements are also available in the areas of Speech and Language Pathology and in Learning Disabilities (which is awarded only as a second special education endorsement).

Approval sequences are available in the areas of Supervisor of Special Education and Director of Special Education, Physical Education Teacher of Handicapped, and Preprimary Impaired coursework in other departments (Educational Leadership; Health, Physical Education, Recreation and Dance, Teacher Education) is typically involved in completing these sequences. See the Administrative Manager for further details. The Department of Special Education works with the Departments of Psychology and Teacher Education to prepare individuals for state approval as school psychologists. This program is described more completely under "Psychology."

A student must be free from any probation, administrative or academic, before an internship or practicum experience is arranged. It is important for a student to realize that the endorsement/approval sequence is independent of a degree program. The minimum degree requirements do not guarantee endorsement/approval and the meeting of endorsement standards should not be construed as the completion of degree requirements. Nine (9) credit hours of approved 400 level courses may be upgraded and credited toward a master's degree; otherwise all undergraduate

courses listed in endorsement sequences are considered undergraduate deficiencies, not credited toward graduate degrees.

ADMISSION REQUIREMENTS

1. The student applying for an endorsement in specific special education areas must meet the requirements specified under the master's degree.
2. Students must be admitted to the Department of Special Education prior to taking 400- and graduate-level requirements.
3. The student applying for an approval sequence as a special education director must meet the admission requirements of the Specialist's degree and be admitted as a specialist student.

CURRICULA

A description of initial endorsement sequences follows. Endorsement sequences for those already endorsed in one area of special education but seeking additional endorsement(s) consists of different courses than listed here. Students should consult the Administrative Manager and the graduate adviser for the area. An Initial Endorsement sequence generally consists of the following core Special Education classes (Courses marked with an asterisk* require admission to the College of Education):

Special Education Core Courses

PSY 101 General Psychology	3
SGN 510 The Exceptional Child in the Regular Classroom	3
IE 252 Prevocational/Vocational Special Needs Program	4
*SLD 673 Language: Acquisition, Disorders, Evaluation	3
*SGN 390 Measurement and Diagnosis in Special Education ...	3
*SGN 461 Classroom Management and Intervention Strategies for Handicapped Students	3
*SGN 615 Social Psychology of Disability: Family, School, and Society	3
*SGN 481 Adapted Technology in Special Education	2
*SGN 689/693 Supervised Internship in Elementary/Secondary Special Education	4

These classes are recommended. Individual assessment of transcripts at time of admission determines the exact classes needed by an individual for an endorsement. Classes that are specific to a disability area are listed below:

HEARING IMPAIRED

Prospective majors should be aware that the basic philosophy of the program is oral communication; however, students are exposed to manual communication during their course of study.

All students are considered provisional majors until such time as they successfully complete SHI 391 Language for the Hearing Impaired and pass a Language Proficiency Examination.

Courses Required for Initial Endorsement

Students must complete the elementary or secondary sequence.	
Courses	Sem hours
SHI 228 Education of the Hearing Impaired	3
SLI 316 Speech Science	5
SLI 337 Language Acquisition	3
SHI 375 Fundamentals of Sign Communication	2
SHI 376 Total Communication Practicum with Hearing Impaired	1
*SHI 387 Introductory Practicum with the Deaf I	1
*SHI 391 Language for the Hearing Impaired	3
*SHI 392 Introduction to Audiology	2
*SHI 394 Auditory Training and Speechreading	3
*SHI 436 Speech for the Hearing Impaired	3
*SHI 437 Adaptive Curriculum for the Hearing Impaired	3

*SHI 487 Speech Practicum with the Hearing Impaired	2
SGN 694 Seminar: Interdisciplinary Special Education	2

Elementary

*SGN 689 Supervised Internship in Elementary Special Education	4
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Secondary

*SGN 485 Methods and Curriculum: Adolescents and Young Adults with Special Needs	2
*SGN 486 Recitation and Field Experience with Adolescents and Young Adults: Mentally Impaired, Physically Impaired, Hearing Impaired, or Visually Impaired.....	2
*SGN 693 Supervised Internship in Secondary Special Education	4

MENTALLY IMPAIRED*Courses required for initial endorsement*

Students must complete the elementary or secondary sequence.

Courses	Sem hours
SMI 240 Preclinical: Mentally Impaired	3
*SMI 557 Mental Retardation: Nature, Needs, and Issues	3
*SMI 429 Curriculum Design and Education Programs for Students with Mild Retardation	3
*SLD 468 Education of Children with Learning Disabilities	2
*SMI 483 Education of Students with Moderate or Severe Retardation	4
*SMI/SGN 694 Seminar: Interdisciplinary Special Education ..	2
*PED 578 Motor Learning and Development	2

Elementary

*SMI 427 Educating the Elementary Student with Mild Retardation	2
SGN 689 Supervised Internship in Elementary Special Education	4

Secondary

*SGN 485 Methods and Curriculum: Adolescents and Young Adults with Special Needs	2
*SGN 486 Recitation and Field Experience with Adolescents and Young Adults: Mentally Impaired, Physically Impaired, Hearing Impaired, or Visually Impaired.....	2
*SGN 693 Supervised Internship in Secondary Special Education	4

PHYSICALLY OR OTHERWISE HEALTH IMPAIRED*Courses Required for Initial Endorsement*

Students must complete required courses and either the elementary or secondary sequence.

Courses	Sem hours
SPI 240 Preclinical Experiences---POHI or approved independent study	3
SPI 310 Developmental Sciences for Teachers of the Physically and Health Impaired	4
SMI 557 Mental Retardation: Nature, Needs, and Issues	3
*SPI 360 Pathology of Physical and Health Impairments	3
*SPI 412 Ancillary Services and Health Procedures for Teachers of Physically Impaired	2
*SLD 468 Education of Children with Learning Disabilities	2
SGN 694 Seminar: Interdisciplinary Special Education	2

Elementary

*SPI 414 Educational Strategies for Teachers of the Physically Impaired	4
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*SGN 689 Supervised Internship in Elementary Special Education	4
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Secondary

*SGN 485 Methods and Curriculum: Adolescents and Young Adults with Special Needs	2
*SGN 486 Recitation and Field Experience with Adolescents and Young Adults: Mentally Impaired, Physically Impaired, Hearing Impaired, or Visually Impaired.....	2
SGN 693 Supervised Internship in Secondary Special Education	4

VISUALLY IMPAIRED*Courses Required for Initial Endorsement*

Students must complete required courses and either the elementary or secondary sequence.

Courses	Sem hours
SVI 365 Braille	3
SVI 366 The Eye and Vision-Anatomy and Physiology	2
SVI 368 Mobility Training for the Visually Impaired	2
SVI 369 Community Considerations for the Visually Impaired ...	3
*SVI 464 Methods of Teaching the Blind	3
*SVI 465 Braille II: Nemeth Code	3
*SVI 467 Education of Children with Impaired Vision	2
*SVI 469 Electronic Communication for the Visually Impaired	3
SGN 694 Seminar: Interdisciplinary Special Education	2

Elementary

SGN 689 Supervised Internship	4
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Secondary

*SGN 485 Methods and Curriculum: Adolescents and Young Adults with Special Needs	2
*SGN 486 Recitation and Field Experience with Adolescents and Young Adults: Mentally Impaired, Physically Impaired, Hearing Impaired, or Visually Impaired.....	2
SGN 693 Supervised Internship in Secondary Special Education	4

EMOTIONALLY IMPAIRED*Courses Required for Initial Endorsement*

Students must complete required courses and either the elementary or secondary sequence.

Courses	Sem hours
SEI 240 Introductory Clinical Experiences in Emotional Impairment	3
SEI 301 Emotionally Impaired Children and Adolescents	3
*PSY 543 Abnormal Psychology	3
*SEI 694 Seminar: The Emotionally Impaired Child	2
SEI 449 Seminar: Current Topics in Emotional Impairment.....	2

Elementary

*PED 578 Motor Learning and Development	2
*SEI 401 Programming, Methods, and Curriculum for the Elementary Emotionally Impaired Child	4
*SLD 468 Education of Children with Learning Disabilities	2
*SGN 689 Supervised Internship in Elementary Special Education	4

Secondary

CRM 354 Juvenile Delinquency	3
*SGN 485 Methods and Curriculum: Adolescents and Young Adults with Special Needs	2
*SEI 488 Programming, Methods, and Curriculum for Secondary Emotionally Impaired Youth.....	4

*SGN 693 Supervised Internship in Secondary Special Education4

MASTER OF ARTS

(AREAS OF EXCEPTIONALITY EXCEPT LEARNING DISABILITIES AND SPEECH-LANGUAGE PATHOLOGY)

Through the Graduate School of Eastern Michigan University, the Department of Special Education offers a Master of Arts degree which encompasses the range and depth required to accommodate contemporary programs and service delivery systems. The program is designed to allow maximum flexibility in meeting the needs of individual students while maintaining the basic academic integrity implicit in a graduate program.

MODEL

The development of special education professionals with the comprehensive knowledge, skills, and attitudes to deliver a continuum of habilitative/rehabilitative services to persons with special needs and to their families within a multicultural society.

ADMISSION REQUIREMENTS

The graduate student seeking admission to the Master of Arts degree program in the Department of Special Education is required to:

1. be admitted to the Graduate School;
2. have a valid teaching certificate;
3. achieve acceptable scores on the Graduate Record Examination (GRE) as required by the College of Education;
4. submit one outside letter of recommendation regarding professional competence for admissions to the program;
5. be recommended for acceptance by a faculty member (this may involve a personal interview);
6. International students must provide scores of 90 on the Michigan English Language Assessment Battery (MELAB) or 570 on the Test of English as a Foreign Language (TOEFL).

Additionally, candidates applying for the learning disability sequence must possess an endorsement in a special education area. Admissions and program requirements for Master of Arts programs in Learning Disabilities and Speech Language Pathology are described separately in subsequent sections.

PROGRAM REQUIREMENTS

The graduate student seeking a Master of Arts degree through the Department of Special Education must:

1. complete a minimum of 32-36 semester hours of approved graduate credit with a minimum 3.0 GPA;
2. complete an approved master's degree program that has been planned with a special education graduate adviser;
3. complete the degree requirements within six years of enrolling for the first course applicable to the degree program;
4. receive a recommendation from the area faculty committee for continuance in the program. This is done upon completion of 12-15 hours of courses and before internship/practicum. The committee will consider GPA, faculty recommendations, demonstrated competence in academic and professional work and rate of progress in the program.
5. meet all other requirements of the Graduate School.

EXIT CRITERIA

Exit criteria involve achievement of the objectives for graduate study in special education listed previously, as demonstrated by:

1. successful completion of all course work on program (minimum GPA 3.0).
2. successful completion of required practica/internship;
3. successful completion of thesis, if pursuing the thesis option, or other culminating experience, which may include but not be limited to comprehensive oral or written examination, portfolio or other product, performance or exhibit.

CURRICULUM

The 32-36 semester hours of graduate credit must include:

1. Special education graduate core courses:	
Courses	Sem hours
SGN 621 Law and Public Policy for Persons with Disabilities	3
SGN 630 Integrated Curriculum and Educational Programming for Special Education	3
SGN 632 Collaborative Consultation in Special Education	2
SGN 661 Advanced Assessment and Decision-Making ...	3
	<i>(11 hours)</i>
2. Courses in area of concentration (7-25 hours)	
3. Cognates (2-6 hours)	
EDP 677 Research Techniques	2

Concentration areas include emotionally impaired, mentally impaired, physically and otherwise health impaired, visually impaired, hearing impaired, and general special education. If endorsement in any area of special education is being sought, the appropriate endorsement sequence must be completed. It is also possible to complete a state approval sequence (e.g. supervisor of special education) as part of the Master of Arts program of study.

Students may elect to do a thesis as part of the Master of Arts program. If pursuing the thesis option, students must complete cognates EDP 621 Statistical Applications in Educational Research (2) concurrent with EDP 677 Research Techniques (2), and subsequently take EDP 651 Inferential Statistics (2). The student should elect SGN 690/691/692 Thesis for one, two or three semester hours during two consecutive semesters, to total 4 semester hours.

MASTER OF ARTS

(SPEECH-LANGUAGE PATHOLOGY)

Students who seek admission to the graduate program in speech-language pathology may elect either a teacher certification or a non-teacher certification track. Those who do not have undergraduate degrees in speech language pathology must enroll as full-time students and complete the undergraduate deficiencies before degree status entry into the graduate program. Students must consult a graduate adviser in speech-language pathology before enrolling in major courses.

MODEL

Eastern Michigan University teacher educators produce knowledgeable professionals who are caring, reflective, decision-makers in a culturally diverse society.

ADMISSION REQUIREMENTS

In addition to the requirements listed above with the exception of number two (have a valid teaching credential), a student

applying to the speech-language pathology program who has an undergraduate degree in speech-language pathology must:

1. have a 3.0 grade point average in the undergraduate major and an overall grade point average of a 2.75 from EMU; 3.0GPA in major and an overall GPA of 3.0 from other institutions.
2. Submit two letters of recommendation from:
 - a. a clinic supervisor
 - b. a professor in the undergraduate major area of study

Note: A student applying to the speech-language pathology program who does NOT have an undergraduate degree in speech-language pathology, in addition to the requirements listed above with the exception of having a valid teaching credential, must have a 3.0 grade point average in the undergraduate major and an overall grade point average of 3.0.
3. International students must have either a score of 100 on the Michigan English Assessment Battery (MELAB) or 600 on the Test of English as a Foreign Language (TOEFL).

PROGRAM REQUIREMENTS

The program requirements for attaining a master's degree in speech-language pathology differ in some aspects from those of the Graduate School in that

- Only six semester hours of graduate transfer credit will be accepted;
2. All candidates must meet the clinical and academic requirements for certification of the American Speech-Language-Hearing Association prior to receiving their degrees;
3. All candidates must complete a minimum of 36 semester hours of approved graduate credit;
4. All candidates must pass major courses with a grade of B- or better;
5. All candidates must be recommended by the speech-language faculty committee for continuance in the program. This is to be done upon completion of 12-15 credit hours of course work in the program, prior to SLI 607 Colloquium. The committee will consider GPA, faculty recommendations, and demonstrated competence in academic and clinical work. Students must demonstrate behaviors which indicate stability, maturity, understanding, and aptitude as judged necessary for predicted success as a speech-language pathologist.

EXIT CRITERIA

To be eligible for graduation and receipt of the Master's degree, the student must:

1. complete a colloquium research project signifying a culminating experience. The student must enroll in the SLI 616 Experiments in Speech-Language Pathology and SLI 607 Colloquium. This is designed to provide the student with the opportunity to conduct research and have discussions of reading with faculty and peers. Although this is not a thesis per se, the student will submit a research manuscript and make a formal oral presentation to faculty and students.
2. complete required course work as described.
3. submit a completed ASHA application
4. submit copies of all clinical practica logs.

CURRICULUM

The following courses are offered to students for completion of the 36 hour (minimum) master's degree program and are considered to be a standard program of study. Students who transfer from other universities should consult their academic adviser concerning equivalencies.

- A. Required Courses in Speech-Language Pathology

SLI 508 Multicultural/Multilingual Communication Development and Disorders	3
SLI 555 Neuroanatomy and Physiology for the Speech Pathologist	2
SLI 578 Audiometric Testing	3
SLI 624 Neurogenic Communicative Disorders	2
SLI 616 Experiments in Speech-Language Pathology ...	3
SLI 620 Consulting and Interviewing in Speech Pathology	3
SLI 622 Augmentative Communication	2
SLI 612 Motor Speech Disorders	2
SLI 614 Aphasia	3
SLI 607 Colloquium	2
SLI 694 Seminar: Professional Issues in Speech-Language Pathology	2
- B. Required Clinical Practica

SLI 568 Diagnostic Methods in Speech, Language, and Hearing	3
SLI 687 Clinical Internship in Speech Pathology	2
SLI 689 Public School Internship in Speech Pathology ...	4

(Students not electing an educational endorsement must complete two clinical internships in lieu of SLI 689 Public School Internship in Speech Pathology.)
- C. Elective Courses in Speech-Language Pathology

SLI 590 Current Issues in Speech-Language Pathology ...	1
SLI 618 Language and Learning Theories	2

MASTER OF ARTS

(LEARNING DISABILITIES)

Students accepted into the graduate program in Learning Disabilities may elect a teaching endorsement and a Master of Arts degree. Learning Disability endorsements are offered at both elementary and secondary levels.

MODEL

The development of special education professionals with the comprehensive knowledge, skills, and attitudes to deliver a continuum of habilitative/rehabilitative services to persons with special needs and to their families within a multicultural society.

ADMISSION REQUIREMENTS

The graduate student seeking admission to a Learning Disabilities Master of Arts degree in the Special Education department is required to:

1. Possess teacher certification and an endorsement in one area of special education.
2. Meet Graduate School admission requirements including graduation from a regionally accredited college or university.
3. Submit two letters of recommendation to include: one letter verifying professional competence, one letter from faculty member or other person knowledgeable of candidate's academic competence.
4. Achieve acceptable score on the Graduate Record Examination, (effective Fall, 1993).
5. Have a successful personal interview with an assigned adviser.

6. Possess previous endorsement in one of the special education areas.
7. Foreign students must provide a score of 90 on the Michigan English Language assessment Battery (MELAB) or 570 on the Test of English as a Foreign Language (TOEFL).

PROGRAM REQUIREMENTS

The graduate student seeking a Master of Arts degree in learning disabilities through the Department of Special Education must:

1. Successfully complete a minimum of 36 semester hours of approved graduate credit.
2. Successfully complete an approved master's degree program that has been planned with a special education graduate adviser.
3. Successfully complete competency examination at 90% or better. This examination is part of the course requirements found in SLD 678 Advanced Diagnostic Prescriptive Programming for Learning Disabled Students. This is a mid-program progress assessment and must be completed prior to practicum experience.
4. Have on file with adviser two evaluations of teaching effectiveness/professional competence. These evaluations are to be completed by supervisors/administrators in public or private schools at the conclusion of the internship experience.
5. Successfully complete supervised practicum experience.
6. Successfully complete the degree requirements within six years of enrolling for the first class applicable to the degree program.
7. Meet all other requirements of the Graduate School.

EXIT REQUIREMENTS

Exit criteria include demonstration of acceptable levels of performance in the following areas:

1. Ability to carry out suitable procedures for assessment of listening, thinking, talking, reading, spelling, writing, mathematics, or other skill deficiencies;
2. Ability to specify in behavioral terms instructional objectives which are appropriate to the skill needs and entry level characteristics of the individual student;
3. Ability to set up and maintain conditions and procedures of instruction suitable to the learning goals set for the individual student;
4. Ability to assess instructional outcomes in terms of the student's behavior change and use this data in the formulation of an ongoing instructional plan adjusted to changed student conditions;
5. Ability to use appropriate techniques with the student to help develop the self-management skills required for constructive social participation and independent learning;
6. Ability to function as a member of interdisciplinary teams and maintain effective liaison with parents and others working with the student;

Acceptable levels will be determined by course grades, GPA, mid-program competency examination, practicum evaluations and performance in Research Colloquium, including production at the end of practicum of a comprehensive written document which demonstrates the understanding, synthesis of knowledge, and the practical applications of diagnostic-prescriptive planning for exceptional youth. This product is considered a culminating activity for the degree program.

CURRICULUM

Core Courses	Hours
SGN 621 Law and Public Policy for Persons with Disabilities	3
SGN 630 Integrated Curriculum and Educational Programming for Special Education	3
SGN 632 Collaborative Consultation in Special Education	2
SGN 661 Advanced Assessment and Decision-Making ...	3

L.D. Concentration Courses

SLD 468 Education of Children with Learning Disabilities 2	
SLD 673 Language: Acquisition, Disorders, Evaluation	3
SLD 672 Methods: Elementary Learning Disabled Students or SLD 674 Methods: Secondary Learning Disabled Students	3
SLD 678 Advanced Diagnostic Prescriptive Programming for Learning Disabled Students	3
SLD 693 Practicum in Learning Disabilities	4
SLD 712 Research Colloquium: Learning Disabilities ...	2
PED 578 Motor Learning and Development	2
EDP 677 Research Techniques	2
Electives/Cognates	4
	<i>36 hours</i>

**SPECIALIST IN ARTS
(SPECIAL EDUCATION)**

The Special Education department offers a Specialist in Arts degree designed to prepare highly qualified leadership personnel in two general areas of study:

1. Administration and supervision of special education programs; and
2. Curriculum development.

MODEL

The development of leaders in special education with the knowledge, skills, and attitudes for building quality services for persons with special needs and their families within a multicultural society.

ADMISSION REQUIREMENTS

The graduate student seeking admission to this degree program is required to:

1. be admitted to the Graduate School;
2. possess a Master's degree from a regionally accredited college or university;
3. have three years of documented professional experience in special education;
4. have an endorsement in one area of special education;
5. submit three letters of recommendation to include: one letter verifying three years of successful professional experience in special education, one letter from a faculty member or other person knowledgeable of candidate's academic competence;
6. have a successful personal interview;
7. achieve acceptable score on the Graduate Record Exam.
8. International students must provide a score of 90 on the Michigan English Language Assessment Battery (MELAB) or 570 on the Test of English as a Foreign Language (TOEFL).

PROGRAM REQUIREMENTS

The program requirements for the Specialist in Arts degree include:

1. Completion of a minimum of 32 hours beyond the master's degree.
2. Achievement of an overall GPA of 3.3 (B+).
3. Recommendation from the specialist degree committee for continuance in the program. This is to be done upon completion of 12-15 hours of course work and before internship and thesis or independent study. The committee will consider GPA, faculty recommendations, demonstrated competence in academic and professional work and rate of progress in the program. Students must demonstrate behaviors which indicate stability, maturity, understanding and aptitude as judged necessary for predicted success as a specialist in special education administration/curriculum.
4. Successful completion of an internship.
5. Achievement of passing scores on oral and written examination near the completion of the program.
6. Completion of all other requirements of the Graduate School.

EXIT CRITERIA

Criteria are to meet all the objectives listed previously for graduate study in special education, as demonstrated by:

1. Successful completion of all coursework on program (minimum GPA 3.3).
2. Successful completion of approved internship.
3. Successful completion of thesis or independent study.
4. Successful completion of oral and written examinations.

CURRICULUM

All specialist degree students are required to take the following courses:

Course	Hours
SGN 615 Social Psychology of Disability: Family, School, and Society	3
SGN 632 Collaborative Consultation in Special Education	2
SGN 619 Administration and Supervision of Special Education	2
SGN 719 Advanced Seminar: Special Education Administration	2
EDP 677 Research Techniques	2
Administrative Strand	minimum 13 hours
or	
Curriculum Strand	minimum 13 hours
Culminating experiences - required by all specialist degree candidates:	
SGN 789 Specialist Internship in Special Education	4
Thesis/Independent Study	4

EMOTIONALLY IMPAIRED COURSES

SEI 510 Advanced Theory of Emotional Impairment. 3 hrs
Focus will be on an advanced behavior concepts, cognitive psychology, biophysical research, ego psychology, and the psycho-educational approach. Students will acquire knowledge of current research and the contributions of these theories of maladjustments to understanding personality deviations.

Prereq: Introductory coursework in psychological theory and special education and department permission.

SEI 514 Advanced Curriculum and Methods: Elementary Emotionally Impaired Students. 3 hrs

Emphasis is on the application of contemporary theories and research relative to the teaching of emotionally impaired elementary school aged children. Through lecture, discussion and simulated experiences, students will learn about instructional techniques, therapeutic management strategies and curriculum materials. For experienced professionals.

Prereq: Department permission and SEI 510.

SEI 516 Advanced Curriculum and Methods: Secondary Emotionally Impaired Students. 3 hrs

Educational techniques, programming, and curriculum design for severely emotionally-impaired adolescents and/or youth in transition. For experienced professionals with emotionally impaired students.

Prereq: SEI 510 and department permission.

SEI 563 Emotionally Impaired Student in the Regular Classroom. 2 hrs

For professionals involved in educating emotionally impaired youngsters in the regular classroom. Course will focus on causes of behavioral problems and therapeutic, affective, and educational techniques as well as the roles of the various professionals involved. This course does not apply toward an endorsement in the area of emotional impairment.

Prereq: Regular classroom teacher. Others with department permission.

SEI 603 Therapeutic Management of Emotionally Impaired Children. 2 hrs

Techniques in dealing with emotionally impaired children; surface manipulation of behavior and life space interview.

Prereq: SEI 510.

SEI 620 Advanced Affective and Educational Techniques for Emotionally Impaired Students. 2 hrs

Advanced course for graduate students in the area of emotional impairment. Exploration and evaluation of educational and affective programming.

Prereq: Department permission.

SEI 630 Introduction to Autism. 2 hrs

This course introduces the student to the definition of the syndrome of autism and the various theories with regard to cause and treatment. The student also is given an overview of the unique problems encountered in intervention strategies and techniques.

Prereq: Graduate students who have department permission and/or endorsement in one area of special education.

SEI 694 Seminar: The Emotionally Impaired Child. 2 hrs

Course consists of a review and discussion of some contemporary issues in the education of emotionally impaired students following which students elect areas for more intensive exploration through library study or actual data gathering. Students present their results and conclusions to the group in a discussion setting.

Prereq: Department permission.

GENERAL SPECIAL EDUCATION COURSES

SGN 510 The Exceptional Child in the Regular Classroom. 3 hrs

A study of the nature and needs of exceptional children being educated in the least restrictive educational environment of the regular classroom. A review of philosophical and legal bases of mainstreaming. A discussion of issues, concerns, and problems related to education of exceptional students in the mainstream of education.

SGN 511 The Instruction and Behavior Management of the Student with Disabilities in the Regular Classroom. 3 hrs

A study of the learning and behavioral needs of pupils with disabilities in regular classroom settings, including students eligible under Section 504 of the Vocational Rehabilitation Act. Review of the nature of learning styles, models of prescriptive teaching, and approaches to understanding and working with behavior problems.

Prereq: SGN 510.

SGN 515 Computer Applications in Special Education. 2 hrs
Development of knowledge of hardware and software adaptation needs for special education populations and presentation of information about availability of each. Focuses on effective utilization of microcomputers with special populations.

Prereq: Graduate special education major or department permission.

SGN 521 Sexuality for Persons with Disabilities. 2 hrs

Exploration of special problems, concerns, needs, and practices of persons with disabilities in relation to development of healthy human sexuality.

Prereq: Senior standing or graduate student.

SGN 522 Understanding Male Behaviors: Identifying and Managing Self-Defeating Characteristics. 2 hrs

This course is designed for students working with males in educational, legal and/or social welfare system programs. It focuses on those variables which contribute to the shaping of masculine behavior and the conditions which may result in physically, emotionally or psychologically dysfunctional behaviors. The impact of ethnic, religious and racial factors on the shaping of masculinity are also considered. Means of responding to male self-defeating behaviors are explored and management techniques designed to modify and channel this behavior into more constructive modes of interaction in the classroom and other settings are presented and explored using student case material.

Prereq: Seniors eligible for graduate classes and graduate students.

SGN 585 Practicum: Severely Multiply Impaired. 4 hrs

This course is designed to meet the state requirements for teachers wanting to teach severely multiply impaired (SXI) children. Students will complete a 180-hour supervised assignment in which they will plan for, teach, and evaluate instruction with SXI individuals and groups. *Credit/no credit.*

Prereq: An endorsement in one area of special education.

SGN 586 Practicum: Elementary Special Education. 4 hrs

This course provides an elementary level practicum experience for teachers having a secondary special education endorsement in mentally, emotionally, physically, visually, or hearing impaired. *Credit/no credit.*

Prereq: Secondary certification and endorsement in the same area of special education.

SGN 587 Practicum: Secondary Special Education. 4 hrs

This course provides a secondary practicum experience for teachers having an elementary special education endorsement in mentally, emotionally, physically, visually, or hearing impaired. *Credit/no credit.*

Prereq: Elementary certification and endorsement in the same area of special education.

SGN 590/591/592 Special Topics. 1/2/3 hrs

Experimental courses designed to investigate current issues and specific topics of concern related to disabilities.

SGN 605 Rehabilitation Counseling in Special Education. 2 hrs

This course is designed to integrate social and vocational theories and practices as they relate to life planning for persons with disabilities in the transition from formal schooling to adult living.

Prereq: SGN 510.

SGN 613 The Slow Learner in the Classroom. 2 hrs

Adjusting the curriculum for slow-learning children; problems of identification, methods and materials, curriculum modifications, and remedial techniques.

SGN 615 Social Psychology of Disability: Family, School, and Society. 3 hrs

This course addresses the principles of social psychology of special needs and exceptional persons, infancy through adulthood, and the influence of the reciprocal interaction of the family, school, and society.

Prereq: Graduate special education and/or psychology majors or department permission.

SGN 619 Administration and Supervision of Special Education. 2 hrs

Organization or improvement of a program for exceptional children; philosophical, legal, and practical aspects of organizing and administering special education programs in public schools.

Prereq: An endorsement in special education or department permission.

SGN 621 Law and Public Policy for Persons with Disabilities. 3 hrs

An extensive study of state and federal legislation as it applies to persons with disabilities. Teacher responsibility and liability under law. The effect of case law and judicial decisions on future legislation.

Prereq: SGN 510.

SGN 630 Integrated Curriculum and Educational Programming for Special Education. 3 hrs

This course is intended for students interested in the learning characteristics, behaviors and effective methods of teaching children who are usually labeled learning disabled, mildly retarded, emotionally disturbed, disadvantaged, and/or educationally handicapped. Following this course, students will be able to perform a diagnosis of children's abilities and achievement levels and determine the need for developmental or remedial programming as well as match the child's learning style with appropriate methods of instruction.

Prereq: Endorsement in one area of special education or department permission of instructor.

SGN 632 Collaborative Consultation in Special Education. 2 hrs

Theories focusing on areas including group process skills, problem solving skills, and relevant consultation models will be introduced and discussed. Particular attention will be given to the development of skills supporting collaborative consultation as an interactive process and ways of working effectively with general education and related fields.

Prereq: An endorsement in one area of special education.

SGN 636 Roles of Resource Room Teachers and Teacher Consultants. 2 hrs

Students will develop a broad understanding of the concept of mainstreaming students into the "least restrictive environment." While the focus will be on the organization of resource rooms and teacher consultant services, the development of teacher instructional and communication skills, alternative models for delivery of service will be explored for addressing both general and special education needs. Specific role expectations and responsibilities of

resource room teachers and teacher consultants will be thoroughly explored.

Prereq: SGN 632 and one endorsement in special education.

SGN 661 Advanced Assessment and Decision-Making. 3 hrs
Examination of data base procedures for reviewing and making educational decisions regarding special education eligibility, program placement, and goals. Laws, special education definitions, behavioral and cognitive theory, administration interpretation of assessment techniques and materials, writing of educational prescriptions, and survey of service delivery systems.

Prereq: An endorsement in an area of special education or department permission.

SGN 669 Occupational Information in Special Education. 2 hrs
Experiences in securing information of cultural, social, educational, and occupational opportunities in the community for exceptional children/youth, visits to industry, community, service agencies, and educational institutions.

Prereq: SGN 510, or equivalent.

SGN 679/680/681 Special Topics. 1/2/3 hrs

Experimental courses designed to investigate specific topics of concern in special education.

Prereq: Department permission.

SGN 683 Workshop. 2 hrs

Please check the current class schedule for specific offerings.

SGN 687 Internship. 2 hrs

Prereq: Department permission.

SGN 689 Supervised Internship in Elementary Special Education. 4 hrs

Supervised internship with elementary-age children in local schools and institutions in the disability area of preparation. *Credit/no credit.*

Prereq: Permission of adviser.

SGN 690/691/692 Thesis. 1/2/3 hrs

Prereq: Approval of adviser and department permission.

SGN 693 Supervised Internship in Secondary Special Education. 4 hrs

Supervised internship with secondary young adults in the disability area of preparation. *Credit/no credit.*

Prereq: Permission of adviser.

SGN 694 Seminar: Interdisciplinary Special Education. 4 hrs

An intensive study of selected problems in special education. *Credit/no credit. Open only to majors in special education.*

SGN 697/698/699 Independent Study. 1/2/3 hrs

An intensive study of a problem or group of problems under the direction of a University faculty member.

Prereq: Department permission

SGN 719 Advanced Seminar: Special Education Administration. 2 hrs

A structured colloquium covering current special education administrative practices, issues, procedures, and tasks specific to special education supervisors and directors.

Prereq: SGN 619.

SGN 789 Specialist Internship in Special Education. 4 hrs

Supervised field placement to ensure that students have actual experiences with all phases of Special Education Administrative responsibilities or Curriculum Specialist's responsibilities. *Credit/no credit.*

Prereq: SGN 619, SGN 719, and adviser approval.

SGN 790/791/792 Thesis. 1/2/3 hrs

Prereq: Approval of adviser and department permission.

HEARING IMPAIRED

SHI 527 Signing Exact English in the Education Setting. 2 hrs
Emphasis on increasing receptive/expressive sign language and finger-spelling as teaching tools. Includes identification of appropriate manually-coded systems of English for special-needs students/individuals.

Prereq: One basic sign language course.

SHI 554 Advances in Auditory Training and Speechreading for Hearing Impaired Persons. 3 hrs

Advanced study of the avenues of receptive communication available to acoustically disabled students, methods of developing speech-reading skills, methods of training persons with residual hearing, and the care and use of group and individual amplification systems. Emphasis on current research, new technology, assistive devices, and intervention with students/clients with cochlear implants.

SHI 575 The Hard of Hearing Child. 2 hrs

A study of the diagnosis and educational planning considerations for the hard of hearing child as opposed to those for the deaf child. Educational innovations and technology as applied to the hard of hearing individual are studied.

SHI 582 Evaluation and Training for Hearing Impaired Infants. 2 hrs

Management of hearing impaired infants, with emphasis on early language development, parent counseling, observation of hearing impaired infants and practice.

Prereq: An endorsement in one area of special education or department permission

SHI 673 Advanced Speech for Persons with Hearing Impairments. 2 hrs

Review of classical approaches, a study of recent research and practical application of findings to the development and improvement of speech for the deaf and hard of hearing. Includes supervised diagnostic and therapeutic practicum.

Prereq: Undergraduate major in education of the hearing impaired or speech-language pathology.

SHI 675 Secondary School Subjects for Hearing Impaired Students. 4 hrs

Principles and methods of teaching secondary school subjects to hearing impaired students the improvement of reading skills and written composition, techniques of correcting language errors and adapting the regular school curriculum to meet the demands of the hearing impaired student.

Prereq: Undergraduate major in education of the hearing impaired.

SHI 687 Auditory Training and Speechreading Practicum. 2 hrs

Sixty clock hours of directed observation and rehabilitation practice with hearing-impaired persons.

Prereq: Undergraduate major in speech-language pathology or hearing impaired

LEARNING DISABLED COURSES

SLD 672 Methods: Elementary Learning Disabled Students. 3 hrs

This course focuses on the basic principles of diagnostic-prescriptive education. Sensory/perceptual processing of information necessary for growth in achievement will be stressed. Listening comprehension, oral expression, basic reading skills, reading comprehension, mathematics and written language will receive em-

phasis. The delivery of services at the elementary level will be reviewed.

Prereq: SGN 251 Education of Exceptional Children and SLD 468 Education of Children with Learning Disabilities.

SLD 673 Language: Acquisition, Disorders, Evaluation. 3 hrs
This course presents information concerning normal language acquisition, descriptions of disorders of language development in disability populations, classroom evaluation techniques and guidelines for referral to a language specialist.

Prereq: SLD 468 Education of Children with Learning Disabilities or equivalent

SLD 674 Methods: Secondary Learning Disabled Students. 3 hrs

This course focuses on the basic principles of diagnostic-prescriptive education. The achievement areas of language, reading, mathematics and written expression will receive emphasis. The delivery of services at the secondary level and application of skills to vocational education and content areas will also be covered.

Prereq: SGN 251 Education of Exceptional Children and SLD 468 Education of Children with Learning Disabilities.

SLD 678 Advanced Diagnostic Prescriptive Programming for Learning Disabled Students. 3 hrs

This course will apply learning disability theory, assessment and data interpretation to the writing of educational prescriptions and educational decision making procedures. Service delivery systems are also surveyed. This course prepares students for the diagnostic practicum in learning disabilities.

Prereq: Department permission

SLD 683 Workshop. 2 hrs

Please check current class schedule for specific offerings.

Prereq: Department permission

SLD 693 Practicum in Learning Disabilities. 4 hrs

This course involves the intensive study of children having learning and behavior problems. Evaluation, planning, diagnostic teaching, consultation, and prescriptive writing are included.

Prereq: Department permission

SLD 712 Research Colloquium: Learning Disabilities. 2 hrs

An examination of current research dealing with theoretical and therapeutic implications for learning disabled children, adults, and their families. Individual investigation and presentation required.

Prereq: SLD 693 and EDP 677, or equivalent.

SPEECH AND LANGUAGE IMPAIRED COURSES

SLI 500 Introduction to Speech-Language Pathology. 2 hrs

An overview of speech, language, and hearing problems, their causes and the remedial procedures which the classroom teacher may employ. Disorders of articulation, voice, fluency, and language. *Not open to students who have credit in SGN 271 Language Development and Speech Disorders in Special Populations. Graduate credit to non-majors only.*

SLI 508 Multicultural/Multilingual Communication Development and Disorders. 3 hrs

Survey of language and cultural influences of major racial and/or ethnic groups, and resultant communication patterns. Differential diagnostic approaches to determine communication disorder or difference. Educational effects are also covered.

SLI 537 Clinical Practice in Hearing Testing. 2 hrs

Supervised practice in hearing testing including air and bone conduction, special procedures and speech audiometry.

Prereq: SLI 578 and department permission.

SLI 538 Clinical Practice in Hearing Therapy. 2 hrs

Supervised practice in auditory learning and speech-reading with children and adults.

Prereq: Department permission.

SLI 550 Phonology. 2 hrs

A critical examination of the assumptions underlying the etiological, symptomatological, and therapeutic rationales currently used in articulation therapy and research.

Prereq: Undergraduate major in speech-language pathology and department permission.

SLI 555 Neuroanatomy and Physiology for the Speech Pathologist. 2 hrs

A lecture class concerned with development, maturation and function of the human central nervous system with emphasis on those neural structures and processes involved in the learning and usage of speech and language.

Prereq: Undergraduate major in speech-language pathology and department permission.

SLI 556 Anatomy of the Head, Neck, and Trunk. 2 hrs

Detailed study of the skeletal, neurological, physiological, and muscular system of the head, neck, and trunk with special emphasis on the speech mechanism. Laboratory dissection will be a part of the course.

Prereq: SLI 316 Speech Science or equivalent. Undergraduate major in speech-language pathology and department permission.

SLI 558 Language Therapy. 2 hrs

Incorporating newly acquired or recently modified speech patterns into communicative behavior. Patterns and codes of language; the development of therapeutic activities for individuals with speech, hearing, or language impairments.

Prereq: Undergraduate major in speech-language pathology and department permission.

SLI 562 Evaluation and Selection of Hearing Aids. 2 hrs

Interpretation of audiograms; electro-acoustic measurement of hearing aids; evaluation, selection, and care of hearing aids for hearing impaired persons.

Prereq: Department permission.

SLI 568 Diagnostic Methods in Speech, Language, and Hearing. 3 hrs

Diagnostic procedures and routines used in the evaluation of speech and language disorders. Emphasis on familiarization with available evaluative tools and practical experience in conducting actual diagnostic sessions; client interview, interpretation of test results, relating of information to parents and report writing.

Prereq: Undergraduate major in speech-language pathology and department permission

SLI 578 Audiometric Testing. 3 hrs

Advanced techniques of testing the auditory function; interpretation of audiograms, hearing aid evaluations, and use of differential hearing assessment techniques for children and adults with hearing disorders. Lab required.

Prereq: SHI 392 Introduction to Audiology, major in speech-language pathology, or hearing impaired.

SLI 590 Current Issues in Speech-Language Pathology. 1 hr

Please check the current class schedule for specific offerings. Pediatric Language Disorders, Dysphagia, Cognition, and Communication.

Prereq: Undergraduate major in speech-language pathology and department permission.

- SLI 595 Workshop.** 2 hrs
Please check the current class schedule for specific offerings.
Prereq: Undergraduate major in speech pathology and audiology.
- SLI 607 Colloquium.** 2 hrs
An examination of current research dealing with theoretical and therapeutic implications in the various pathologies of speech and language. Opportunity for individual investigation and study provided. *Credit/no credit.*
Prereq: Undergraduate major in speech-language pathology and SLI 616.
- SLI 610 Cleft Palate.** 2 hrs
Nature and etiology of palatal and facial deformities, surgical procedures, and related therapy. Observation of dental, medical, and social service agencies.
Prereq: Undergraduate major in speech-language pathology
- SLI 612 Motor Speech Disorders.** 2 hrs
Examines the nature, etiology, and treatment of speech disorders resulting from neuropathologies. Related intellectual, perceptual, social, and emotional problems will be considered as well as the neuromuscular symptoms. Current speech pathology approaches will be emphasized within a total therapeutic program.
Prereq: Undergraduate major in speech-language pathology
- SLI 614 Aphasia.** 3 hrs
Designed to provide a theoretical framework for understanding the symbolic language problems of aphasia and current therapeutic approaches to the problem. Aphasia resulting from cerebral insult after language has been established, related physical and behavioral disturbances.
Prereq: Undergraduate major in speech-language pathology and SLI 555.
- SLI 616 Experiments in Speech-Language Pathology.** 3 hrs
The first of a two-course sequence stressing clinical research in the area of human communication development and disorders with emphasis on single subject design. Coursework culminates in a formal proposal. The research must be completed and results formally presented in the second course of the sequence.
Prereq: Full admission to the SLI graduate program.
- SLI 618 Language and Learning Theories.** 2 hrs
The nature and functions of language and communication via linguistics, semantics, and phonetics, with special emphasis placed on learning theories and their relationship to language, speech, and communication behavior.
Prereq: Undergraduate major in speech-language pathology
- SLI 620 Consulting and Interviewing in Speech Pathology.** 3 hrs
Instruction and experiences in preparing students to manage interviewing, consulting, and educational activities for families of persons with speech and hearing disabilities and/or clients with disabilities.
Prereq: Major in speech-language pathology, or hearing impaired.
- SLI 622 Augmentative Communication.** 2 hrs
This course focuses on a historical perspective and philosophy of augmentative communication with assessment and intervention considerations. Includes emphasis on aided, unaided, electronic, and gestural communication techniques.
Prereq: Department permission.
- SLI 624 Neurogenic Communicative Disorders.** 2 hrs
This lecture/discussion course will cover communication disorders resulting from organic brain syndromes. Among syndromes

and other conditions covered will be dementia, focal brain lesions, and traumatic brain injury.
Prereq: SLI 555.

SLI 652 Disorders of Voice. 2 hrs
An advanced course in disorders of voice involving a study of current literature and laboratory experiences with clinical equipment and case centered video tape recordings. Special emphasis on psychosomatic voice disorders and the voice problems of the laryngectomee.
Prereq: Major in speech-language pathology or hearing impaired; graduate status.

SLI 654 Stuttering II: Disorders of Fluency. 2 hrs
An advanced course in disorders of fluency involving research and the development of rationale for treatment of stuttering, cluttering, and disruption of speech rate resulting from organic pathology.
Prereq: Major in speech-language pathology; graduate status.

SLI 687 Clinical Internship in Speech Pathology. 2 hrs
Opportunity to practice speech and language assessment and intervention in a clinical setting. Experience with children and adults with multiple disabilities. *Credit/no credit.*
Prereq: Undergraduate major in speech-language pathology

SLI 689 Public School Internship in Speech Pathology. 4 hrs
Supervised practice in a public school setting. *Credit/no credit.*
Prereq: Undergraduate major in speech-language pathology.

SLI 694 Seminar: Professional Issues in Speech-Language Pathology. 2 hrs
Emphasis on current issues, professional ethics, organization, and administration of speech-language pathology programs in all settings. Includes state and national laws governing professional practices in speech-language pathology, professional growth and development, and employment practices and procedures. *Credit/no credit.*

SLI 697/698/699 Independent Study. 1/2/3 hrs
An intensive study of a problem or group of problems under the direction of a University faculty member. *Credit/no credit.*
Prereq: Department permission.

MENTALLY IMPAIRED COURSES

SMI 557 Mental Retardation: Nature, Needs, and Issues. 3 hrs
Investigation of the nature and causes of mental retardation. Addresses preventive aspects as well as the inherent social, legal and moral issues; current practices and emerging trends in school and society. *Not open to students who have credit in SMI 350 Introduction to Mental Retardation.*
Prereq: SGN 251 Education of Exceptional Children or SGN 510.

SMI 635 Program Development for Students with Severe Mental or Multiple Disabilities. 3 hrs
This course, required of graduate students working toward a master's degree with a focus on students with severe mental or multiple disabilities, teaches the skills necessary to develop programs for students identified as SMI or SXI. Program development requires understanding and application of best educational practices in assessment, curriculum development, and classroom management; utilization of skills of paraprofessionals, families, and volunteers; and knowledge related to students' physical and sensory disabilities necessary to work collaboratively with other professionals.
Prereq: Endorsement in the area of mentally impaired or physically and otherwise health impaired or department permission.

SMI 694 Seminar: Mental Retardation. 2 hrs
A review and discussion of contemporary problems and issues related to the field. Recent developments and practices are critically analyzed. Course includes resource speakers and assigned topics for individual students/groups.
Prereq: Eight graduate hours in special education.

PHYSICALLY AND OTHERWISE HEALTH IMPAIRED COURSES

SPI 638 Developing Curriculum for Physically and Health Impaired Students. 2 hrs
For experienced teachers, a course in which curriculum models are researched and established methods of teaching are examined and drawn upon to develop an appropriate curriculum for students with physical disabilities and health limitations.
Prereq: Knowledge of the pathology of physical and health impairments and special education methodology for the physically and health impaired or department permission

OTHER COURSES

A maximum of nine hours of approved 400-level coursework may be permitted in the earning of any graduate degree.

The following undergraduate courses in the Special Education Department may be taken for graduate credit, with the adviser's and the Graduate School's approval.

If you intend to enroll in any of the following undergraduate courses for graduate credit, you must come to the Graduate School for written permission before enrolling in the course; otherwise, you will receive undergraduate credit.

General Special Education

- SGN 461 Classroom Management and Intervention Strategies for Handicapped Students (3)
- SGN 481 Adaptive Technology in Special Education (2)
- SGN 485 Methods and Curriculum: Adolescents and Young Adults with Special Needs (2)
- SGN 486 Recitation and Field Experience with Adolescents and Young Adults: Mentally Impaired, Physically Impaired, Hearing Impaired, or Visually Impaired (2)
- SGN 491 Seminar for Teachers of Special Education (2)

Emotionally Impaired

- SEI 401 Programming, Methods, and Curriculum for the Elementary Emotionally Impaired Child (4)
- SEI 488 Programming, Methods and Curriculum for Secondary Emotionally Impaired (4)

Hearing Impaired

- SHI 436 Speech for the Hearing Impaired (3)
- SHI 437 Adaptive Curriculum for the Hearing Impaired (3)
- SHI 487 Speech Practicum with the Hearing Impaired (2)

Learning Disabilities

- SLD 468 Education of Children with Learning Disabilities (2)

Speech and Language Impaired

- SLI 452 Voice (3)
- SLI 454 Stuttering (3)

Mentally Impaired

- SMI 427 Educating the Elementary Student with Mild Retardation (2)
- SMI 483 Education of Students with Moderate or Severe Retardation (2)

Physically and Otherwise Impaired

- SPI 412 Ancillary Services and Health Procedures for Teachers of Physically Impaired (2)

SPI 414 Educational Strategies for Teachers of the Physically Impaired (4)

Visually Impaired

- SVI 464 Methods of Teaching the Blind (3)
- SVI 465 Braille II: Nemeth Code (3)
- SVI 467 Education of Children with Impaired Vision (2)
- SVI 469 Electronic Communication—Visually Impaired (3)
- Upper division undergraduate courses suitable for use as a cognate by majors in other fields:
- SLD 468 Education of Children with Learning Disabilities (2)

TEACHER EDUCATION

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Graduate Coordinator
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487-3187

The theme of the graduate programs in the Department of Teacher Education is the development of educators who are committed to their ongoing professional growth and are aware of the challenges of democracy in our culturally diverse society. These educators will assert leadership, apply and practice scholarship, and exercise reflective thinking to meet the needs of learning communities.

PROGRAMS OFFERED

The Teacher Education department offers eight master of arts degrees in the following areas: Social Foundations; Educational Psychology with areas of concentration in Development and Personality, Research and Evaluation, and Educational Media and Technology; Reading; Early Childhood Education; Elementary Education with areas of concentration in Children with Special Needs, Gifted and Talented, Language Arts, Open Education, and Individualized Program; Middle School Education; Secondary School Teaching; and K-12 Curriculum. In addition, the department offers a thirty hour post-master's program which leads to a

Certificate of Advanced Studies in Curriculum and Instruction (CASCI).

GENERAL ADMISSION REQUIREMENTS FOR ALL PROGRAMS

The requirements listed below are common to all master's programs in the department except for Educational Media and Technology, whose admission requirements are listed separately. Please note that enrollments in Early Childhood Education, Elementary Education, K-12 Curriculum, Middle School Education, Reading, and Secondary School Teaching are limited.

Individuals seeking admission to master's programs in the Department of Teacher Education must:

1. Comply with the Graduate School admission requirements.
2. Show evidence of having taken the Graduate Record Examination (verbal and quantitative subtests only) within the past five years.
3. Have a 2.50 undergraduate grade point average (or 2.75 undergraduate grade point average in the last half of the undergraduate program or a 3.30 grade point average in 12 hours or more of work in a master's program). If the applicant fails to present the required grade point average, she or he must have a minimum score of 900 (combined verbal and quantitative subtests only) on the Graduate Record Examination or she or he may substitute a score of 40 or above on the Miller Analogies Test.
4. Have or be eligible for a valid teaching credential if seeking admission to the following master's programs: Early Childhood Education, Elementary Education, Middle School Education, Reading, Secondary School Teaching and K-12 Curriculum. (This requirement may be waived for foreign students who do not intend to teach in the United States.)
5. Submit a one-page letter of interest describing the applicant's career goals and reasons for pursuing a master's degree in a specific program area.
6. Solicit two letters of recommendation that address the applicant's professional commitment, experience and potential.
7. Come for a personal interview, if requested by the program area.

STUDENT RESPONSIBILITIES

Upon admission to the program, the student is expected to assume the following responsibilities: (a) follow all the policies of the Graduate School, department, and program area as specified in the Graduate Catalog; (b) consult with an assigned adviser before registering for courses in the degree program; (c) prepare a program of study approved by an adviser; (d) obtain permission from the adviser before making substitutions or altering the program of study.

DEPARTMENT APPEALS PROCEDURE

The appeals procedure provides each graduate student with the opportunity to appeal formally an admission, retention, or exit decision in a graduate program in the Department of Teacher Education because she or he believes that the decision was made capriciously or unfairly. When such disputes arise, the student should immediately contact the department head and graduate coordinator. Each appeal submitted according to this procedure must be an individual action by an individual student. Class action appeals by one student on behalf of several students are not permitted.

Step I

If a student wishes to appeal an admission, retention or exit decision, she or he must notify the department head and graduate coordinator in writing within five (5) working days after the student has received written notice of the admission, retention or exit appeals action. The student's written request should include a brief summary of the facts of the case and reasons for making the appeal. With the aid of the department head in scheduling an appointment, the student will meet as soon as possible with the graduate coordinator and department head to privately discuss the disputed admission, retention or exit decision.

Step II

If the dispute is not resolved in Step I to the student's satisfaction and if the student still believes that the appeal has merit based on the facts of the case, she or he has the right to file a formal written appeal with the department head who will forward it immediately to the Department Grade Grievance and Appeals Committee. Guidelines for filing a formal admission, retention or exit decision appeal are as follows:

1. An appeal must be based on evidence that the program area in question has been capricious and/or unfair in making its decision. The written appeal must describe specifically the perceived capricious or unfair action of the program area. The student also should present all other evidence or documentation in support of her or his appeal.
2. An appeal must be filed within fifteen (15) working days after the meeting described in Step I has taken place.

Within ten (10) working days after receipt of the written appeal, the department head must schedule a hearing before the Department Grade Grievance and Appeals Committee. The committee shall be composed of three faculty members and two students. The faculty members shall be selected by appropriate department procedures. The two graduate students on the committee shall be selected by the department head. If possible, one student should be from the program area to which the appeal is directed. The student appellant may, however, request in advance in writing that the two students be excused and that his or her appeal be heard only by the three faculty members. The committee shall conduct a hearing according to the following guidelines:

1. Prior to the hearing, any written information in support for either the student or the program area involved should be distributed to committee members.
2. A detailed record shall be kept of the hearing, preferably a taped sound recording. If a written record is kept, that record should be signed by the Grievance and Appeals Committee asserting that the written record is a true record of the hearing proceedings. If a tape serves as the hearing record, the Grievance and Appeals Committee shall sign a statement attesting that the tape is the true record of the hearing.

- Written or recorded records of any Step II appeal shall be kept on file in the college dean's office and copies shall be provided, upon request, to the student who has initiated the appeal or the program area which is involved in the appeal. Costs associated with duplicating appeals records shall be borne by the individual or program area requesting copies.
3. The hearing shall be open unless the student or the program area requests a closed hearing. This request should be conveyed in writing to the department head prior to the hearing.
 4. Both the student and representatives of the involved program area shall be permitted an adviser. Advisers

must be members of the university community, i.e., students or full-time faculty or staff members.

5. The Department Grade Grievance and Appeals Committee chair shall begin the hearing by beginning the tape recorder (or announcing the name of the person who will be taking minutes) and reviewing the guidelines and procedures under which the hearing shall be conducted.

The committee chair will then announce, "This Step Level II Appeals Hearing is being held on (date). (Name of student) is appealing the (program area) decision on (admissions, retention or exit) requirements. The following committee members are in attendance today: (members give their names).

6. In order, the student and the program area representative(s) will present their cases. Both the student and program area representatives may call witnesses, and the student, program area representatives, adviser(s), and committee members all have the right to question any witnesses that are called. The student and program area representative(s) should be asked for brief closing statements.
7. The chair will then close the hearing with "This Step Level II Appeals Hearing is now concluded." The committee will meet in executive session and will present its findings, in writing, to the department head within five (5) working days. The written decision and recommendations will contain a numerical report of the vote and will be signed by the members of the committee. The department head will notify the student and the program area representative(s) of this committee's decision and recommendations.

MASTER OF ARTS SOCIAL FOUNDATIONS

The social foundations graduate program seeks students with a broad range of professional goals who are eager to explore issues pertaining to quality of life, equity and ethics in schools and society. Graduate students in social foundations are expected to assess the complex forces—economic, social and political—that shape the structure and control of education both nationally and internationally. Students also engage in a theoretical analysis of cultural diversity as it impacts the practices and processes of education and life in a democratic society.

The goal of the program is to strengthen and inform a commitment to education for participatory democracy in a pluralistic society. This program is in compliance with the Standards for Academic and Professional Instruction in Foundations of Education, Educational Studies, and Educational Policy as defined by the American Educational Studies Association.

ADMISSION REQUIREMENTS

See general admission requirements above.

RETENTION REQUIREMENTS

To gain approval to proceed with exit requirements, each student must:

1. Complete a total of twelve but no more than fifteen hours of graduate credit with an overall GPA of 3.0 or better.
2. In consultation with the adviser, establish a Midpoint Review Committee consisting of three or four faculty members, two of whom must be from Social Foundations.
3. Write a three-page interim prospectus which will include: (a) a statement of professional goals, (b) a self assessment of professional development since entering

the program, (c) an identification of key issues to be pursued for the remainder of the program, and (d) a plan of action for the culminating experience.

4. Develop a portfolio which contains the prospectus described in #3, the approved program of study, and three examples of graduate work to verify that the student is developing appropriate skills in research and critical analysis.
5. Make an oral presentation of the portfolio to the Midpoint Review Committee. (Students are encouraged to invite their peers to the meeting.)
6. If the student's progress is judged unsatisfactory at the time of the midpoint review, a plan of remediation will be developed by the adviser in consultation with the student and the Midpoint Review Committee.

EXIT REQUIREMENTS

In order to graduate, each student is expected to:

1. Complete a minimum of 30 semester hours of graduate credit applicable to the program.
2. Maintain a minimum GPA of 3.0.
3. Take at least two-thirds of the coursework on campus.
4. Successfully complete a thesis or take the advanced seminar, which will include a project or comprehensive examination.
5. Fill out an application for graduation and obtain the adviser's recommendation.
6. Meet all other requirements for a master's degree adopted by the Graduate School of Eastern Michigan University.
7. Complete an exit interview with two members of the Social Foundations faculty to discuss the strengths and weaknesses of the master's program.

CURRICULUM

The curricular requirements include a minimum of 30 graduate-level semester hours, distributed as follows:

SFD 500 Social Foundations of Education: An Introduction	2
CUR 655 Curriculum Foundations	2
<i>Either</i> EDP 677 Research Techniques (2) <i>or</i> EDP 687 Qualitative/Interpretive Research (2)	2
<i>Either</i> SFD 691 Thesis (2-6) <i>or</i> SFD 694 Seminar (2)	2-6
<i>Three of:</i>	6
SFD 550 Philosophy of Education (2)	
SFD 572 History of American Education (2)	
SFD 580 Sociology of Education (2)	
SFD 627 Trends and Challenges in International Education (2)	
Electives among SFD courses	6-10
Outside electives	6-10

MASTER OF ARTS

EDUCATIONAL PSYCHOLOGY

The educational psychology program has areas of concentration in development and personality, research and evaluation, and educational media and technology, which is described in the following section. The mission of the education psychology program is to prepare the educator as a practitioner and researcher. The focus is on the application of psychological theories, principles, and concepts to school and non-school settings. Specifically, the goals include enhancing the student's abilities to: (a) understand educational psychology concepts related to the cognitive, affective, physical, and social development of children and adolescents; (b) apply educational psychology and principles of learning in school and non-school settings; (c) utilize the findings gained from research studies to create programs and environments which foster positive learning; (d) design research studies and assessments of student

outcomes; and (e) understand the multiple dimensions of diversity and their potential impact on development and learning.

ADMISSION REQUIREMENTS

See general admissions requirements above.

RETENTION REQUIREMENTS

To gain approval to proceed with exit requirements, each student must:

1. Complete a total of twelve but no more than eighteen hours of graduate credit with an overall GPA of 3.0 or better.
2. Write a three-page interim prospectus which will include: (a) a statement of professional goals, (b) a self assessment of professional development since entering the program, (c) an identification of key issues to be pursued for the remainder of the program, and (d) a plan of action for the culminating experience. A copy of this statement will be placed in the student's file.
3. Set up an appointment with the faculty adviser to discuss the prospectus.
4. In the event that the student's GPA has dropped below 3.0 or any other deficiencies are noted, the adviser will develop a plan of remediation in consultation with the student.

EXIT REQUIREMENTS

In order to graduate, each student is expected to:

1. Complete a minimum of 30 semester hours of graduate credit applicable to the program.
2. Maintain a minimum GPA of 3.0.
3. Take at least two-thirds of the coursework on campus.
4. Complete the program culminating seminar including a successful thesis proposal, comprehensive exam, or project.
5. Successfully complete a thesis, if the thesis proposal is chosen in #4.
6. Fill out an application for graduation and obtain the adviser's recommendation.
7. Meet all other requirements for a master's degree adopted by the Graduate School of Eastern Michigan University.

DEVELOPMENT AND PERSONALITY CONCENTRATION

The development and personality concentration provides knowledge about human development, personality and learning, and helps students to apply these concepts to a variety of environments. Students analyze issues regarding individual differences including children at risk, the impact of poverty, giftedness, multicultural factors, social class, and gender influences on learning and development. Students learn to analyze critically and synthesize information to respond to individual differences within the classroom and other educational settings, thereby creating situations that enhance the motivation and capacity for learning.

CURRICULUM

The curricular requirements include a minimum of 30 graduate-level semester hours, distributed as follows:

CUR 655 Curriculum Foundations	2
EDP 677 Research Techniques	2
<i>One of:</i>	2
SFD 500 Social Foundations of Education: An Introduction (2)	
SFD 550 Philosophy of Education (2)	

SFD 572 History of American Education (2)	
SFD 580 Sociology of Education (2)	
EDP 600 Human Development	2
EDP 621 Statistical Applications in Educational Research	2
EDP 631 Measurement and Evaluation	2
EDP 694 Seminar	2
Electives among EDP courses	10
Outside electives	6

RESEARCH AND EVALUATION CONCENTRATION

The Research and Evaluation concentration emphasizes educational assessments and evaluations, research methodology, and a variety of data analysis procedures. Students design and implement studies in educational settings including assessments of student outcomes in instruction. In addition, students develop skills in the use of microcomputer application software. Also, this program provides a foundation for the pursuit of advanced degrees in Educational Psychology and allied fields.

CURRICULUM

The curricular requirements include a minimum of 30 graduate-level semester hours, distributed as follows:

EDP 600 Human Development	2
<i>Either</i> EDP 603 Principles of Classroom Learning (2)	
<i>or</i> EDT 517 Educational Applications of Computers I (2)	2
<i>Two of:</i>	4
CUR 655 Curriculum Foundations (2)	
CUR 656 Curriculum Design, Implementation, and Evaluation (2)	
G&C 505 Counselor Development: Basic Skills (2)	
SFD 500 Social Foundations of Education: An Introduction (2) or SFD 550 Philosophy of Education (2) or SFD 572 History of American Education (2) or SFD 580 Sociology of Education (2)	
EDP 677 Research Techniques	2
EDP 621 Statistical Applications in Educational Research	2
<i>Either</i> EDP 631 Measurement and Evaluation (2)	
<i>or</i> EDP 535 Measurement and Evaluation of Adult Learners (2)	2
G&C 520 Standardized Group Testing	2
EDP 651 Inferential Statistics	2
EDT 676 Using Computers for Data Analysis	2
EDP 687 Qualitative/Interpretive Research	2
EDP 694 Seminar	2
Outside electives	6

EDUCATIONAL MEDIA AND TECHNOLOGY CONCENTRATION

The mission of this program is to prepare professionals who are capable of facilitating student learning in a variety of settings. The program is designed to provide students with both the knowledge base and the application skills that are required to use technology effectively in education. Focusing on the design, development, utilization, management and evaluation of instructional systems moves us toward achieving this mission.

Students who complete the educational technology concentration will be able to: (a) provide a rationale for using technology in the educational process; (b) identify contributions of major leaders in the field of educational media technology and instructional theory and the impact that each leader has had on the field;

(c) assess current trends in the area of educational media technology and relate the trends to past events and future implications; (d) integrate technology into instructional programs; (e) teach the operation and various uses of educational technology in instruction; (f) act as consultants/facilitators in educational media technology; (g) design and develop instructional products to meet specified needs; (h) evaluate the effectiveness of instructional materials and systems.

ADMISSION REQUIREMENTS

Individuals seeking admission to this program must:

1. Comply with the Graduate School admission requirements.
2. Have a combined GRE score of 800 on the quantitative and verbal sections of the Graduate Records Examination; the GRE must have been taken within the past five years.
3. Score 500 or better on the TOEFL if a non-native speaker of English.
4. Have a 2.75 undergraduate grade point average or a 3.30 grade point average in 12 hours or more of work in a master's program. If the applicant fails to present the required grade point average, she or he must have a minimum score of 900 (combined verbal and quantitative subtests only) on the Graduate Record Examination or she or he may substitute a score of 40 or above on the Miller Analogies Test.
5. Solicit three letters of reference.
6. Submit a statement of professional goals.

RETENTION REQUIREMENTS

To gain approval to proceed with exit requirements, each student must:

1. Complete a total of twelve but no more than eighteen hours of graduate credit with an overall GPA of 3.0 or better.
2. Write a one-page mid-program statement concerning the student's interest and goals for the remainder of the program;
3. Set up an appointment with the faculty adviser to discuss #2. In addition, each faculty adviser and student will discuss the student's plans and make revisions in the program (including the choice of statistics or qualitative research). They will also discuss remediation if warranted. A copy of the mid-program statement will be placed in the student's file.
4. In the event that the student's GPA has dropped below 3.0 or any other deficiencies are noted, the adviser will develop a plan of remediation in consultation with the student.

EXIT REQUIREMENTS

In order to graduate, each student is expected to:

1. Complete all work on an approved program of study.
2. Maintain a "B" (3.00 GPA) average or better on course work taken within the program.
3. Take two-thirds of the coursework on campus.
4. Get a recommendation from the faculty adviser.
5. Fill out an application for graduation and obtain the adviser's recommendation.
6. Meet all other requirements for a master's degree adopted by the Graduate School of Eastern Michigan University.
7. Complete a culminating experience (thesis, internship, or project) as determined by the student and faculty adviser.

Curriculum

The curricular requirements include a minimum of 32 graduate-level semester hours, distributed as follows:

<i>Either</i> SFD 500 Social Foundations of Education: An Introduction (2) <i>or</i> CUR 655 Curriculum Foundations (2)	2
<i>Either</i> EDP 602 Psychology of the Adult Learner (2) <i>or</i> EDP 603 Principles of Classroom Learning	2
EDP 677 Research Techniques	2
EDT 616 Technology of Instruction	2
EDT 623 Instructional Design	2
EDT 680 Special Topics: Message Design	2
EDT 516 Computers in Instruction	2
<i>One of:</i>	2-6
EDT 688 Internship (3)	
EDT 698 Independent Study (2)	
EDT 690/691/692 Thesis (2-6)	
EDP 694 Seminar (2)	
Electives among EDT or EDM courses	10
Outside electives	6

MASTER OF ARTS

READING

The reading program area offers a master's of arts degree and a program of study leading to an elementary, secondary, or K-12 endorsement. The mission of the program focuses upon the professional preparation of classroom teachers, special teachers of reading at the elementary and secondary levels, supervisory reading specialists such as consultants, coordinators and supervisors, and specialists for reading clinic positions including clinic directors and reading counselors. This mission is accomplished by providing students with a strong theoretical grounding in the field of reading, both historic and current, as well as the application skills necessary to implement reading instruction in today's varied educational settings. In addition, the program is consistent with the Minimum Standards for Professional Training of Reading Specialists as defined by the International Reading Association.

MODEL

The development of educators who are committed to their ongoing professional growth and are aware of the challenges of democracy in our culturally diverse society. These educators will assert leadership, apply and practice scholarship, and exercise reflective thinking to meet the needs of learning communities.

ADMISSION REQUIREMENTS

See general admission requirements above.

RETENTION REQUIREMENTS

To gain approval to proceed with exit requirements, each student must:

1. Complete a total of twelve but no more than eighteen hours of graduate credit with an overall GPA of 3.0 or better.
2. Have faculty member(s) complete the instructional application observation form which verifies that the student has successfully completed activities in which she or he was observed applying course information in a classroom/instructional setting. The observation form will become part of the student's portfolio.
3. Receive a completed recommendation form from at least two Reading faculty, from whom the student has had courses, stating that her or his continuation as a student in the reading master's program is recommended.

These recommendations will become part of the student's portfolio.

4. Receive a completed recommendation form from a school professional(s) stating that the student has been observed in working with children in an actual classroom setting. The results of this observation must be a positive recommendation regarding the student's teaching abilities. This recommendation will become part of the student's portfolio.
5. Develop a portfolio which incorporates the following information: (a) the above mentioned forms, (b) from the initial meeting with the adviser, a statement of the goals which the student wishes to achieve during study as a master's student, (c) a statement of the areas in which the student wishes to grow professionally, (d) examples of work which verify that the student is working toward the goals developed in the initial meeting with the adviser, and (e) examples of work which address the quality of the student's ability to conduct and/or report research.
6. Schedule a meeting with the adviser and satisfactorily complete a portfolio midpoint review of the information described above in items one through five.
7. If a student's progress is judged unsatisfactory at the time of the midpoint review, the decision will be reviewed by a three-member committee of the Reading faculty with the decision based on a majority vote. A plan of remediation will be developed. A student who does not meet the criteria but maintains graduate student status may continue to take graduate credit for professional development.

EXIT REQUIREMENTS

In order to graduate, each student is expected to:

1. Complete all Graduate School and Department of Teacher Education requirements for a master's degree, following the program of study approved by the faculty adviser.
2. Complete a paper which describes how the student accomplished her/his goals set at the beginning of their master's program. This paper is to be part of the student's portfolio.
3. Complete the student portfolio, which contains the information described in the retention criteria and in number two above.
4. Meet with the faculty adviser before the final presentation to ensure that the student is prepared for the portfolio presentation.
5. Sign up to present the portfolio to the Reading faculty committee and a group of the student's peers.
6. Fill out an application for graduation and obtain the adviser's recommendation.
7. Present the portfolio to a committee of the reading faculty (graduate coordinator and two Reading faculty) and a group of the student's peers.
8. A student has the option of completing a master's thesis, in addition to the criteria described above.

CURRICULUM

The curriculum requirements include a minimum of 30 graduate-level semester hours, distributed as follows:

RDG 563 Foundations of Reading Development	4
RDG 668 Diagnosis and Remediation of Reading Problems.....	4
RDG 689 Practicum in Reading	4
RDG 694 Seminar: Current Issues in Reading	2
EDP 600 Human Development	2

<i>One of:</i>	2
CUR 616 Issues in Elementary School Curriculum (2)	
CUR 620 Issues in Middle School/Junior High Curriculum (2)	
CUR 630 Issues in Secondary School Curriculum (2)	
CUR 655 Curriculum Foundations (2)	
<i>One of:</i>	2
SFD 550 Philosophy of Education (2)	
SFD 572 History of American Education (2)	
SFD 580 Sociology of Education (2)	
<i>Either</i> EDP 677 Research Techniques (2) <i>or</i> EDP 687 Qualitative/Interpretive Research (2)	2
Electives among RDG courses	4
Outside electives	4

MASTER OF ARTS

EARLY CHILDHOOD EDUCATION

The program in Early Childhood Education is designed for those who hold teacher certification and have or are seeking careers as classroom teachers (preschool through third grade), child care program directors, or other positions related to the care and education of children ages birth through eight years. Each student's program is worked out in consultation with an adviser according to the background and needs of the individual student. The program requires a minimum of thirty hours of graduate credit. The actual credits required for the degree may be more than thirty, depending on the amount of previous teaching experience and course work the student has successfully completed. Students can plan programs with their advisers that will enable them to meet the State of Michigan requirements for the Early Childhood endorsement (coded "ZA") for the elementary teaching certificate. This program is in compliance with the standards set forth by the National Association for the Education of Young Children.

MODEL

The development of educators who are committed to their ongoing professional growth and are aware of the challenges of democracy in our culturally diverse society. These educators will assert leadership, apply and practice scholarship, and exercise reflective thinking to meet the needs of learning communities.

ADMISSION REQUIREMENTS

See general admission requirements above.

RETENTION REQUIREMENTS

To gain approval to proceed with exit requirements, each student must:

1. Complete CUR 600 Trends and Issues in Early Childhood Education and CUR 602 Preschool Education with a grade of "B" or better in both courses. CUR 600 should be taken in the first eight hours on the program, as the course content will include a discussion of the master's portfolio requirements and format.
2. Complete EDP 677 Research Techniques and enough additional courses including the above, to total fifteen hours of graduate credit with an overall GPA of 3.0 or better.
3. Schedule and satisfactorily complete a faculty interview and professional portfolio midpoint review. Faculty interview times, with two faculty present, will be announced each term. Students will register for an interview slot (approximately twenty minutes). Blocks of interview times will be scheduled for late afternoon and evening, rotating among the faculty teaching during that term. The interview will include discussion of the

student's program to date and a review of the portfolio contents. (See ECE Master's Degree Portfolio Guidelines for portfolio requirements.)

4. If a student's progress is judged unsatisfactory at the time of the midpoint review, the decision will be reviewed by all early childhood education graduate faculty with the decision based on a majority vote. (Students who do not meet the criteria but maintain graduate student status may continue to take graduate credit for professional development.)

EXIT REQUIREMENTS

In order to graduate, each student is expected to:

1. Complete all graduate school and department requirements for a master's degree, following as approved program of study for the master's degree in Early Childhood Education.
2. Complete a culminating seminar in Early Childhood Education, including submission of all required components for the professional portfolio or thesis proposal.
3. Fill out an application for graduation and obtain the adviser's recommendation.
4. Satisfactorily complete an exit review of the portfolio by two or more graduate faculty members in Early Childhood Education or satisfactorily complete a master's thesis. The exit review will be conducted as part of the culminating seminar.

CURRICULUM REQUIREMENTS

The curricular requirements include a minimum of 30 graduate-level semester hours, distributed as follows:

CUR 655 Curriculum Foundations	2
EDP 600 Human Development	2
EDP 677 Research Techniques	2
<i>One of:</i>	2
SFD 500 Social Foundations of Education: An Introduction (2)	
SFD 550 Philosophy of Education (2)	
SFD 572 History of American Education (2)	
SFD 580 Sociology of Education (2)	
CUR 600 Trends and Issues in Early Childhood Education	2
CUR 602 Preschool Education	2
CUR 694 Seminar: Early Childhood Education	2
Ten credits from the following:	
CUR 601 Helping Young Children in Crisis through Curricular Activities (2)	
CUR 604 Directing a Child Care Program (2)	
CUR 605 Kindergarten Education (2)	
CUR 606 Preschool and Kindergarten Methods (2)	
CUR 610 Teacher-Parent Partnerships in Early Education (2)	
EDP 507 Young Children in Poverty: Educational Implications (2)	
EDP 611 Piaget for Educators (2)	
EDP 618 Play and Human Development (2)	
EDP 641 Developmental Assessment of the Young Child: Theory and Practice (2)	
Special Topics with Young Child(ren) or Early Childhood in title (2)	
<i>One of:</i>	10
RDG 563 Foundations of Reading Development (4)	
RDG 580 Reading-Writing Connection: K-6 (2)	
RDG 519 Programs in Language Arts (2)	
Electives	6

MASTER OF ARTS**ELEMENTARY EDUCATION, MIDDLE SCHOOL
EDUCATION, SECONDARY SCHOOL TEACHING,
AND K-12 CURRICULUM****MODEL**

The development of educators who are committed to their ongoing professional growth and are aware of the challenges of democracy in our culturally diverse society. These educators will assert leadership, apply and practice scholarship, and exercise reflective thinking to meet the needs of learning communities.

ADMISSION REQUIREMENTS

See general admission requirements above.

RETENTION REQUIREMENTS

To gain approval to proceed with exit requirements, each student must:

1. Complete a total of fifteen but no more than eighteen hours of graduate credit, including all of the foundation courses, with an overall GPA of 3.0 or better. (Foundation courses are CUR 655 and the required EDP and SFD courses.)
2. Achieve a satisfactory assessment of written communication. (Written communication will be assessed as follows: After the student completes CUR 655, the instructor will fill out a form that indicates proficiency in written communication. The form will be completed for each student and sent to the graduate coordinator.)
3. If a student does not meet the requirements stated above, she or he must meet with the adviser to determine whether to withdraw from the program or apply for continuing eligibility. Continuing eligibility will require the completion of a plan of remediation to be created with the adviser. If the student does not complete the plan of remediation satisfactorily, she or he will be asked to withdraw.

EXIT REQUIREMENTS

In order to graduate, the student is expected to:

1. Complete an approved program of study with a GPA of 3.0 or better.
2. Successfully complete a culminating experience: project, thesis, or comprehensive examination.
3. Fill out an application for graduation and obtain the adviser's recommendation.
4. Meet all other requirements for the degree as specified by the Graduate School.

MASTER OF ARTS**ELEMENTARY EDUCATION**

The program in elementary education is designed to provide teachers with increased depth and breadth in theoretical foundations of education and expanded knowledge of classroom practice that will allow them to interact thoughtfully and effectively in a variety of elementary school classrooms. It also provides students with skills in gathering and evaluating information to enable them to make knowledgeable classroom decisions and continue in independent learning. Students may choose from among the following concentration areas: children with special needs, gifted and talented, language arts, open education and individualized program.

CURRICULUM

The curricular requirements include a minimum of 30 graduate-level semester hours, distributed as follows:

CUR 655 Curriculum Foundations	2
EDP 600 Human Development	2
EDP 677 Research Techniques	2
<i>One of:</i>	2

SFD 500 Social Foundations of Education: An Introduction (2)

SFD 550 Philosophy of Education (2)

SFD 572 History of American Education (2)

SFD 580 Sociology of Education (2)

CUR 616 Issues in Elementary School Curriculum

CUR 694 Seminar: Elementary School Curriculum

Electives: Concentration Area and Related Fields

(Minimum of 6 hours in Teacher Education.)

Electives for children with special needs concentration

CUR 510 Developing Creativity in the Classroom (2)

CUR 572 Education of the Gifted Child (2)

CUR 601 Helping Young Children in Crisis through Curricular Activities (2)

CUR 673 Curriculum and Teaching Strategies for the Gifted/Talented (2)

EDP 504 Nature and Identification of the Gifted (2)

EDP 509 Problems in Child Psychology (2)

EDP 611 Piaget for Educators (2)

EDP 614 Psychology of Creativity for Educators (2)

EDP 618 Play and Human Development (2)

RDG 554 Reading Problems of Learners with Special Needs (2)

RDG 664 The Nature of Common Reading Problems (2)

PED 578 Motor Learning and Development (2)

SGN 510 The Exceptional Child in the Regular Classroom (3)

SLD 468 Education of Children with Learning Disabilities (2)

Other courses as approved by adviser.

Electives for gifted and talented concentration

CUR 510 Developing Creativity in the Classroom (2)

CUR 572 Education of the Gifted Child (2)

CUR 673 Curriculum and Teaching Strategies for the Gifted/Talented (2)

CUR 680 Special Topics: Gifted/Talented (2)

EDP 504 Nature and Identification of the Gifted (2)

EDP 614 Psychology of Creativity for Educators (2)

Other courses as approved by adviser.

Electives for language arts concentration

CTA 501 Creative Drama and Role-Playing (2)

CTA 502 Introduction to Theatre for the Young (2)

CTA 504 Oral Interpretation of Literature and Language with the Young (2)

RDG 506 Storytelling (2)

EDP 611 Piaget for Educators (2)

LIT 516 Major Genres in Children's Literature (3)

LIT 518 History of Children's Literature (3)

RDG 514 Literature for Young Adults (3)

RDG 518 Developmental Reading—Elementary (2)

RDG 519 Programs in Language Arts (2)

RDG 554 Reading Problems of Learners with Special Needs (2)

RDG 563 Foundations of Reading Development (4)

RDG 580 Reading-Writing Connection: K-6 (2)

RDG 593 Microcomputer Applications in Reading Instruction (2)

RDG 664 The Nature of Common Reading Problems (2)

Other courses as approved by adviser.

Electives for open education concentration

CTA 501 Creative Drama and Role-Playing (2)

- CTA 502 Introduction to Theatre for the Young (2)
 CTA 504 Oral Interpretation of Literature and Language with the Young (2)
 CTA 523 Puppetry: Catalyst in Human Development (3)
 CUR 510 Developing Creativity in the Classroom (2)
 CUR 657 The Open Classroom (4)
 EDP 507 Young Children in Poverty: Educational Implications (2)
 EDP 611 Piaget for Educators (2)
 EDP 614 Psychology of Creativity for Educators (2)
 EDP 618 Play and Human Development (2)
 SFD 602 Progressivism in American Education (2)
 SFD 652 Pragmatism and Education (2)
 Other courses as approved by adviser.

Individualized program concentration

The individualized program concentration is a minimum of ten hours of courses organized by a student and adviser around an area of specific interest such as "uses of industrial technology in elementary school" or "creativity". It is not intended as a collection of miscellaneous courses of interest. Six hours of the concentration must be from the Department of Teacher Education.

MASTER OF ARTS

MIDDLE SCHOOL EDUCATION

The program in middle school education enriches the foundations' work in education while providing an opportunity to select courses which enhance understanding of adolescents and the programs associated with the middle school. Emphasis also is placed on courses which improve teaching effectiveness.

CURRICULUM

The curricular requirements include a minimum of 30 graduate-level semester hours, distributed as follows:

- CUR 655 Curriculum Foundations 2
 EDP 677 Research Techniques 2
One of: 2
 EDP 600 Human Development (2)
 EDP 501 Psychology of Adolescence (2)
One of: 2
 SFD 500 Social Foundations of Education: An Introduction (2)
 SFD 550 Philosophy of Education (2)
 SFD 572 History of American Education (2)
 SFD 580 Sociology of Education (2)
 CUR 522 Effective Teaching in the Middle School 4
 CUR 620 Issues in Middle School/Junior High Curriculum 2
 CUR 694 Seminar: Secondary Curriculum 2
 Electives: Concentration Area and Related Fields (Minimum of 6 hours in Curriculum & Instruction; Minimum of 2 hours outside of Curriculum & Instruction) 14

MASTER OF ARTS

SECONDARY SCHOOL TEACHING

The master's degree program in secondary school teaching is designed to enrich the student's understanding of curriculum and its relationship to societal beliefs and forces; to gain insights into the process of education research and evaluation; to examine contemporary issues that influence curriculum selection, implementation and evaluation; to gain additional technical skills in planning and implementing instruction; to integrate knowledge gained from formal courses as well as life experiences; and/or to

pursue an individualized investigation of some aspect of curriculum study.

CURRICULUM

The curricular requirements include a minimum of 30 graduate-level semester hours, distributed as follows:

- CUR 655 Curriculum Foundations 2
 EDP 677 Research Techniques 2
Either EDP 600 Human Development (2) *or* EDP 501 Psychology of Adolescence (2) 2
One of: 2
 SFD 500 Social Foundations of Education: An Introduction (2)
 SFD 550 Philosophy of Education (2)
 SFD 572 History of American Education (2)
 SFD 580 Sociology of Education (2)
 CUR 630 Issues in Secondary School Curriculum 2
 CUR 632 Individualizing Instruction in the Secondary School 2
 CUR 694 Seminar: Secondary Curriculum 2
 EDM 552 Audio-Visual Instruction 2
 Electives: Concentration Area and Related Fields (Minimum of 6 hours outside Curriculum & Instruction; Minimum of 6 hours within teaching field) 14

MASTER OF ARTS

K-12 CURRICULUM

The program in K-12 curriculum is designed for those students whose professional interests and responsibilities recommend a broad understanding of the current controversies and trends in education and the historical, social and philosophical influences which have shaped the K-12 curriculum. (Note: This program is under review.)

CURRICULUM

The curricular requirements include a minimum of 30 graduate-level semester hours, distributed as follows:

- CUR 655 Curriculum Foundations 2
 EDP 677 Research Techniques 2
 EDP 600 Human Development 2
One of: 2
 SFD 500 Social Foundations of Education: An Introduction (2)
 SFD 550 Philosophy of Education (2)
 SFD 572 History of American Education (2)
 SFD 580 Sociology of Education (2)
 CUR 659 K-12 Curriculum 4
One of: 2
 CUR 616 Issues in Elementary School Curriculum (2)
 CUR 620 Issues in Middle School/Junior High Curriculum (2)
 CUR 630 Issues in Secondary School Curriculum (2)
 CUR 694 Seminar: Elementary/Secondary School Curriculum 2
 Electives: Concentration Area and Related Fields (Minimum of 8 hours within Curriculum & Instruction; Minimum of 2 hours outside Curriculum & Instruction) 14

THE CERTIFICATE OF ADVANCED STUDIES IN CURRICULUM AND INSTRUCTION (CASCI)

The Certificate of Advanced Studies in Curriculum and Instruction (CASCI), a 30-hour post-master's program, offers an

opportunity for post-master's teachers to select and study experiences which are specifically related to their current professional needs. While there are no pre-determined course requirements, the Curriculum Graduate Coordinator reviews each program for coherence and quality. Advisers approve program choices which teachers make in accordance with their individual desires for professional growth. CASCI is offered in response to the need for relevant, flexible, individualized programs which will enable career teachers to keep abreast of new developments and to respond to the professional challenges in their classrooms and in their school districts. (Note: This program is under review.)

ADMISSION REQUIREMENTS

Individuals seeking admission to this program must have:

1. A valid teaching certificate.
2. A master's degree from an accredited university .
3. A minimum of one year's teaching experience.

CURRICULUM COURSES

CUR 510 Developing Creativity in the Classroom. 2 hrs
Helps teachers plan activities that encourage creativity in students. Emphasizes the direct teaching of creative thinking skills, developing a supportive classroom atmosphere and enhancing the teacher's personal creativity.

CUR 512 Enriching the Elementary Classroom Program. 2 hrs
Types of organization of elementary classroom activities and programs in relation to behavioral goals. Uses of direct and vicarious experiences, materials and instructional techniques to develop and extend vocabulary, language, experience backgrounds, self-concepts, and social learnings. Particularly beneficial for teachers working with educationally disadvantaged.

CUR 514 Integrating Consumer and Economic Education in the Elementary School. 2 hrs
Elementary teachers will become familiar with and use effective strategies and materials for integrating consumer and economic education concepts, skills, attitudes, and behaviors into various subject areas.

CUR 522 Effective Teaching in the Middle School. 4 hrs
This course is concerned with helping teachers examine the issues and possibilities of teaching middle school youth. Based on such an examination, each teacher works with other class members and the University professor in developing an effective teaching style within the context of his or her teaching situation.
Prereq: CUR 620.

CUR 551 Integrating the Curriculum Via School Camping. 2 hrs
A study of the history and purpose of school camping in Michigan. Students will develop their personal courses of study involving the integration of all curriculum areas as well as the skills to organize an outdoor education class for their personal classroom use. Students will be required to participate in a minimum of one weekend camping experience together as a class. Students will be expected to pay the actual cost for the weekend camping experience.

CUR 560 School and Classroom Discipline. 2 hrs
This course will review case studies, general teacher practices, and the theoretical base for classroom and school discipline management. Additionally there will be a review and critique of emerging legal issues, information systems, and programs that affect discipline.

CUR 571 Teaching Secondary Social Studies. 2 hrs
Subjects included in social studies at the secondary level, problems related to the presentation of materials, planning of units, and types of class activities. Not open to students who have credit in HIS 481 The Teaching of Social Studies and GEO 348 Teaching Social Studies in Elementary Schools.

CUR 572 Education of the Gifted Child. 2 hrs
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; of special value to classroom teachers.

CUR 590/591/592 Special Topics. 1/2/3 hrs
Prereq: Departmental Permission.

CUR 593 Microcomputer Applications in the Social Studies. 2 hrs
Through demonstrations and hands-on experiences, students will evaluate programs for use in the social studies. These will include software programs for tutorials, drill and practice, and simulations. An examination of the impact of computers on society will

be an integral part of the course. Suggestions for developing units for using computers in the social studies will be included.

Prereq: A basic course in using microcomputers or permission of instructor and EDT 516.

CUR 600 Trends and Issues in Early Childhood Education. 2 hrs

A study of the historical, developmental, and curricular research of early childhood education; examination of current issues and trends, and their educational implications for early childhood professionals.

CUR 601 Helping Young Children in Crisis through Curricular Activities. 2 hrs

Examination of crisis situations that affect young children's lives; consideration of situations involving neglect, abuse, substance abuse in the home, abandonment, separation or divorce, and death. Applications are made to curricular activities and materials to help young children cope with these crises.

CUR 602 Preschool Education. 2 hrs

An overview of programs for preschool children, infancy through age five, including program goals, selection of curriculum content, materials, and teaching techniques suitable for working with pre-kindergarten children.

CUR 604 Directing a Child Care Program. 2 hrs

The roles and responsibilities of the directors of part-time, full-day, enrichment, and special child care programs, including licensing requirements, selection of equipment and personnel, budgeting, record keeping, and implementation of program goals. *Prereq: CUR 602 or instructor's permission.*

CUR 605 Kindergarten Education. 2 hrs

Development of the kindergarten-aged child and educational implications for kindergarten education; historical and curricular approaches to kindergarten programming.

CUR 606 Preschool and Kindergarten Methods. 2 hrs

Effective strategies for working with parents in the school setting. Topics include parent-teacher conferences, utilizing parents in the classroom, working with parents of special circumstance, conducting parent meetings, and communicating with parents through newsletters and reports.

Prereq: CUR 602 or CUR 605.

CUR 610 Teacher-Parent Partnerships in Early Education. 2 hrs

Effective strategies for working with parents in the school setting. Topics include parent-teacher conferences, utilizing parents in the classroom, working with parents of special circumstance, conducting parent meetings, and communicating with parents through newsletters and reports.

CUR 616 Issues in Elementary School Curriculum. 2 hrs

Issues involving curriculum development determinants, approaches, and the concept of change. Emphasis is on the role of the teacher in curriculum development.

CUR 620 Issues in Middle School/Junior High Curriculum. 2 hrs

Issues involving the history and philosophy of the junior/middle school; curriculum, provision for individual differences, modern classroom procedures, use of materials and aids of instruction, the activity program, and guidance.

CUR 630 Issues in Secondary School Curriculum. 2 hrs

Students are encouraged to concentrate on curriculum problems in their schools involving issues of development, revision, and change in the secondary school.

CUR 632 Individualizing Instruction in the Secondary School. 2 hrs

A course designed to help secondary teachers meet individual differences among their students by using a variety of resources, pupil involvement, thematic approaches, and other teaching strategies.

CUR 650 Improving Instruction. 2 hrs

Examines contemporary theories and research on teaching strategies and models, with emphasis on the applications of these to classroom problems. Students will experiment with and/or analyze the effectiveness of various teaching techniques.

CUR 655 Curriculum Foundations. 2 hrs

Historical and theoretical authority for the curriculum; criteria for the choice of content; philosophical, psychological, and sociological bases of curriculum.

CUR 656 Curriculum Design, Implementation, and Evaluation. 2 hrs

This course covers curriculum design and development from goal selection through implementation and evaluation. Students will be expected to produce curriculum examples that are consistent with the principles in the course.

Prereq: CUR 655.

CUR 657 The Open Classroom. 4 hrs

The open classroom tied to a demonstration center, planning an integrated day based upon learning centers and pupil self direction, the child-centered experience-based curriculum. Designed to help free teachers to become more innovative, open, creative, and human in curriculum development.

CUR 659 K-12 Curriculum. 4 hrs

An integrated study of curriculum from preschool through high school with emphasis on form, priorities, and impact. Historical and contemporary study of school programs from a social-humanitarian vantage point.

CUR 660 Assisting Student Teachers and New Teachers. 2 hrs

This course is designed for teachers who are employed as clinical faculty, student teaching supervisors, cooperating teachers and mentor teachers. It develops teacher's awareness of their own reflective decision-making through action research, discussions, and simulations. The course also presents a framework for assessing student teacher's development. Finally, teachers practice and analyze coaching and problem-solving strategies for promoting reflective decision-making.

Prereq: Prior approval as a mentor/cooperating teacher or university supervisor. Three years teaching experience.

CUR 673 Curriculum and Teaching Strategies for the Gifted/Talented. 2 hrs

Study of curricular options and teaching models, and strategies appropriate for the differentiated learning needs of gifted/talented students.

Prereq: EDP 504 or CUR 572.

CUR 676 Education of the Gifted and Talented: Under Represented Populations. 2 hrs

Examines barriers that cause under representation of student populations in gifted programs. Discusses identification and programming strategies for gifted students with disabilities, underachieving students, and students from diverse cultural groups.

Prereq: CUR 572 or EDP 504.

- CUR 679/680/681 Special Topics.** 1/2/3 hrs
- CUR 682/683/684/685 Workshop.** 1/2/3/4 hrs
- CUR 686/687/688 Internship.** 1/2/3 hrs
Provides a supervised opportunity for students to apply knowledge and skills gained through classroom activity in a "real world" working environment. Internship sites and supervisory arrangements must be approved by program adviser prior to registration.
Prereq: Department permission.
- CUR 690/691/692 Thesis.** 1/2/3 hrs
Prereq: Department permission.
- CUR 694 Seminar: Secondary Curriculum.** 2 hrs
Prereq: CUR 655, CUR 620, CUR 630, or CUR 659; and 20 hours of graduate credit.
- CUR 694 Seminar: Open Education.** 2 hrs
Prereq: CUR 657 and 20 hours of graduate credit.
- CUR 694 Seminar: Early Childhood Education.** 2 hrs
Systematic analysis of issues and research areas in early childhood education. Presentation of individual reports to seminar group for discussion. Serves as the capstone experience in the master's degree in early childhood education.
Prereq: Twenty hours of graduate credit including CUR 600, CUR 602, and EDP 677. (To be taken as the last course on master's degree)
- CUR 694 Seminar: Elementary School Curriculum.** 2 hrs
Prereq: CUR 616 and 20 hours of graduate credit.
- CUR 697/698/699 Independent Study.** 1/2/3 hrs
An intensive study of a problem or group of problems. The completed study must give evidence of the student's ability to select a problem, set it up, and pursue it to satisfactory completion. Must be done with approval of a full-time member of the staff.

EDUCATIONAL MEDIA COURSES

- EDM 552 Audio-Visual Instruction.** 2 hrs
A survey course for teachers and administrators in which the nature and effective use of teaching materials are considered and fully demonstrated. Provision is made for actual use of materials and equipment.
- EDM 553 Radio and TV in the Classroom.** 2 hrs
Study and practice in the utilization and evaluation of instructional, educational, and enrichment radio and television programs. Familiarization with broadcast methods and facilities. Includes utilization guidebooks and sources of materials.
- EDM 590/591/592 Special Topics.** 1/2/3 hrs
Prereq: Department permission.
- EDM 662 TV in Education.** 2 hrs
Extent and nature of experimentation in instruction by radio and television; current philosophy and attitudes toward teaching by radio and television.
- EDM 679/680/681 Special Topics.** 1/2/3 hrs
- EDM 682/683/684/685 Workshop.** 1/2/3/4 hrs
Please examine the current time schedule for specific workshop topics.
- EDM 683 Workshop: Production of Instructional Materials.** 2 hrs
Basic techniques in the production of a variety of teaching materials; lettering, mounting, and color application to flat pictures and

graphics; projected materials of various sizes; overhead projectors; display boards of all types.
Prereq: EDM 345 or EDM 552.

EDM 683 Workshop: Television Utilization. 2 hrs
For teachers; advanced problems in the use of television in the classroom.

EDM 693/694/695/696 Seminar. 1/2/3/4 hrs
Please examine the current time schedule for specific seminar topics.

EDM 694 Seminar: History and Appreciation of Motion Pictures and Photography. 2 hrs
A course designed to give the history of the photographic medium with the emphasis on important films and photographs and the people who created them.
Prereq: EDM 345, EDM 552, or department permission.

EDM 694 Seminar: Instructional Materials. 2 hrs
A course designed to assist the individual student in detailed study of specific problems or topics in utilization, production, selection, or administration of instructional materials. Visits to actual service centers, use of resource persons, etc., will be employed. A sharing of solutions and problems will be used in a seminar setting during the course.
Prereq: EDM 345, EDM 552, or department permission.

EDM 697/698/699 Independent Study. 1/2/3 hrs
Prereq: Department permission.

EDUCATIONAL PSYCHOLOGY COURSES

EDP 501 Psychology of Adolescence. 2 hrs
Study of the physical, cognitive, affective, and social behavior and development of adolescents; their relation to family, peer group, school, and society with reference to youth here and abroad.

EDP 502 Basic Concepts in Educational Psychology. 2 hrs
Review and critical assessment of major issues in the areas of human growth and development, learning and technology, personality and mental health, and measurement and evaluation.

EDP 504 Nature and Identification of the Gifted. 2 hrs
The study of the nature of giftedness, the characteristics and needs of gifted students, and the issues involved in the identification and development of the gifted.

EDP 507 Young Children in Poverty: Educational Implications. 2 hrs
Course analyzes the critical poverty conditions of young children and families, and implications for educators. Emphasis is on social-psychological development, educational advocacy, and interventions which promote understanding of ethnic, cultural, and socio-economic diversity.

EDP 509 Problems in Child Psychology. 2 hrs
Deals theoretically and practically with the many concerns felt by teachers and parents in regard to the various problems children face. Includes home, family, and school influences as creators of problems and approaches for dealing with these problems.

EDP 535 Measurement and Evaluation of Adult Learners. 2 hrs
Designed to assist teachers of adults to become familiar with the construction and uses of teacher-made and selected standardized tests suitable for placement, diagnosis, individualizing instruction, and evaluating student achievement. Treats measurement issues unique to adult learners.
Prereq: Admission to a degree program for teachers of adults, or department permission.

EDP 560 School and Classroom Discipline. 2 hrs

This course will review case studies, general teacher practices, and the theoretical base for classroom and school discipline management. Additionally, there will be a review and critique of emerging legal issues, information systems, and programs that affect discipline.

EDP 561 Questionnaire Design and Analysis. 2 hrs

Survey research: questionnaire design and construction, sampling techniques, data collection and analysis, and reporting results of student-generated questionnaire data. Background in descriptive statistics and research techniques would be helpful.

EDP 590/591/592 Special Topics. 1/2/3 hrs

The content will include current relevant topics and will vary from term to term. Special topics not included in the usual course offerings but within the domain of educational psychology will be considered. See appropriate schedule.

EDP 600 Human Development. 2 hrs

The study of social, emotional, physical, and mental growth processes and developmental stages from birth through adolescence and their implications for learning and teaching. Students are expected to pursue an in-depth analysis of research, theory, and issues in the field commensurate with the experiential background which they bring to the course.

EDP 602 Psychology of the Adult Learner. 2 hrs

The course focuses on characteristics of the adult learner, adult learning styles, understanding learning theories, information processing, and principles of learning and motivation. Participants will discover their own strategies of learning, motivation, and decision-making, and skills in creating rapport with adult learners. Emphasis will be on the application of learning theory concepts and teaching skills to the participant's instructional setting.

Prereq: Admission to a degree program for teachers of adults, or department permission.

EDP 603 Principles of Classroom Learning. 2 hrs

Major principles of learning are examined for their applications in a classroom setting. Recent contributions are studied and the value of learning theories for the teacher is discussed.

Prereq: At least one course in human growth and development or psychology.

EDP 604 Essentials of Programmed Instruction. 3 hrs

Principles of programmed instruction are discussed and students examine programs and evaluate them. Students construct short programs in their areas of interest and revise and evaluate them. This is not a course in computer programming.

Prereq: At least one course in educational psychology, human growth and development or psychology.

EDP 605 Mental Hygiene. 2 hrs

A study of the conditions and practices which promote mental, emotional, and social well-being. Concepts are explored in terms of restoration, preservation, and elevation of mental health goals. This course emphasizes introspection and self awareness, techniques and skills relevant to interpersonal relationships, and the application of principles and concepts to home, school, and other social settings.

EDP 606/607/608 Colloquium. 1/2/3 hrs

Academic seminars centered upon a broad field of study involving several different lecturers from within and outside of the department. See appropriate schedule for announcement.

EDP 610 Personality Theories for Educators. 2 hrs

A study of cognitive, psychoanalytic, and social learning personality theories primarily for graduate students in educational psy-

chology. The focus of the course will be on implementation of those theoretical approaches for problems in the classroom.

Prereq: EDP 600 or equivalent, or department permission.

EDP 611 Piaget for Educators. 2 hrs

A systematic summary and analysis of Piagetian theory and research. Applications to the helping professions from infancy through adulthood will be made. Students will conduct interviews with children, adolescents, and/or adults and make recommendations for intervention. Students will evaluate educational materials and teaching strategies and instructional methods from a Piagetian framework.

Prereq: EDP 600 or equivalent.

EDP 612 Behavior Modification Techniques for School Personnel. 2 hrs

This course is designed for school personnel who are desirous of developing skills in the use of behavior modification in their settings. Students will learn and apply the principles of behavior modification to projects conducted in their institutions. Students who enroll in this course currently should be teaching or employed in an instructional setting.

Prereq: Current employment in an instructional setting or department permission.

EDP 614 Psychology of Creativity for Educators. 2 hrs

A study of the various aspects of creativity; the person, the environment, the process, with emphasis on their implications for teaching. The course also will focus on teacher procedures and methods for facilitating student creative behavior in the classroom.

Prereq: EDP 600 or equivalent, or department permission.

EDP 618 Play and Human Development. 2 hrs

The phenomena of children's play and the relationships to developmental processes. Definitions, viewpoints, history, and theories of play. Applications to early childhood and elementary education. Students will conduct observations with children, adolescents, and/or adults.

Prereq: EDP 600 or equivalent.

EDP 619 Stress Management for Educators. 2 hrs

Description and analysis of the factors contributing to school personnel stress in the work environment. Utilizes relevant psychological theory to explain the basic theme of stress as an adjustment to one's environment. Specific techniques for reducing stress in school personnel and students are reviewed. Credit/no credit.

EDP 621 Statistical Applications in Educational Research. 2 hrs

Emphasizes the role of statistics in hypothesis testing; statistical applications in visually presenting and summarizing data; computation of central tendency, variability, relationship and prediction indices; and interpretation of results.

EDP 625 Eating Disorders: Recognition and Education. 2 hrs

Explores the psychological socio-cultural and treatment issues of anorexia nervosa and bulimia. Emphasis will be placed on the role school personnel may play in coping with this problem. Treatment specialists will guest lecture.

EDP 631 Measurement and Evaluation. 2 hrs

A study of the construction and use of teacher-made tests, rating scales, questionnaires, check lists, and similar measures. Also includes the administration of standardized tests and utilization of the results.

EDP 633 Systematic Observation, Checklists, and Rating Scales. 2 hrs

An introduction to the techniques and tools of systematic observation; uses and limitations of checklists and rating scales in educa-

tional settings, methods of estimating, and improving the reliability and validity of such techniques and tools.

Prereq: EDP 631 and/or statistics or department permission.

EDP 641 Developmental Assessment of the Young Child: Theory and Practice. 2 hrs

Theory and procedures applicable to the evaluation and assessment of young children from birth through age nine. Consideration of current issues and formal and informal assessment of the young child. *No credit in EDP 341 Assessment of the Young Child.*
Prereq: One graduate course in early childhood education.

EDP 651 Inferential Statistics. 2 hrs
Inferential statistics, both parametric and non-parametric; theory of hypothesis testing.
Prereq: EDP 621 or equivalent.

EDP 652 Multivariate Statistics. 2 hrs
Includes analysis of variance and covariance, multivariate correlation and regression analysis, factor analysis, and other multivariate procedures.
Prereq: EDP 621 and EDP 651, or department permission.

EDP 674 Research Methods and Interpretation. 3 hrs
The understanding and application of research concepts, designs, and procedures; organization, coding, and calculation of descriptive statistics; use of statistical packages; critical evaluation of educational research; interpretation of results.
Prereq: EDT 507 or permission of instructor.

EDP 677 Research Techniques. 2 hrs
Basic concepts, procedures, and language of research; facets of research, i.e., problem formulation, research design, data collection, data analysis, and interpretation. Critical appraisal of published research.

EDP 678 Empirical Methods for Educational Research. 3 hrs
Emphasis is on the understanding of advanced empirical methods in education. Topics included are measurement procedures, research designs, data analyses and interpretations, and the use of the computer terminal.
Prereq: EDP 621 or EDP 651 and EDP 677, or permission of the instructor.

EDP 687 Qualitative/Interpretive Research. 2 hrs
Course provides educators and other human service professionals who work in educational settings with training and competence in qualitative data-gathering methods and interpretive analysis. These include educational ethnography, phenomenology, and action research.

EDP 690/691/692 Thesis. 1/2/3 hrs
Prereq: Department permission.

EDP 694 Seminar. 2 hrs
Prereq: Near completion of Educational Psychology program.

EDP 697/698/699 Independent Study. 1/2/3 hrs
Must be done with approval of a full-time member of the departmental faculty.

EDUCATIONAL TECHNOLOGY COURSES

EDT 507 Introduction to Microcomputers. 2 hrs
This introductory course will (1) build confidence and competence for educators with limited computer experience and (2) raise awareness of implications of computer technology in education. This course is not included as part of the program of study in the Educational Technology concentration. Credit/no credit.

EDT 514 Logo for Educators I. 2 hrs
A first course in a powerful computer language and teaching philosophy for all ages. Major foci include activities with graphics, activities with words and lists, and using Logo with students.
Prereq: Competency in using a computer.

EDT 515 BASIC Programming for Educators I. 2 hrs
Students will be able to draw logical flowcharts; write, test, and debug programs. Students also will learn to use subroutines, subscripted variables, and how to convert BASIC programs from one microcomputer to another and understand the difference between BASIC+ and standard BASIC.
Prereq: EDT 507 or permission of instructor.

EDT 516 Computers in Instruction. 2 hrs
This introductory course will explore the role of computers in the instructional process. Students will learn how to evaluate educational software, how to use an authoring system, and the variety of teacher utilities available.
Prereq: A basic course in using microcomputers or permission of the instructor.

EDT 517 Educational Applications of Computers I. 2 hrs
Develops computer literacy for educators. Includes computer terminology, the role of programming and the use of computers in education including some hands-on experience with instructional and recordkeeping applications. Requires no prior knowledge of computers or computing.
Prereq: EDT 507 or permission of instructor.

EDT 590/591/592 Special Topics. 1/2/3 hrs
Prereq: Department permission.

EDT 614 Logo for Educators II. 2 hrs
An advanced course in Logo. Students learn programming concepts and style, debugging, functional use of primitives in text and graphics, music, mathematics, teaching philosophy, and evaluation of current issues and research.
Prereq: EDT 514.

EDT 615 BASIC Programming for Educators II. 2 hrs
Students write interactive instructional computer programs using arrays (string and numeric), subroutines, mathematical functions, and machine codes (POKE, PEEK, CALL). Students create and retrieve data files, use high resolution graphics, and develop simulations.
Prereq: EDT 515.

EDT 616 Technology of Instruction. 2 hrs
Classroom management of learning and instruction; the tools of instruction. Educational technology is more than the study of machines used in education.
Prereq: At least one course in educational psychology, or human growth and development, or psychology.

EDT 617 Educational Applications of Computers II. 2 hrs
A hands-on experience with educational application of computers. Students will learn how to use wordprocessing software to prepare tests, handouts, letters, and papers; spreadsheet programs to maintain student gradebooks and prepare budgets; authoring systems to prepare computer-assisted instructional materials, database managers to maintain student and school records; and information utilities as information and communication media.
Prereq: EDT 507, EDT 517, or permission of the instructor.

EDT 618 Microcomputer Communications for Educators. 2 hrs
Students will learn how to set up and use communications equipment, select and use telecommunications software, send electronic mail, how to use information services and bulletin boards,

transfer data and programs between microcomputers, and use of teleconferencing services.

Prereq: EDT 507, EDT 517, and EDT 617.

EDT 623 Instructional Design. 2 hrs

Introduces the student to the design and development of instructional systems. Topics surveyed include needs assessment, learner analysis, task analysis, specification of instructional objectives, selection of instructional strategies and media, and formative evaluation.

Prereq: Graduate standing; EDP 603.

EDT 625 Designing Computer-Mediated Instruction. 2 hrs

Design of computer-mediated learning: The content will focus on four major areas—design issues, research related to CMI, lesson development, and project management.

Prereq: Graduate standing.

EDT 676 Using Computers for Data Analysis. 2 hrs

Use of statistical packages available for micro- and mainframe computers to organize, code, create, edit, manage, store, and process data. Compare statistical packages. Write research reports interpreting educational data results.

Prereq: EDT 507 and EDP 674; or EDT 507, EDP 621, and EDP 677; or permission of instructor.

EDT 679/680/681 Special Topics. 1/2/3 hrs

EDT 686/687/688 Internship. 1/2/3 hrs

Provides a supervised opportunity for students to apply knowledge and skills gained through classroom activity in a "real world" working environment. Internship sites and supervisory arrangements must be approved by the program adviser prior to registration.

Prereq: Department permission.

EDT 690/691/692 Thesis. 1/2/3 hrs

Prereq: Department permission.

READING COURSES

RDG 506 Storytelling. 2 hrs

Applying techniques storytellers use to research, prepare, learn, and master a story, participants will tell a variety of different types of stories using an array of presentation formats. Students will also prepare a collection of storytelling/language arts activities appropriate for various grade levels.

RDG 514 Literature for Young Adults. 2 hrs

Young adult literature (grades 7-12) will be surveyed. Students will consider teaching approaches which integrate young adult literature into the secondary curriculum and processes for choosing appropriate literature. Current theory and research regarding the psychological, sociological, and legal issues pertaining to the use of young adult literature will be discussed.

RDG 518 Developmental Reading—Elementary. 2 hrs

Objectives, approaches, materials, and techniques for reading in the elementary school classroom. Factors influencing development, fundamental skills, assessing, and providing for individual strengths and needs. Not open to reading majors.

RDG 519 Programs in Language Arts. 2 hrs

Curriculum objectives and their implementation through listening; speaking; handwriting; spelling; and creative, narrative, and expository writing. Evaluative procedures and some consideration of corrective techniques.

RDG 530 Developmental Reading—Secondary. 2 hrs

Curricular objectives and their implementation through recommended activities, methods, and materials; functional programs for disabled readers.

RDG 544 Fundamentals of Reading for Teachers of Adults. 2 hrs

Characteristics of the adult learner and teaching implications; organization and teaching of vocabulary development, comprehension, word recognition, study skills, and reading-related skills for adults; emphasis on reading relevancy for adults.

RDG 545 Advanced Concepts in Reading for Teachers of Adults. 2 hrs

This course is designed for the adult educator who has a basic background in reading consisting of experience in course work in teaching reading to the adult illiterate. The emphasis will be on the diagnosis and remediation of reading problems presented in this population.

RDG 554 Reading Problems of Learners with Special Needs. 2 hrs

Methods, materials, and assessment techniques found effective in teaching reading to learners with special needs; culturally different, mainstreamed, reluctant, and gifted learners.

Prereq: A basic course in the teaching of reading.

RDG 563 Foundations of Reading Development. 4 hrs

A theory course emphasizing psychological, sociological, and linguistic foundations of reading development; issues and research in reading instruction; a survey of current methods and materials in reading with a focus on goals, reading skills, and evaluation techniques. This is the first course in the reading concentration area.

Prereq: An undergraduate course in the teaching of reading.

RDG 580 Reading-Writing Connection: K-6. 2 hrs

This course is designed to provide teachers opportunities to expand their knowledge of reading instruction to a more integrated approach which interfaces reading, writing, and subject areas.

RDG 590/591/592 Special Topics. 1/2/3 hrs

Prereq: Department permission.

RDG 593 Microcomputer Applications in Reading Instruction. 2 hrs

Participants will evaluate software for reading/language arts, including programs for drill and practice, tutorials, simulations, diagnosis and prescription, word processing, and management. Suggestions for developing units about computers in society will be included.

Prereq: One course in reading and ability to use a word processor.

RDG 636 Content Reading in the Secondary School. 4 hrs

This course is for secondary content area classroom teachers. Emphasis will be placed upon specific reading and study strategies needed to understand subject matter in the content areas.

RDG 664 The Nature of Common Reading Problems. 2 hrs

Problems of underachievement: weaknesses and deficiencies in attitudes, comprehension, word recognition and facility and flexibility in silent and oral reading, physical, psychological, environmental, and educational factors. Not open to reading majors.

Prereq: A basic course in the teaching of reading.

RDG 665 Psycholinguistics and Reading. 2 hrs

An analysis of the reading process from a psycholinguistic perspective. Emphasis includes selected readings in language development, learning, and comprehension as each relates to reading.

Prereq: RDG 563.

RDG 668 Diagnosis and Remediation of Reading Problems. 4 hrs

A survey of formal and informal procedures used in identifying, evaluating, and remediating reading problems in a classroom or clinical setting. Preparation of case studies and recommendations

to teachers and parents; examination of current group and individual reading tests.

Prereq: RDG 563.

RDG 670 Materials and Activities in Reading and Language Arts Instruction. 4 hrs

A practical course designed for teachers who see the need for creating and constructing aids for pupil learning in reading classes. This course combines the how and why of constructed materials by drawing on learning theory, child development, and creativity principles.

RDG 679/680/681 Special Topics. 1/2/3 hrs

RDG 682/683/684/685 Workshop. 1/2/3/4 hrs

Please examine the current time schedule for specific workshop topics. Among those offered in the past: Providing for Individual Differences in Reading.

RDG 689 Practicum in Reading. 4 hrs

Opportunities to work with community children demonstrating reading difficulties. Under supervision, students will engage in the diagnosis, analysis, and treatment of various reading disabilities, maintaining a professional relationship with their clients, their clients' families, and associated schools or agencies. On-going study of current procedures in the analysis of reading performance critical to systematic diagnosis and prescription.

Prereq: RDG 563, RDG 668, and department permission.

RDG 690/691/692 Thesis. 1/2/3 hrs

Prereq: Department permission.

RDG 694 Seminar: Current Issues in Reading. 2 hrs

The seminar is a culminating course in the graduate reading concentration. Current trends in reading research, critical examination of selected research studies and investigations, self evaluations of professional needs, and interests in reading are included. *Prereq: Eight hours of graduate credit in reading. It is highly desirable to have completed EDP 677.*

RDG 697/698/699 Independent Study. 1/2/3 hrs

An intensive study of a problem or group of problems. The completed study must give evidence of the student's ability to select a problem, set it up, and pursue it to satisfactory completion. Must be done with approval of a full-time member of the staff.

SOCIAL FOUNDATIONS COURSES

SFD 500 Social Foundations of Education: An Introduction. 2 hrs

An overview presented by varied staff members of the major areas of social foundations of education: educational sociology, educational anthropology, educational philosophy, educational history, and comparative education.

SFD 540/541/542 Field Studies in Comparative Education. 1/2/3 hrs

A study of selected aspects of education and the environing society by visits to and periods of residence in one or more other nations. Previously studied: East Africa, England, India, the Philippines, Scandinavia. Summers only typically.

SFD 550 Philosophy of Education. 2 hrs

Philosophical study of educational questions, the nature of being human, what should be learned, who is educable, the ends of education, personal meaning of philosophical questing.

Prereq: SFD 500 for majors; course in philosophy or religion for non-majors.

SFD 560 Anthropology of Education. 2 hrs

An overview of the learning process in human societies addressing universal problems of motivation, selectivity, thinking-remembering, forgetting, language and thought, value orientation, and cultural sets.

Prereq: SFD 500 for majors; course in sociology or anthropology for non-majors.

SFD 572 History of American Education. 2 hrs

Historical precedents of present educational circumstances; the developmental background of modern school crises; a study of problems and answers, successes and failures in America's schools.

Prereq: SFD 500 for majors; course in American history for majors and non-majors.

SFD 580 Sociology of Education. 2 hrs

Examined here are selected points of view and empirical studies on social organization, social change, policy-making, power and authority structures, social class system, and social movements in relation to the school as an institution.

Prereq: SFD 500 for majors; course in sociology for majors and non-majors.

SFD 590/591/592 Special Topics. 1/2/3 hrs

Prereq: Department permission.

SFD 601 History of Educational Thought. 2 hrs

A study of the history of educational thought as a means of understanding the evolutionary process by which modern concepts of education developed.

Prereq: SFD 500 or an undergraduate course in Western history or philosophy.

SFD 602 Progressivism in American Education. 2 hrs

The genesis and development of pragmatism; the special contributions of Pierce, James, Mead, and Dewey; the educational theories and practices of the Progressivists: Bode, Kilpatrick, Counts; present thought and new influences.

Prereq: SFD 500 or an undergraduate course in Western history or philosophy.

SFD 603 Groups in Schools. 2 hrs

Examines schools and classrooms as social organizations; considers dynamics of interpersonal behavior in large and small settings; examines such phenomena as roles, statuses, communications, and patterns of influence.

Prereq: SFD 580 for majors; for non-majors SFD 580 or one course in psychology or sociology.

SFD 604 Delinquency and Schools. 2 hrs

Nature, meaning, causal factors, and conditions of delinquency in home, school, and community; problems in personality and behavior; the juvenile courts; delinquency prevention and control programs. Opportunity to study problems of particular individual interests. *Not open to students who have credit in CRM 354 Juvenile Delinquency.*

Prereq: SFD 580 for majors; for non-majors, SFD 580 or one course in psychology or sociology.

SFD 624 Education for What and Whom: A World View. 2 hrs

Why should people be educated? Who should be educated? What should this education accomplish? What form should it take? What methods should we use? These questions, viewed in world perspective, may suggest some workable answers. A course in comparative education.

SFD 625 Power and Influence in Education: A Cross-Cultural View. 2 hrs

Designed to increase participation and effectiveness of educators in the decision-making process, the course examines cross-cultur-

ally the structure and dynamics of power in education, emergence of pressure groups, and integrative mechanisms to minimize conflicts between power groups.

SFD 626 Schools, Poverty, Population: Selected Problems in Comparative Education. 2 hrs

Education in various societies; e.g., agrarian, capitalist, totalitarian, preliterate, etc., is studied to discern how policies and practices of schools affect and are affected by the problems of poverty and population, e.g., fertility control, world food problems, education as capital, economic development as educational purpose, etc.

SFD 627 Trends and Challenges in International Education. 2 hrs

The materials covered in the course are intended to provide an international perspective to the continuing debate on reforms in education and on the issue of what multicultural education should be and its place in the curriculum. The course provides an overview of (a) comparisons of standardized achievements in education between the schools in the U.S. and selected industrial countries, and (b) the nature and implications of the involvement of the U.S. in education overseas programs through the foreign aid program and through an increasing number of U.S. teachers working in overseas schools.

SFD 651 Analysis of Educational Concepts. 2 hrs

Philosophical analysis of concepts central to the processes of education; learning by doing, teaching as telling, and the curriculum as content, knowing "that", and knowing "how."
Prereq: SFD 500 for majors; course in philosophy or religion for non-majors.

SFD 652 Pragmatism and Education. 2 hrs

Consideration of pragmatists' psychology, sociology, ethics, and social philosophy and their influence upon educational psychology and practices.
Prereq: SFD 500 for majors; course in philosophy or religion for non-majors.

SFD 653 Existentialism and Education. 2 hrs

An historical and comparative analysis of the relationship of pragmatism to existentialism; factors which affect theories and practices of American education.
Prereq: SFD 500 for majors; course in philosophy or religion for non-majors.

SFD 662 Cultural Determinants of Learning. 2 hrs

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.
Prereq: SFD 500 for majors; course in sociology or anthropology for non-majors.

SFD 671 Development of European Education. 2 hrs

Consideration of ancient traditions as the Graeco-Roman and Hebraic-Christian and such modern forces as nationalism, democracy, science, and industrialization in terms of their impact on educational development in selected European countries. Focus is upon organization, philosophy, curriculum, methods of instruction, and evaluation.
Prereq: SFD 500 for majors; course in history of Western civilization or history of Europe for non-majors.

SFD 673 Black Experience and American Education. 2 hrs

The role of African Americans in the development of the United States. The course is designed to help teachers to understand the cultural, economic, and political contributions of African Ameri-

cans and to develop materials to be used in their courses at both elementary and secondary schools.

Prereq: SFD 500 for majors; course in American history for others.

SFD 679/680/681 Special Topics. 1/2/3 hrs

This course number is used for an experimental offering of the department when a course is being given a trial run in a given semester.

SFD 682/683/684/685 Workshop. 1/2/3/4 hrs

Designed each semester to consider particular themes or issues; e.g., racism and education, human relations in schools, and providing a basic empirical orientation with attention to teaching resources and skills. Student-faculty planning, small group discussions are used extensively. May be selected more than once.
Prereq: SFD 500 for majors; consent of advisers for non-majors.

SFD 690/691/692 Thesis. 1/2/3 hrs

Prereq: Department permission.

SFD 693/694/695 Seminar. 1/2/3/4 hrs

An intensive study of selected problems in social foundations of education. Open to social foundation majors only.
Prereq: Twenty hours completed on MA program, including SFD 500 and eight hours in area of concentration.

SFD 697/698/699 Independent Study. 1/2/3 hrs

An intensive study of a problem or group of problems in the field of social foundations of education under the direction of a University faculty member.
Prereq: Department permission.

OTHER COURSES

The following upper division undergraduate courses also may be elected for graduate credit; course descriptions may be found in the undergraduate catalog. *A maximum of nine hours of approved 400-level coursework may be permitted in the earning of any graduate degree.*

If you intend to enroll in any of the following undergraduate courses for graduate credit, you must come to the Graduate School for written permission before enrolling in the course; otherwise, you will receive undergraduate credit.

- EDP 402 Learning in the Later Years (3)
- SFD 402 Sexism and Education (3)
- SFD 403 Endangered Children (3)

THE PROFESSIONAL EDUCATION PROGRAMS OF THE COLLEGE OF ARTS AND SCIENCES

Barry Fish, Dean
Barbara Richardson, Associate Dean
James Waltz, Acting Associate Dean
Velma Clark, Administrative Associate II
411 Pray-Harrold
487-4344

DEPARTMENTS

Art
Music
Psychology

ART

John E. Van Haren
 Department Head
 Ford Hall
 487-1268

MASTER OF ARTS (ART EDUCATION)

This degree is designed for persons currently teaching or who have fulfilled Art teaching certificate requirements. The program emphasizes the four components of discipline-based art education (DBAE): aesthetics, art history, art criticism, and art production.

MODEL

The development of educators who are committed to their ongoing professional growth and are aware of the challenges of democracy in our culturally diverse society. These educators will assert leadership and the ability to cultivate abstract thinking skills and analyze visual statements for personal meaning.

ADMISSION REQUIREMENTS

Entry requirements are a minimum of 34 semester hours of art education and studio art with a minimum 2.8 grade point average in these classes. In addition, each applicant is expected to hold a teaching certificate for the teaching of art.

An applicant for admission must do the following:

1. Send an application for admission, supported by official transcripts of all undergraduate and graduate credit at each institution attended, to Graduate School Admissions, Starkweather Hall, Eastern Michigan University.
2. Send a letter of purpose outlining aspirations in graduate work to the Art Department.
3. Send a portfolio of 10-15 color slides and/or photographs of recent work, presented in a clear plastic holder, with each slide/picture individually labeled with name, title of work, medium or media, size, and date of completion (applicants in three-dimensional disciplines may submit multiple views of examples) to the Art department.

International students must have a score of 80 or above on the MELAB (Michigan English Language Assessment Battery) or 500 or above on the TOEFL (Test of English as a Foreign Language).

DEGREE REQUIREMENTS

The graduate adviser will meet with each student to construct a program of study. Students should follow closely the Graduate School requirements for "Application for Diploma." Students whose degree program includes a final exhibition of work must apply for gallery space one semester prior to the proposed exhibition.

Graduate credit in art education (theory and practice) earned more than six years prior to the date on which the degree was granted may not be applied to meet the graduate requirements.

After the student has completed six hours of course work in art education, the graduate coordinator or program advisor will evaluate for approval the selection of a thesis proposal or paper option in an appropriate art education area. A required thesis review will be conducted by a faculty committee.

COURSE REQUIREMENTS

Art Education courses (to be selected through advisement by art education faculty) 10 hours
Six to eight hours from the following: 6-8
 FA 504 Aesthetic Education (2)

- FA 505 Curriculum Development (Art Education) (2)
- *FA 506 ARTAG (Art for the Talented and Gifted) (2)
- *FA 507 Studio Connections in Art Education (2)
- *FA 508 Research in Art Education (2)
- *FA 591 Special Topics (2)
- FA 694 Seminar in Art Education (2)

Other courses as they become available and approved by the adviser.

Two to four hours from the following: 2-4

- *FA 691 Thesis (2)
- *FA 698 Independent Study (paper of publishable or distributable quality) (2)

**These courses may be repeated if appropriate.*

Art Electives (Studio, Art History, Art Education) 14 hours

Students wishing to have an exhibition in conjunction with their art education studies are subject to a 10-hour review of their studio concentration.

Cognates 6 hours

Selected from art or other areas in consultation with the adviser.

Total 30

MUSIC

James B. Hause
Department Head
N101 Alexander Music Building
487-0244

MASTER OF ARTS (MUSIC EDUCATION) (PENDING APPROVAL)

MODEL

An advanced musician/teacher education program to provide the knowledge and competencies necessary for meeting the culturally diverse music education needs of the twenty-first century.

ADMISSION REQUIREMENTS

Admission to a graduate program in the Music department is granted to students who meet the requirements of both the Graduate School and the Music department. Application for admission should be made to the Graduate School, where undergraduate transcripts are evaluated. Transcripts should be forwarded to the Graduate School at the time of application. In addition to Graduate School requirements for degree admission, the department requires the applicant to have an undergraduate degree in music or its equivalent. Students wishing to major in performance should send a tape to the Music department or write for information on auditions. Upon general admission to the department, additional auditions are necessary for applied music study or acceptance in a performance concentration.

Students who meet Graduate School requirements for admission but who do not meet all departmental requirements may be granted conditional admission. Conditions that must be met before degree admission is granted include: (a) completion of all graduate placement examinations and auditions; (b) completion of all deficiency courses and requirements; (c) completion of MUS 601 Introduction to Graduate Studies; and (d) completion of at least six credit hours of graduate study in music at Eastern Michigan University with a cumulative grade point average of 3.0 ("B") or better.

For degree admission, an international student must present a score of 90 on the Michigan English Language Assessment Battery (MELAB)/550 on the TOEFL (Test of English as a Foreign Language). A conditionally admitted international student must present a score of 85-90 on the MELAB/500-550 on the TOEFL.

PROGRAM REQUIREMENTS

All candidates for the MA in music are required to complete the following:

1. Music Theory-Literature Placement Examination;
2. Audition for acceptance into any performance concentration and for applied music study;
3. Comprehensive examination prior to graduation;
4. At least 15 hours of course work at the 600 level.

Upon admission to the Music department, each student is assigned an adviser who assists in planning a curriculum based on student needs and future plans. Placement examinations in theory, literature, history, and performance are given each semester and students are expected to complete these tests before decisions on course elections are made. Students should write or call the Music department for the next scheduled test date. The results of the placement tests are used by advisers in determining the course needs of students. Students with deficiencies may be required to take remedial courses without graduate credit. Auditions are arranged with the adviser and area chair.

Programs consist of 12 hours of foundation courses including research techniques, music theory and literature, and applied

music; 14 hours of concentration in the student's field of interest; and 4 hours of elective or cognate courses. A final recital, thesis, or special project is required in each degree program.

In addition to regular tuition, students accepted for private music lessons will be assessed applied music fees described under the section on tuition and fees.

COURSE REQUIREMENTS

Required Courses	12 hours
MUS 601 Introduction to Graduate Studies	2
One of the following (based on Music Theory-Literature placement examination results)	2
MUS 511 Survey of Harmonic Techniques	
MUS 513 Form and Analysis Theory-Literature Elective	
Music History-Literature course (at 600 level for Music Education concentration)	2
Applied Music	2
Music electives from outside the area of concentration	4
(Applied Music and Ensembles recommended for Music Education concentration; Applied Music, Ensembles and Composition recommended for Music Theory-Literature concentration)	
Concentration	14 hours
Select all courses listed in one of the following concentrations:	
<i>Music Education</i>	
MUS 642 Foundations of Music Education	2
MUS 694 Seminar: Music Education Topic	2
MUS 576 Score Study and Rehearsal Strategies for Music Educators or MUS 678 Advanced Methods and Conducting Techniques for Music Educators	2
Either MUS 691 Thesis (strongly recommended for students who wish to pursue the doctorate in Music Education) or MUS 692 Final Project	2
Six hours from the following	6
MUS 561 Studies in Literature (Band, Choral, Orchestra) (2)	
MUS 576 Score Study and Rehearsal Strategies for Music Educators (2)	
MUS 591 Special Topics: Music Education only—K-12 (2)	
MUS 595 Workshop: Music Education only—K-12 (2)	
MUS 660 Studies in Pedagogy (Music Education topics) (2)	
MUS 678 Advanced Methods and Conducting Techniques for Music Educators (2)	
MUS 697/698 Independent Study: Music Education (1/2)	
Other Music Education courses with adviser approval	
<i>Music Theory-Literature</i>	
MUS 635 Music of the 20th Century	2
MUS 660 Studies in Pedagogy (Theory-Literature)	2
MUS 691 Thesis or MUS 692 Final Project	2
Two of the following:	4
MUS 504 America's Music (2)	
MUS 505 World Music (2)	
MUS 631 Renaissance Music (2)	
MUS 632 Baroque Music (2)	
MUS 633 Music in the Classic Era (2)	
MUS 634 Music in the Romantic Era (2)	
Four hours from the following:	4
MUS 513 Form and Analysis (2)	
MUS 613 Advanced Form and Analysis (2)	
MUS 638 The New Music (2)	
MUS 697/698 Independent Study: Theory-Literature topics (1/2)	

Piano Pedagogy

AMU 602 Applied Music (Piano) (level 622-B81, 626-B82)	4
MUS 692 Final Project (lecture-recital or paper on piano pedagogy plus fluent reading of thirty minutes of music of higher intermediate difficulty)	2
Two of the following:	4
MUS 660 Studies in Pedagogy (Studio Piano) (2)	
MUS 660 Studies in Pedagogy (Adult Group Piano) (2)	
MUS 660 Studies in Pedagogy (Children: Private/Group) (2)	
Four hours from the following:	4
MUS 561 Studies in Literature (Piano) (2)	
MUS 595 Workshop: Keyboard Topics (2)	
MUS 660 Studies in Pedagogy (topic not chosen in preceding option) (2)	
MUS 660 Studies in Pedagogy (Taubman Piano Techniques) (2)	
Other appropriate Music courses with adviser approval	

Music Performance (Accompaniment)

AMU 602 Applied Music (Piano) (4) (level 622 B81 and above)	4
MUS 551 Vocal and Instrumental Accompanying (Piano)	4
MUS 687 Graduate Recital	2
Four hours from the following:	4
MUS 561 Studies in Literature (Piano) (2)	
MUS 590/591 Special Topics: Chamber Music (1/2)	
MUS 660 Studies in Pedagogy (Studio Piano) (2)	
MUS 660 Studies in Pedagogy (Adult Group Piano) (2)	
MUS 660 Studies in Pedagogy (Children: Private/Group) (2)	
MUS 660 Studies in Pedagogy (Taubman Piano Techniques) (2)	
Ensemble (any large or small approved by adviser)	
Other appropriate Music courses with adviser approval	

Music Performance (Choral)

AMU 601-602 Applied Music (at least one semester at the A 81 level or above by the end of 4 hours of study)	4
MUS 660 Studies in Pedagogy (Choral)	2
MUS 687 Graduate Recital	2
MUS 561 Studies in Literature (Choral Music) or MUS 561 Studies in Literature (Opera)	2
Four hours from the following:	4
MUS 561 Studies in Literature (Solo Song) (2)	
MUS 576 Score Study and Rehearsal Strategies for Music Educators (2)	
MUS 660 Studies in Pedagogy (Vocal) (2)	
MUS 678 Advanced Methods and Conducting Techniques for Music Educators (2)	
Ensemble (up to 2 hours; any large or small approved by adviser)	
Other appropriate Music courses with adviser approval	

Music Performance (Organ)

AMU 602 Applied Music (Organ) (level 650 C91 and above)	6
MUS 561 Studies in Literature (Organ)	2
MUS 687 Graduate Recital	2
Four hours from the following:	4
MUS 551 Vocal and Instrumental Accompanying (2)	
MUS 561 Studies in Literature (Choral Literature, Church Liturgy, second term of Organ Literature) (2)	

MUS 660 Studies in Pedagogy (Organ) (2)

Other appropriate Music courses with adviser approval

Music Performance (Piano)

AMU 602 Applied Music (Piano) (level 622 B91 and above)	6
MUS 561 Studies in Literature (Piano)	2
MUS 687 Graduate Recital	2
Four hours from the following:	4
MUS 551 Vocal and Instrumental Accompanying (2)	
MUS 590/591 Special Topics: Chamber Music (1/2)	
MUS 660 Studies in Pedagogy (Studio Piano) (2)	
MUS 660 Studies in Pedagogy (Adult Group Piano) (2)	
MUS 660 Studies in Pedagogy (Children: Private/Group) (2)	
MUS 660 Studies in Pedagogy (Taubman Piano Techniques) (2)	
Ensemble (any large or small approved by adviser)	
Other appropriate Music courses with adviser approval	

Music Performance (Voice)

AMU 602 Applied Music (Voice) (level 610 A91 and above)	6
MUS 687 Graduate Recital	2
Ensemble (any large or small vocal ensemble approved by adviser)	2
Four hours from the following:	4
MUS 561 Studies in Literature (Solo Song) (2)	
MUS 561 Studies in Literature (Opera) (2)	
MUS 660 Studies in Pedagogy (Vocal Diction) (2)	

Music Performance (Wind, Stringed, and Percussion Instruments)

AMU 602 Applied Music (major instrument) (level 650 C91 and above)	6
MUS 687 Graduate Recital	2
Ensemble (any large or small approved by adviser)	2
Four hours from the following:	4
AMU 501, 601, 602 Applied Music	
MUS 576 Score Study and Rehearsal Strategies for Music Educators (2)	
MUS 595 Workshop: Band, Orchestra Instrument Repair (2)	
MUS 660 Studies in Pedagogy (Brass, Percussion, Strings, Woodwind) (2)	
MUS 678 Advanced Methods and Conducting Techniques for Music Educators (2)	
Ensemble (any large or small approved by adviser) (2)	
Other appropriate Music courses with adviser approval	

Electives (music or non-music courses approved by adviser) **4 hours**
(Applied Music elected by students in Music Performance concentrations may not be on the principal instrument.)

Total **30 hours**

PSYCHOLOGY

Kenneth Rusiniak
Department Head
537 Mark Jefferson
487-1155

SPECIALIST IN ARTS IN SCHOOL PSYCHOLOGY

The program is an interdisciplinary effort among the Teacher Education, Psychology, and Special Education departments and is coordinated through the Psychology department.

MODEL

Based on the recommendations of the Spring Hill Conference, the training emphasis is to provide school psychologists who can meet the comprehensive psychological, educational, and mental health needs of a culturally diverse student population found in the public and private educational institutions of Michigan and the United States. Emphasis is given toward direct and consultative services to students, parents, teachers, and administrators.

OBJECTIVES

1. Meet state requirements for full approval of school psychologists.
2. Provide psychological services required by state and federal laws.
3. Promote student welfare through the development of effective programming recommendations.
4. Develop improved understanding of students' educational needs in parents, teachers, administrators and others interested in promoting student welfare.

ADMISSION REQUIREMENTS

The admission committee will select students in terms of the promise of successful completion of program requirements based on previous academic performance, evidence of aptitude, past experience and letters of recommendation. Committee decisions will be made once each year by February 15 for the fall class. Approximately 10 students will be accepted each year.

Applicants with a bachelor's degree (including all persons without a master's degree) must meet the following requirements:

1. Present background preparation in the areas of psychology, special education, or education. This preparation must include a bachelor's degree with a minimum of 36 hours primarily in the preceding fields.
2. Have a minimum undergraduate grade point average of 2.75 on a 4.0 scale.
3. Normally, students applying for the specialist's program should have a minimum of three years of full-time successful professional experience in the fields of psychology, special education, or education.
4. Submit results of the verbal and quantitative sections of the Graduate Record Examinations, with a minimum combined score of 1000. In addition, the applicant must supply results of the advanced achievement tests in psychology or education on the Graduate Record Examination and achieve scores acceptable to the admissions committee.
5. Supply letters of recommendation from three professional persons familiar with the applicant's academic performance and professional abilities.
6. Supply a current vita (resume).

Applicants holding the master's degree must meet all the above requirements except number 2. Persons with a master's degree must present a minimum undergraduate GPA of 2.75 and a graduate GPA of at least 3.3 ("B+").

PROGRAM REQUIREMENTS

The Specialist in Arts degree in school psychology requires a minimum of 62 semester credits of graduate work, including a 1,200 clock-hour internship. The course work and required educational experiences are designed to provide the competencies required by state law. The competencies ensure that the graduate will have a depth of understanding and ability to perform psycho-educational evaluations, help plan educational strategies, communicate findings, implement intervention programs, consult and counsel with school personnel, parents and pupils, and assume a leadership role in developing services to students.

Program requirements, including practicum and internship, will generally necessitate two calendar years of study. A minimum of three semesters of full-time day scheduling is required.

An overall GPA of 3.3 ("B+") is required for graduation.

COURSE REQUIREMENTS

Required Courses	55-57 hours
Psychological Foundations	25 hours
<i>Assessment Techniques</i>	14 hours
SGN 661 Advanced Assessment and Decision-Making ...	3
PSY 762 The Wechsler Intelligence Tests	4
PSY 763 Individual Testing II	4
PSY 775 Theory of Psychological Testing	3
<i>Interventions and Theory</i>	11 hours
PSY 646 Personality: Theory and Research	3
PSY 743 Psychopathology	3
PSY 751 Psychotherapy	3
PSY 520 Coping with Problem Behavior	2
Educational Foundations	14 hours
<i>Education of Exceptional Children</i>	11 hours
SGN 510 The Exceptional Child in the Regular	
Classroom	3
SEI 510 Advanced Theory of Emotional Impairment	3
SLD 468 Education of Children with Learning	
Disabilities	2
SMI 557 Mental Retardation: Nature, Needs, and	
Issues	3
<i>Legal/Ethical Issues</i>	3 hours
SGN 621 Law and Public Policy for Persons with	
Disabilities	3
Statistics and Research Design	6-8 hours
EDP 631 Measurement and Evaluation	2
*PSY 600 Psychological Statistics I (3) or EDP 621	
Statistical Applications in Educational	
Research (2)	2-3
EDP 677 Research Techniques (2) or EDP 678 Empirical	
Methods for Educational Research (3)	2-3
(*PSY 600 has prerequisite of PSY 205 or equivalent and	
department permission)	
Practicum and Internship Experiences	10 hours
PSY 793 Seminar (1 hr/sem; take 4 sems)	4
PSY 794 Internship in School Psychology	3
PSY 795 Internship in School Psychology	3
(1,200 clock hours of internship is required)	
Electives	5-7 hours
Highly recommended are: PSY 610 Clinical	
Neuropsychology (3) and PSY 629 Physiological Psy-	
chology (3). Other choices include:	
<i>Psychological Foundations</i>	
<i>Assessment Techniques</i>	
PSY 770 Personality Evaluation I (4)	

- PSY 771 Projective Techniques (4)
- Interventions and Theory*
- PSY 750 Clinical Psychology (3)
- PSY 620 Learning (3)
- PSY 625 Behavior Change Methods I (3)
- PSY 632 Sensation and Perception (3)
- PSY 637 Social Psychology (3)
- PSY 640 Developmental Psychology (3)
- PSY 528 The Psychology of Stress and Relaxation (3)

Educational Foundations

Educational Psychology

- EDP 600 Human Development (2)
- EDP 605 Mental Hygiene (2)
- EDP 611 Piaget for Educators (2)
- EDP 618 Play and Human Development (2)
- EDT 616 Technology of Instruction (2)

Counseling

- SGN 615 Social Psychology of Disability: Family, School, and Society (3)
- SGN 632 Collaborative Consultation in Special Education (2)

Total 62 hours

THE PROFESSIONAL EDUCATION PROGRAMS OF THE COLLEGE OF TECHNOLOGY

Thomas K. Harden, Dean
150 Sill Hall
487-0354

DEPARTMENT

Business and Industrial Education

BUSINESS AND INDUSTRIAL EDUCATION

Ann M. Remp
Department Head
14 Sill Hall
487-4330

The Business and Industrial Education department offers programs leading to the Master of Business Education and the Master of Arts in industrial education.

MASTER OF BUSINESS EDUCATION (MBE)

The Master of Business Education program recognizes the need for broadly educated business teachers in a rapidly changing global economy and technological world. The program emphasizes the importance of a clear mission and a strong philosophy about the role of basic business education and the preparation of a highly educated business workforce. This program is intended for business teachers in secondary schools and community colleges who will assume leadership in the classroom, in the school, and in the various processes which shape business education today. The MBE degree provides a program for teachers of basic business and economic education, business services and technology education, and marketing education and teachers providing business education through other programs at secondary, adult, and post-secondary levels.

MODEL

Development of career and technical education teachers who exercise leadership in their professions, apply and practice scholarship, and develop the business literacy and employability competencies required in a technological and global economy.

PROGRAM OBJECTIVES

The goals of the Master of Business Education program are to:

1. strengthen the teacher's commitment to the philosophical foundations of business education as it relates to developing business, economic, and technological education and to developing a highly educated business workforce;
2. develop professional involvement and leadership in business education through the organizations, agencies, and other processes which operate on a local, regional, national, and international basis;
3. develop and restructure curricula which reflect sound educational principles and reflect the expressed needs of the economy and education/business/industry community;
4. provide research foundations which enable the teacher to apply the findings of contemporary research to teaching and learning and to foster the spirit of inquiry and the ability to develop new knowledge for the improvement of instruction;
5. develop advanced teaching approaches for the business education classroom;
6. expand the teacher's knowledge of business and economic concepts, relevant technologies, occupational clusters, and workplace trends.

MBE PROGRAM ADMISSION

Candidates for admission must meet the following requirements:

1. have a bachelor's degree from an accredited institution, with a grade point average of at least 2.5 overall or at least 2.75 for the last half of the program.
2. have completed a minimum of 30 semester hours in business.

3. hold or be eligible for a secondary teaching certificate in business or a waiver of certificate. A waiver of certification can be made for individuals with two or more years of teaching at the post-secondary level.
4. complete all Graduate School requirements. All students applying for degree admission for fall 1993 and beyond may be required to submit a Graduate Record Examination score that is not more than five (5) years old.
5. international students must meet requirements 1-4 above and meet the Graduate School requirements on the TOEFL and TWE or the MELAB.

Candidates must submit an application which includes a statement of goals for the graduate program. Upon review of the application, transcripts, and other qualifications by the graduate faculty, the candidate will be notified by the Graduate School of the admission recommendation. The candidate must then meet with the graduate adviser to design the program.

MIDPOINT CHECK

Midway through the program, the candidate and adviser will meet to discuss general progress and the candidate's plan for professional development and leadership activities. At this time, the candidate will also discuss options for the capstone research experience.

EXIT FROM THE PROGRAM

As part of the capstone course, the candidate must provide a review and evaluation of the program in terms of his/her educational goals, including continuing goals for professional growth and development. The candidate must report the results of the professional development and leadership plan. The candidate must complete a study which demonstrates the ability to select and research a significant question in business education and draw conclusions for the educational environment. The candidate may choose the thesis (BE 691) or the professional seminar (BE 694) as the capstone course.

MBE PROGRAM REQUIREMENTS

A minimum of 30 semester hours of graduate work which include:

Required Courses:

BE 569 Foundations of Business Education	2
BE 611 Curriculum Models in Business Education.....	3
BE 678 Research in Business Education: Analysis and Application	3
One advanced methods course.....	2-3

Capstone Experience:

<i>Choose one:</i>	2
BE 694 Business Education Professional Seminar (2)	
BE 691 Thesis (2)	

Electives

Business Education electives to ensure at least 12 but not more than 24 semester hours in Business Education. These are selected in consultation with the graduate adviser.

Cognate Area

At least six hours but not more than 18 from offerings outside Business Education selected in consultation with the graduate adviser.

MASTER OF ARTS IN INDUSTRIAL EDUCATION

The program leading to a Master of Arts degree in industrial education provides advanced preparation in professional, techni-

cal, and related fields as a foundation for career advancement and professional upgrading. The curriculum consists of regular class work, field experiences in industry and education, research activities, technical laboratory work, and cognate courses. As a result of this advanced preparation, technology and industrial-vocational educators should develop an understanding of the philosophical, social, psychological, and economic foundations as a basis for developing and implementing industrial education programs.

The student's program of study is planned with a graduate adviser in industrial education. Each graduate program is customized to meet the needs, interests and abilities of the individual students.

MODEL

Development of technology and career/technical teachers who exercise leadership in their professions, apply and practice scholarship, and develop the creative and critical thinking skills, understanding of social and global impacts of technology, and technical skills required in a technological society.

PROGRAM OBJECTIVES

The program in industrial education is designed to:

1. provide advanced preparation in professional, technology, and cognate areas.
2. develop an awareness and understanding of the philosophical, social, and economic foundations as bases for technology and industrial-vocational programs.
3. produce professional personnel who have the appropriate knowledge and competencies to promote and develop comprehensive and viable technology and industrial-vocational education programs.
4. enable a student to acquire and manage a broad knowledge of the literature in technology and industrial-vocational education.
5. provide a strong foundation for student and program evaluation.
6. develop a basic competence in applied research.
7. provide a strong foundation for professional participation and leadership.

ADMISSION REQUIREMENTS

An applicant for admission must:

1. meet the Graduate School degree admission requirements. All students applying for degree admission for fall 1993 and beyond may be required to submit a Graduate Record Examination score that is not more than five (5) years old.
2. have completed an undergraduate major in technology education, vocational education, industrial arts education, industrial technology, or other technically related field;
3. hold, be eligible for, or have a waiver for a valid teaching certificate. The teaching certificate requirement may be waived for prospective or currently employed community college personnel;
4. have at least a 2.75 undergraduate gradepoint average or a 3.0 in the last half of the bachelor's program;
5. receive the recommendation of the Graduate Committee in the Business and Industrial Education department.
6. international students must meet requirements 1-5 above and meet the Graduate School requirements on the TOEFL and TWE or the MELAB.

MIDPOINT CHECK

Midway through the program, the candidate and adviser will meet to discuss general progress and the candidate's plan for professional development and leadership activities. At this time, the candidate will also discuss options for the capstone research experience.

EXIT FROM THE PROGRAM

To complete the degree program, the candidate must provide a review and evaluation of the program in terms of his or her goals, including continuing goals for professional growth and development. The candidate must report the results of the professional development and leadership plan. The candidate must complete a capstone experience which demonstrates the ability to select and research a significant question and draw conclusions for the educational setting.

PROGRAM REQUIREMENTS

An applicant for the master's degree must:

1. have earned a minimum of 30 semester hours of graduate credit applicable to the program. All courses are selected in consultation with the graduate adviser. The program of study must be planned with the adviser and submitted within the first 12 hours of the program.
2. have completed a concentration of no fewer than 24 semester hours in one of the following areas:
Technology Education
Industrial-Vocational Education

Included in the 24 hours are the following:

Eight hours in the required core:

IE 551 Philosophy of Industrial Education	2
IE 562 Curriculum Development in Industrial Education	2
IE 661 Evaluation in Business and Industrial Education	2
IE 677 Research in Industrial Education	2

Capstone Experience:

Choose one:2-6

IE 694 Seminar (2)

IE 690, 691, 692 Thesis (6)

Six to ten hours of professional electives in industrial education. A maximum of four hours of application courses.

3. have earned a minimum of six semester hours in cognate courses from offerings other than industrial education;
4. have a minimum of a 3.3 (B+) gradepoint average in the core courses in the major;
5. have a minimum of a 3.0 (B) gradepoint average for all graduate courses applicable to the master's degree program;
6. receive the recommendation of the student's adviser, the Graduate Committee in the Business and Industrial Education department, and the Graduate School of the University.

COLLEGE OF HEALTH AND HUMAN SERVICES

Elizabeth King, Dean
Kathy Randles, Assistant to the Dean
212 King Hall
487-0077

DEPARTMENTS

Associated Health Professions
Human, Environmental, and Consumer Resources
Nursing Education
Social Work

ASSOCIATED HEALTH PROFESSIONS

Stephen A. Sonstein
Department Head
328 King Hall
487-0460

The Associated Health Professions department offers the Master of Science degree in occupational therapy. In addition, the department offers graduate-level courses in clinical laboratory sciences and health administration that may be used as cognates in other master's degree programs with the permission of the student's adviser.

Students who satisfy the admission requirements of the Graduate School and who have fulfilled the specific course prerequisites are eligible to enroll in these courses.

MASTER'S PROGRAM IN OCCUPATIONAL THERAPY

Virginia Dickey
Graduate Coordinator/Adviser
324 King Hall
487-3230

The occupational therapy program at Eastern Michigan University has a long and rich history of providing high quality baccalaureate level professional education. Since the early 1940s, this program has been meeting the ever increasing demand for occupational therapists in our state. Currently the faculty are nationally recognized as excellent educators and for their numerous contributions to the profession through their participation in professional organizations and their scholarly pursuits. The strength of this faculty is the essential underpinning for the new master's degree in occupational therapy.

This program is available to persons who have completed an undergraduate degree in occupational therapy and wish to receive advanced education in their discipline. The program is designed to allow students to attend on a full- or part-time basis. Courses in the major are offered in the late afternoon or evening to accommodate those therapists who are working full-time.

OBJECTIVES

This program is designed to provide credentialed occupational therapists with skills necessary to pursue research and other scholarly endeavors. The student will have the opportunity to critically analyze the profession of occupational therapy, to acquire basic research skills, and to gain relevant knowledge from related areas of study and apply it to occupational therapy.

DESIGN

The student will establish a plan of study with the graduate adviser in the first semester after admission to the program. The program will consist of the following requirements:

1. Minimum of 30 hours for a master's degree.
2. Minimum of 15 hours of occupational therapy courses.
3. Minimum of 6 hours of research and statistics courses.
4. Minimum of 8 hours of cognate courses. (Each student will select an area of concentration based on individual interests and career goals.)

ADMISSION REQUIREMENTS

1. An applicant for admission must:
 1. meet the Graduate School's degree admission requirements,

2. provide proof of certification as an occupational therapist,
3. have a cumulative GPA of 3.0 or better in entry level occupational therapy courses, and

Conditional admission may be granted for a probationary period of two semesters or six credit hours to students who do not meet the minimum GPA requirement.

OCCUPATIONAL THERAPY COURSES

OT 520 Advanced Theory of Practice. 2 hrs
Introductory graduate course to be taken by all entering students. Provides students with a systematic method for analyzing areas of practice.

Prereq: Admission to program.

OT 530 Critique of Occupational Therapy Theory. 2 hrs
Provide the student with the opportunity to critically examine the major models of occupational therapy practice.

Prereq: OT 520.

OT 590/591/592 Special Topics. 1/2/3 hrs
The content of these courses will vary from semester to semester. Topics in occupational therapy will be covered which are not offered in regular course offerings.

OT 640 Methods of Occupational Therapy Research. 2 hrs
In this course, students will examine the current status of research in occupational therapy, identify the research design concerns which are inherent in the profession, and develop a thesis proposal.

Prereq: OT 520, OT 530, and the required series research and statistics courses.

OT 679/680/681 Special Topics. 1/2/3 hrs
The content of these courses will vary from semester to semester. Topics in occupational therapy will be covered which are not offered in regular course offerings.

OT 692 Thesis. 3 hrs
Individual research conducted under the guidance of, and in consultation with, a thesis committee and the graduate coordinator.

Prereq: OT 520, OT 530, OT 640.

OT 693/694/695/696 Seminar. 1/2/3/4 hrs
The focus of these courses will vary from semester to semester. These courses are designed to allow intensive analysis of specialized occupational therapy content.

OT 697/698/699 Independent Study. 1/2/3 hrs
An intensive study of a problem or a group of problems under the direction of a University faculty member.

Prereq: Permission of graduate coordinator.

OTHER COURSES

CLS 590/591/592 Special Topics. 1/2/3 hrs
Advanced level courses covering specific topics in clinical laboratory sciences.

Prereq: Permission of instructor.

CLS 597/598/599 Independent Study. 1/2/3 hrs
Independent original endeavors involving library and/or laboratory work under the guidance of a clinical laboratory sciences program faculty member.

Prereq: Permission of instructor.

HAD 510 Medical Care Organization. 3 hrs
A theoretical approach to the medical care system that allows the consideration of the key problems and issues such as DRG-based

prospective payment, alternative delivery systems and cost quality trade-offs.

Prereq: Graduate student status.

HAD 511 Health Law. 3 hrs
Legal aspects of health law for the design, administration, and regulation of health care services will be explored from the alternative perspectives of providers, reimbursement sources, government, and professional accreditation. Contract, tort, advocacy, enforcement of regulations, and other topics will be covered as well as the controversial issues of the definition of life and death, informed consent, medical malpractice, liability, and legal entitlement of health care services.

Prereq: Graduate student status or senior status with minimum 2.8 GPA.

HAD 512 Reimbursement for Health Care Services. 3 hrs
This is a survey of the full range of public and private sector methods of reimbursing health care services. The course covers all aspects of private health insurance, Blue Cross and Blue Shield, Medicare, Medicaid, welfare health care reimbursement, government regulation of health insurance, national health insurance proposals, and the problem of uninsured populations in the United States.

Prereq: Graduate student status or senior status with minimum 2.8 GPA.

HAD 590/591/592 Special Topics. 1/2/3 hrs
Topics of state, local, and national importance in health services management, administration, and policy. Offered only in response to special circumstances in the field of health services and faculty availability.

HAD 697/698/699 Independent Study. 1/2/3 hrs
Scholarship, original research, and collaborative research with health administration program graduate faculty.

Prereq: Graduate standing and department permission.

HUMAN, ENVIRONMENTAL, AND CONSUMER RESOURCES

Elizabeth A. Rhodes
Department Head
108 Roosevelt Hall
487-1217

Elizabeth A. Rhodes
Coordinator of Advising
108 Roosevelt Hall
487-1217

Graduate curricula in the department are designed to provide a broad philosophy of the field with in-depth concentration in the subject matter content areas. The interpretation of current research and theory as they apply to the selected professional role is an integral part of each concentration. The professional concentration enhances the student's ability to utilize knowledge and interpersonal skills in contributing to the psychological, physiological, social, and economic development of individuals and families.

MASTER OF SCIENCE IN HUMAN, ENVIRONMENTAL, AND CONSUMER RESOURCES

The department has one graduate degree: The MS in Human, Environmental, and Consumer Resources with concentration in:
Family Sciences
Human Nutrition
Hospitality Management
Interior Design
Clothing and Textiles

OBJECTIVE

The objective of the concentrations is to provide the conceptual understanding, analytical, and research skills needed for advanced study or professional practice. Each concentration offers opportunity for the student and the adviser to create the program to reflect individual career and study goals.

PROGRAM REQUIREMENTS

A minimum of 30 hours is required for the MS in Human, Environmental and Consumer Resources. Of these 30 hours:
5 hours are required of everyone: HEC 678, HEC 694. These 5 hours are included in the 20 hours required in the chosen concentration.
From 2-10 hours may be taken in a cognate outside the department.

A specific plan of course work is to be planned with the graduate adviser in the chosen concentration.

ADMISSION REQUIREMENTS

An applicant for the MS in Human, Environmental, and Consumer Resources must:
meet the EMU Graduate School admission requirements,
have completed the minimum prerequisites for the concentration chosen,
have a 2.75 (4.0 scale) undergraduate grade point average*
receive the recommendation of the graduate advisor in HECR,

Foreign students must present a score of 80 on the Michigan English Language Assessment Battery (MELAB), or 530 on the Test of English as a Foreign Language (TOEFL)

* *Applicants who do not meet the 2.75 undergraduate GPA may request non-degree status.*

FACILITIES

The Human, Environmental, and Consumer Resources department is located in Roosevelt Hall. Practicum experiences are included in many areas of graduate study with community and state agencies, businesses, and health care facilities. Cooperative education opportunities are available, but credits for these experiences may not be counted as part of the 30-semester-hour minimum.

COOPERATIVE PROGRAMS WITH EDUCATIONAL LEADERSHIP AT THE MA AND SPA LEVELS

The Leadership and Counseling department offers a cooperative program in vocational/technical administration. The program combines course work in school administration with courses in vocational/technical education (industrial education, business education, or home economics). This program is designed for persons seeking a career as either a director or supervisor of industrial vocational education. This program is available at either the master's or specialist's level. Interested persons should contact the department head in Leadership and Counseling.

DIETETICS COURSES

DTC 508 Behavioral and Cultural Aspects of Nutrition. 2 hrs
Critical investigation of beliefs about food and consequent behaviors with an emphasis of their impact on nutritional status.
Prereq: Six hours in undergraduate foods and nutrition, or department permission.

DTC 509 Enteral and Parenteral Nutrition. 2 hrs
Advanced study of the art and science of nutrition support, application of principles of delivery, discussion of biochemical, psychological, and physiological aspects of enteral and parenteral nutrition support.
Prereq: Human physiology, biochemistry, nutrient metabolism, six semester credit hours in undergraduate clinical nutrition.

DTC 518 Interdisciplinary Team Functions. 2 hrs
Exploration of the purpose, structure, and functions of interdisciplinary health care teams. Application of decision making process, integration of professional values and ethics.
Prereq: Four hours of graduate-level coursework or department permission.

DTC 538 Nutrition Care Management. 2 hrs
Comprehensive examination of assessment/screening, planning, implementation, counseling, and monitoring techniques used in the nutrition care management process. Development of nutrition care plans for assigned case studies.
Prereq: Six hours in undergraduate nutrition.

DTC 548 Metabolic Nutrition Care I. 2 hrs
Integration of principles of physiology and nutritional biochemistry in relation to the metabolism of essential nutrients at cellular and intact levels of the human body.
Prereq: Undergraduate biochemistry, nutrient metabolism, and human physiology.

DTC 590/591/592 Special Topics. 1/2/3 hrs
An experimental course designed to investigate specific topics of concern in the specialization areas of study.
Prereq: Department permission.

DTC 608 Advanced Topics in Foods. 2 hrs
Analysis of selected advanced topics in food science with application to current issues of practice.
Prereq: DTC 211 Food Science or equivalent.

DTC 618 Advanced Topics in Nutrition. 2 hrs
Analysis of selected advanced topics in human nutrition with application to current issues of practice.
Prereq: Six hours of credit in nutrition or department permission.

DTC 619 Metabolic Nutrition Care II. 2 hrs
Continuation of the integration of physiology and nutritional biochemistry in relation to the metabolism of essential nutrients at cellular and intact levels of the human body.
Prereq: DTC 548.

DTC 649 Nutritional Ecology. 2 hrs
Examination of issues in the political, physical, and social environments that impact the availability of food and nutrients in the U.S. food supply. Analysis of how individuals and populations interact with their nutritional environments.
Prereq: Six semester hours in undergraduate human nutrition or department permission.

DTC 668 Proteins, Lipids, and Carbohydrates. 2 hrs
Investigation of the macronutrients and their properties, functions, and appropriate contribution to energy and growth requirements in health and disease.
Prereq: DTC 402 Nutrient Metabolism or equivalent.

DTC 669 Vitamins and Minerals. 2 hrs
Emphasis on interrelationships of minerals and vitamins in human metabolism.
Prereq: DTC 402 Nutrient Metabolism : physiology recommended.

DTC 679/680/681 Special Topics. 1/2/3 hrs
An experimental course designed to investigate specific topics of concern in the specialization areas of study.
Prereq: Department permission.

FAMILY AND CONSUMER SCIENCE COURSES

FCS 511 Management for Special Needs Families. 2 hrs
Emphasis on helping families with special needs cope in contemporary society. Management techniques and support services available to help selected groups. Focus will vary according to semester offered: handicapped homemakers, displaced and single parent families, unemployed, and retired households.

FCS 531 Parent Education. 2 hrs
Study of parental roles and competence in family life; analysis of methods and techniques for providing education for parents.

FCS 590/591/592 Special Topics. 1/2/3 hrs
An experimental course designed to investigate specific topics of concern in the specialization areas of study.
Prereq: Department permission.

FCS 612 Laws Affecting the Family. 2 hrs
Laws related to the family; their historical development and application to various stages of the family life cycle. Family law from the viewpoints of family members and professional persons who work with families, legal assistance available to families.

FCS 613 Child Guidance in the Family. 2 hrs
Consideration of theoretical approaches to child guidance applicable for home or school. Practical application of child guidance principles at various developmental stages.

FCS 622 Family Development. 3 hrs
Application of developmental and system theory in the analysis of families. Investigation of current research on family transitions, dynamics of multicultural families, and family relationships over the family life cycle.
Prereq: A course in marriage or family development.

FCS 623 Drug Abuse and Family Dynamics. 2 hrs
Consideration of remedial and preventative aspects of drug abuse (alcohol and other drugs) in families. The focus will be upon family dynamics relating to drug use with minor emphasis on the pharmacology of drugs.

FCS 630 Family Financial Planning. 3 hrs
Financial planning principles and strategies for families through the life cycle. Analysis of family financial demands, crises, and sources of assistance.
Prereq: A course in family development.

FCS 632 The Man-Woman Relationship in Modern Society. 2 hrs
Consideration of the changes and dynamics of interaction stimulated by emerging shifts in roles of men and women; implications of these changes for the family and society; impact of multiple roles upon various men-women relationships.

FCS 633 Families in Crisis. 2 hrs
Social, psychological, and interpersonal aspects of crisis situations in families; educational and therapeutic resources available to families in crisis.

FCS 636 Recent Developments in Home Equipment and Technology. 2 hrs
Innovation in household equipment, including home computers. Emphasis on new technology, products, testing methods, consumer protection, government regulations, and trends affecting home equipment.

FCS 642 Family in the Middle and Later Years. 2 hrs
Individual, family, and community planning for the later years of life; developing potentialities; maintaining health; providing reasonable security; building interpersonal relationships. Lecturers, field trips, and demonstrations.
Prereq: HEC 622.

FCS 650 Approaches to Marriage and Family Problems. 2 hrs
Exploration of the interrelationships between marital counseling and the concepts of marital interaction and development. Comparison of the role of the marriage counselor and the family life educator in assisting families to cope with problems that arise throughout the family life cycle. This course does not provide training in counselor skills but does study the application of marital and family therapy to common problems experienced by married couples.
Prereq: A course in personality development or family interaction or department permission.

FCS 660 Consumer Behavior and Decision-Making in the Family. 3 hrs
Study of decision making theory and its application to family and consumer behavior.

FCS 679/680/681 Special Topics. 1/2/3 hrs
An experimental course designed to investigate specific topics of concern in the specialization areas of study.
Prereq: Department permission.

FASHION MERCHANDISING COURSES

FM 504 History of Textiles. 2 hrs
Study of textiles from ancient times to 20th century; fibers, fabric construction, dyes, finishes, design of textiles from various world regions; emphasis on the development of American textiles.

FM 590/591/592 Special Topics. 1/2/3 hrs
An experimental course designed to investigate specific topics of concern in the specialization areas of study.
Prereq: Department permission.

FM 625 The Fashion Field. 2 hrs
The nature of fashion, the psychology of fashion, general definitions and background, fashion movements, the fashion centers, fashion trends, and the major fashion designers.

FM 634 Consumer Problems in Clothing and Textiles. 2 hrs
Investigation of the sociological, psychological, and economic facts involved in the selection and use of textiles and clothing.
Prereq: HEC 235 Textiles for Consumers, FM 302 Fashion Manufacturing Techniques, or department permission.

FM 635 History of Costume. 2 hrs
The costume from ancient times to present day; major characteristics; social, economic, and aesthetic influences; recurring styles; influence on present fashion.
Prereq: A course in history.

FM 644 Recent Developments in Textiles. 2 hrs
The nature of textile fibers; economic, chemical, and physical problems related to their manufacture and use; technological advances to overcome these problems.
Prereq: HEC 235 Textiles for Consumers.

FM 645 Clothing Design and Construction. 2 hrs
Principles of flat pattern design, with application to a variety of styles and fabrics. Special problems in fitting, adaptations of design, and processes of construction.
Prereq: HEC 235 Textiles for Consumers, FM 302 Fashion Manufacturing Techniques, or department permission.

FM 667 Fabric Design for the Home. 2 hrs
Advanced work in experimental design with fabrics, with emphasis on use in the home.
Prereq: Department permission.

FM 675 Textile Analysis. 2 hrs
The chemical and physical analysis of fibers, yarns, fabrics, and finishes; equipment and techniques used; interpretation of data; presentation of findings to the consumer; textile standards; current textile literature.
Prereq: HEC 644 or department permission.

FM 679/680/681 Special Topics. 1/2/3 hrs
An experimental course designed to investigate specific topics of concern in the specialization areas of study.
Prereq: Department permission.

HOSPITALITY MANAGEMENT COURSES

HM 500 Hospitality Program Administration. 2 hrs
Concepts used by hospitality faculty and administrators to become competent academic advisors for students. Includes discussion of articulation agreements, program accreditation requirements, cooperative education, the role of alumni, student organizations and advisory committees, plus development strategies and grantsmanship.

HM 519 Management in Hospitality and Nutrition Service.**2 hrs**

Emphasis on skills and techniques used to manage foodservice personnel. Analysis of interpersonal relationships that impact employee motivation and morale, the emerging role of women in foodservice management and current developments in unionized foodservice operations.

Prereq: Introductory foodservice management course and basic management course.

HM 560 Service Strategies for Hospitality Industry.**2 hrs**

A review of current service strategies used to provide total guest satisfaction in customer contact areas, facilities provided and marketing/promotion of lodging properties and foodservice operations.

Prereq: Two hospitality/foodservice management courses.

HM 590/591/592 Special Topics.**1/2/3 hrs**

An experimental course designed to investigate specific topics of concern in the specialization areas of study.

Prereq: Department permission.

HM 609 Advanced Topics in Food Systems Management.**2 hrs**

Evaluation of recent trends in food systems management, including food service systems, food and equipment innovations and personnel relationships.

Prereq: A course in food service/meal management or department permission.

HM 610 Advanced Topics in Hospitality Management.**2 hrs**

Review of specialized topics of concern to hospitality management professionals today in areas of human resource management, consumer trends, legal issues, marketing strategies, product and equipment advances, maintenance and energy management, security and housekeeping management.

Prereq: Two courses in hospitality/foodservice management or department permission.

HM 626 Productivity Management in Hospitality and Foodservice Facilities.**2 hrs**

Review of productivity as related to human resource management, work methods, supplies and equipment, technology innovations, work environments and worker wellness while maintaining cost and quality standards.

Prereq: Two hospitality/foodservice management courses or department permission.

HM 655 Cost Control Strategies for Hospitality Operations.**2 hrs**

A review of current cost control strategies used to manage food and beverage operations, human resources, facility maintenance/engineering, and marketing of lodging properties and foodservice operations.

Prereq: Two hospitality/foodservice management courses.

HM 679/680/681 Special Topics.**1/2/3 hrs**

An experimental course designed to investigate specific topics of concern in the specialization areas of study.

Prereq: Department permission.

HUMAN, ENVIRONMENTAL, AND CONSUMER RESOURCES COURSES**HEC 507 Consumer and Economic Trends in Housing.****2 hrs**

A survey of consumer and economic trends in housing. Attention given to housing alternatives, tenure practices, conservation issues, and related governmental policies.

Prereq: IDE 269 Housing for Consumers.

HEC 520 Development of Educational Programs.**2 hrs**

Organization, development, and assessment of educational programs in clothing, foods, housing, interiors, nutrition, and textiles in community settings (adult education, agencies, community colleges, governmental agencies and health care facilities) for identified audiences (preschool, adult, agency clients, health care patients, parents, community college students).

Prereq: Department permission.

HEC 587 Cooperative Education.**3 hrs**

Provides practical experience in the student's concentration for four to six months of full-time employment with an individual employer. *May not be used on 30 hour program plan for the master's degree. Offered on a credit/no credit basis.*

Prereq: Department permission.

HEC 590/591/592 Special Topics.**1/2/3 hrs**

An experimental course designed to investigate specific topics of concern in the concentration areas of study within the department.

Prereq: Department permission.

HEC 601 Curriculum Development in Home Economics Education.**2 hrs**

Contributions of home economics at secondary level, techniques employed in curriculum planning and reconstruction, clarification of student needs in terms of current social problems.

Prereq: FCS 370 Methods and Materials in Home Economics Education or equivalent.

HEC 620 Evaluation in Home Economics Education.**2 hrs**

Experience in analyzing progress toward important objectives in home economics education. Development of classroom tests and evaluation materials. Evaluation instruments and statistical techniques useful in home economics.

Prereq: FCS 370 Methods and Materials in Home Economics Education or equivalent.

HEC 678 Research Methods and Design.**3 hrs**

Introduction to research methods and design, including evaluation of research, sampling techniques, basic statistical concepts, analysis of data, and computer use. *Course is required for department majors.*

Prereq: Must be on a planned master's program. Should be taken early in graduate study.

HEC 679/680/681 Special Topics.**1/2/3 hrs**

An experimental course designed to investigate specific topics of concern in the concentration areas of study within the department.

Prereq: Department permission.

HEC 683 Workshop.**2 hrs**

Prereq: Department permission

HEC 686/687/688/689 Practicum.**1/2/3/4 hrs**

Completion of research problems and writing of a thesis under the direction of a departmental adviser and committee. A minimum of six semester hours in thesis credit must be earned.

Prereq: Department permission.

HEC 690/691/692 Special Topics.**1/2/3 hrs**

An experimental course designed to investigate specific topics of concern in the concentration areas of study within the department.

Prereq: Department permission.

HEC 694 Seminar.**2 hrs**

Consideration and investigation of special problems in the specialization areas of study in home economics.

Prereq: Department permission.

HEC 697/698/699 Independent Study. 1/2/3 hrs
An intensive study of a selected professional problem under the direction of a faculty adviser.
Prereq: Department permission.

INTERIOR DESIGN COURSES

IDE 501 Problems in Interior Design. 2 hrs
Analyzing and solving the problems of interiors with regard to social, psychological, and economic concerns of families.
Prereq: Department permission.

IDE 502 Facility Programming and Post-Occupancy Evaluation. 2 hrs
An examination of the techniques and concepts used in facility programming and post occupancy evaluation, their interrelatedness, and their application in facility management.

IDE 503 Physical Environments for Aging. 2 hrs
The course will explore the interrelationship between the physical and psychosocial changes that occur with normal aging and the designed environment. Environmental assessments and recommendations to accommodate normal aging and the related physical impairments will be addressed.

IDE 504 Computer-Aided Design for Interiors. 2 hrs
An examination of CAD applications in interior design research and practice. Emphasis on interactive programming, simulation, computer-aided planning (CAP), and computer aided facility management.
Prereq: IDE 312 Computers for Interior Design or equivalent

IDE 505 Advanced Lighting Design for Interiors. 2 hrs
An examination of current technologies and techniques for lighting interiors. Emphasis on solving complex interior lighting problems.
Prereq: IDE 211 Lighting for Interiors or equivalent

IDE 506 Social and Psychological Aspects of Housing. 2 hrs
Concerns for adequate family housing with an evaluation of physical, social, and psychological aspects, including analysis of local, state, and federal legislation.
Prereq: IDE 269 Housing for Consumers.

IDE 590/591/592 Special Topics. 1/2/3 hrs
An experimental course designed to investigate specific topics of concern in the specialization areas of study.
Prereq: Department permission.

IDE 601 Interior Design Research Methods. 2 hrs
Advanced research methods course to investigate qualitative and quantitative methodologies used in interior design research.
Prereq: HEC 678 or equivalent.

IDE 602 Barrier-Free Design. 2 hrs
The course will explore the creation, evolution, and application of barrier-free construction codes and their relationship to the American National Standards Institute and other federal legislation. Design analysis of residential and non-residential interior environments for individuals with specific disabilities will be emphasized.

IDE 603 History of Furniture and Contemporary Trends. 2 hrs
A study of furniture of various periods of history and the relationships to contemporary styles.

IDE 604 American Interiors. 2 hrs
An investigation of the relationships between the various components of interior enhancement and indigenous arts and crafts to the major developments in American domestic architecture, A.D. 1500 to 1900.

IDE 616 Consumer Problems in Home Furnishings. 2 hrs
Characteristics, cost construction and range in quality of furniture, tableware and accessories, wall coverings, rugs and carpets, flooring, woods, and fabrics; field trips. Purchasing problems are analyzed.
Prereq: IDE 208 Introduction to Basic Design or equivalent. FCS 285 Resource Management: Individual and Family or equivalent.

IDE 679/680/681 Special Topics. 1/2/3 hrs
An experimental course designed to investigate specific topics of concern in the specialization areas of study.
Prereq: Department permission.

NURSING EDUCATION

Regina M. Williams
 Department Head and Coordinator of Advising
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 (313) 487-2310

MASTER OF SCIENCE IN NURSING

The Master's program builds on the knowledge and competencies of baccalaureate nursing education. The structure and process of the master's program provides for the attainment of advanced knowledge and provides a curriculum that focuses on the present yet analyzes trends to keep pace with evolving needs of the community for health care and for nurses with advanced practice knowledge and skills.

The Master's program prepares graduates for clinical practice as advanced generalists in the specialty area of adult health nursing, with the knowledge and skill to function as clinical managers in the health care setting of their choice. The arenas of practice are hospitals, and community agencies such as clinics and home health care agencies.

The program of study consists of 39 to 41 credits depending on whether or not the student elects to write a thesis or a field study as the major research paper. The program is organized with 8 credits of core courses; 9 credits of the clinical major in adult health; 9 credits course work related to the clinical management role; 7-9 credits of course work related to scholarly inquiry and 6 credits of cognate courses.

Nursing core courses consist of one 4 credit advanced assessment course, two 2 credit courses related to theoretical foundations of nursing practice. The clinical major consists of three, 3 credit courses in adult health nursing, all of which include a clinical practicum. However, one of the courses (NUR 665) is a preceptor clinical practicum and requires a total of 9 clinical contact hours per week.

The advanced functional role component consists of three, 3 credit courses related to clinical systems management, one of these courses (NUR 675) also is a clinical practicum with a total of 9 clinical contact hours per week. The course objectives for this practicum are formulated jointly by the student, the academic faculty and the clinical preceptor faculty. The specific clinical time frames are negotiated among the individual student, the academic faculty, and the clinical preceptor faculty responsible for directing the practicum.

The 7-9 credits of scholarly inquiry will consist of a 3-credit course focused on research design and methods and a 2-credit seminar on proposal development in which students develop a research proposal related to a problem of choice. The students have the option of a 2-credit field study or 4 credits of thesis work. Students select appropriate graduate faculty for field study or thesis direction, based on the fit between the faculty expertise and the particular problems elected for study. Students choose six credits of cognate based on the career focus and research direction they intend to pursue in this program.

This program allows the student a choice of cognates that may include management, physiology, psychology, or education. Students choose the cognate that best supports their particular career direction.

Full-time and part-time options based on calendar year scheduling are offered. A minimum of two courses is offered each semester. Evening courses are planned to meet the needs of applicants to the program.

ADMISSION REQUIREMENTS

Admission to the Graduate School of EMU
 Graduation from an NLN accredited baccalaureate program

GPA of 3.0 or above (applicants can petition for conditional admission with a GPA of 2.8-3.0)

Graduate Record Examination (GRE; all three scores will be considered):

quantitative score

verbal score

analytical score

Current license to practice as a professional nurse in Michigan

Minimum one year experience as a professional nurse

3 references that document professional competence in nursing

Interview (personal or phone)

2-3 page narrative statement of personal goals for graduate study

Evidence of computer literacy

ACCREDITATION

The program is seeking National League for Nursing accreditation.

NURSING CORE COURSES

NUR 500 Pathophysiological and Psychosocial Dimensions of Adult Health. 4 hrs

Provides the advanced knowledge base from a holistic perspective. It examines the inter-relatedness of physiologic, pathophysiologic, psychosocial, cultural, and spiritual dimensions of adults as a way to understand the influences these interacting subsystems have on adult experiences with, responses to, and self definition of, health and illness.

Prereq: Course in basic health assessment.

NUR 504 Theoretical Foundations of Nursing Practice. 2 hrs

Provides a basis for graduate study through analysis of nursing theory and selected other theories used by nurses. Examines the development of the science of nursing and the application of theoretical and conceptual models to advanced nursing practice. Students will complete a paper analyzing a selected theory, and its proposed use in nursing practice.

NUR 600 Advanced Theoretical Concepts of Clinical Practice. 2 hrs

Provides the opportunity for the student to select and test a specific nursing theory for its relevance to and use in nursing practice. The course enables in-depth appreciation of nursing process and other critical processes within selected nursing theory frameworks. *1 credit seminar, 1 credit clinical.*

CLINICAL MAJOR COURSES

NUR 650 Advanced Adult Health Nursing I. 3 hrs

This course focuses on application of selected knowledge derived from nursing theory and nursing research to the development of a repertoire of advanced nursing interventions in significant life stressors of the adult. Relevant concepts addressed in the course are health belief systems, health promotion, advocacy, caring, phenomenon of uncertainty, and quality of life. *2 credit seminar, 1 credit clinical.*

NUR 660 Advanced Adult Health Nursing II. 3 hrs

This course focuses on application of selected knowledge derived from nursing theory and nursing research to the development of a repertoire of advanced nursing interventions in significant life stressors of the adult. Relevant concepts addressed in the course are health belief systems, health promotion, advocacy, caring, phenomenon of uncertainty, and quality of life. *2 credit seminar, 1 credit clinical.*

NUR 665 Practicum in Adult Health Nursing. 3 hrs
This clinical practicum focuses on delivery of advanced nursing care to adults. Student will also focus on systems, such as case management, "managing" care for groups of clients with similar health concerns in given health settings. The course emphasizes the synthesis of knowledge related to client care. The student selects her/his own setting based on individual goals and objectives, and works under the mentorship of a selected clinical preceptor. *3 credit clinical, 9 clock hours per week.*

SYSTEMS/ROLE FUNCTION COURSES

NUR 591 Special Topics. 2 hrs
An experimental course for subject matter not provided in other department offerings. The content will change from semester to semester. Students may elect this course several times as long as different topics are studied. *Not more than six hours of special topics may be used on a degree program.*
Prereq: Department permission.

NUR 596 Chronic Illness and Aging. 2 hrs
Introduction to common chronic disease entities which may occur in the elderly person. Problems related to "who are the caregivers," the "healthy" state or quality of life, multiple therapeutic drug usage, and issues of compliance and control will be discussed. Seminar method will be used.
Prereq: Senior or graduate standing.

NUR 605 Health Status Trends and Health Care Delivery Systems. 3 hrs
Focuses on organizations as complex social systems. The health care delivery system will be emphasized. The student will explore national health status trends and their impact at the local level. It will include advanced assessments, analysis and evaluation of the physical, legal, ethical, political and technical dimensions of health care systems as environments for delivery of client services.

NUR 607 Evolving Roles of Nurses in Health Care Delivery Systems. 3 hrs
This course focuses on professional development for advanced nursing roles. It includes advanced leadership and collaborative skills; strategic planning, financial management, total quality management, various models of nursing governance and competing power paradigms. Students utilize this knowledge in the development of strategies for clinical systems management. The course provides a forum to explore ways to facilitate client care within various organizational environments. *2 credit seminar, 1 credit clinical.*

NUR 675 Practicum in Systems Management. 3 hrs
This clinical practicum focuses on the management of clinical systems within health care organizations under the mentorship of a selected preceptor. The student will apply knowledge synthesized from organizational theory, nursing theory, nursing research, nursing systems, human resource management and financial management. Students select her/his own setting based on courses and individual goals and objectives. *3 credit clinical, 9 clock hours per week.*

RESEARCH COURSES

NUR 610 Research Design, Methods, and Analysis. 3 hrs
This course focuses on types of design, methods, sources of knowledge and analyses useful to consideration of selected nursing research problems. It builds on the foundations of research critique and utilization studied at the baccalaureate level. Students develop a beginning proficiency in designing nursing research studies. Students critique and consider the usefulness of both clinical and systems research process in nursing.

NUR 614 Seminar: Proposal Development. 2 hrs
This course focuses on the application of the research process in nursing. Students will develop a research proposal. It includes development of practical skills related to the coding of data, analysis of research data, and use of a computer statistical analysis package.

NUR 688 Field Study. 2 hrs
Development of a major research project completed under the direction of a research adviser.

NUR 693 Thesis. 4 hrs
Development and defense of an important study that contributes to nursing knowledge. Done under the guidance of a major professor and thesis committee.

COGNATE COURSES

Courses of a student's choice in physiology, psychology, sociology, management, education, etc.

SOCIAL WORK

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MASTER'S DEGREE IN SOCIAL WORK

The Master's Degree in Social Work (MSW) prepares graduates for advanced social work practice. Specifically, the program educates people to meet the needs of families in poverty, neglected and abused children, those persons made vulnerable due to severe and persistent mental illness and/or chemical dependency, and older persons experiencing problems related to aging.

The intent of the program is to enhance the quality of services provided to populations through strengthening the skills of those committed to providing these populations with innovative and empowering services.

The MSW program will prepare graduates for working at both the practice and leadership levels, with individuals, families, groups and communities.

A special feature of the program is to provide graduate education in social work to human service providers who cannot leave their current employment to attend graduate school full-time. The program offers course work in the evenings and on week-ends, opportunities for both full-time and part-time study, as well as the possibility of field placements in the students current employment settings. Both BSW's and non-BSW's with a demonstrated commitment to oppressed populations in the specialty areas mentioned above are eligible for admission.

GENERAL ADMISSION INFORMATION

Admission to the graduate program in Social Work will be limited to students showing high promise of success in post-baccalaureate study. Applicants must (a) meet the Graduate School degree admissions requirements, (b) demonstrate commitment through prior work experiences in human services (paid or volunteer). Priority will be given to those with experience in working with oppressed populations such as women, people of color and people in poverty, (c) show interest in developing skills for working with children and families, mentally ill, chemically dependent and/or ageing people (d) have a 2.75 or better undergraduate GPA.

Students who have an undergraduate GPA below 2.75 may be considered for "Non-Degree Status 1". This may later be changed to "Degree Status". Modification of degree status is based on the students ability to successfully complete course work designated by the department. Completion of course work does not guarantee degree admission status.

Students must make an application to the Graduate School in addition to submitting supplemental information to the Department of Social Work.

LENGTH OF PROGRAM

The length of time required to complete a Master's Degree in Social Work depends upon the undergraduate preparation of the student. For those with a non-social work bachelors degree, the program can be completed in 63 credits which includes both foundation and advanced level courses. Students who do not have their bachelors degree in social work can complete their MSW in approximately 2 years providing they attend classes full-time.

Those students with a BSW from a program accredited by the Council on Social Work Education can complete the MSW program in approximately 1 year provided they enroll in 12 credit hours per semester during the academic year. Both non-social work bachelors degree students and BSW students can elect to complete their BSW on a part-time basis provided their degree is completed within 4 years.

Foundation level	30 hours
SWK 502 Social Work Profession and Services	3
SWK 506 Human Behavior and the Social Environment ...	3
SWK 510 Communication Skills for Professional Practice	3
SWK 520 Generalists Social Work Practice	3
SWK 521 Policy Analysis and Change	3
SWK 526 People of Color: The Non-Deficit Perspective	2
SWK 528 Practice with Women	2
SWK 530 Social Work Research Methodology	3
SWK 588, 589 Field Experience I, II	8
Advanced level	33 hours
SWK 610 Empowerment: Social Justice and Social Change	2
SWK 630 Action Research	3
SWK 688, 689 Field Experience III, IV	8
Select one of the following three concentrations:	
<i>Family and Children's Services</i>	
SWK 540 Policies and Issues in Services to Families	3
SWK 542 Family-Centered Practice	3
SWK 592 Special Topics: Family and the Social Environment	3
<i>Mental Health and Chemical Dependency</i>	
SWK 650 Policy Issues in the Health Care Setting	3
SWK 651 Practice in Mental Health and Chemical Dependency Settings	3
SWK 681 Special Topics: Dynamics of Mental Illness and Chemical Dependency	3
<i>Services to the Aging</i>	
SWK 550 Working with Aging People	3
SWK 552 Policy Issues and Older People	3
GRT 512 Psycho-Social Aspects of Aging	3
Electives in area of concentration	9

SOCIAL WORK COURSES

SWK 502 Social Work Profession and Services. 3 hrs
Designed to provide students with an overview of social work, socialization to the profession and an understanding of social work ethics. Content includes history and analysis of the profession, its scope, methods, values, and organization of services. It will focus on practice in a variety of settings with oppressed populations. The ecological systems and non-deficit approaches will be introduced.

SWK 506 Human Behavior and the Social Environment. 3 hrs
Knowledge regarding human behavior and the social environment will be examined and related to social work practice. An ecological systems framework will guide analysis of human behavior through the life cycle, in families, small groups, organizations,

and communities. The focus will be on the ways in which the social worker uses this knowledge. An emphasis will be on knowledge relevant to work with vulnerable groups in society, such as the indigent, cultural and racial minorities, and other oppressed populations.

SWK 510 Communication Skills for Professional Practice. 3 hrs
The focus will be on relationship building and communication skills to engage and assess different size systems (e.g. families, individuals, groups, organizations, communities). Emphasis will be on the helping process; information gathering, assessment, and contracting. Written skills common to social work will also be emphasized.

Prereq: Social work students only.

SWK 520 Generalists Social Work Practice. 3 hrs
This course introduces the student to a generalists ecological systems approach to practice in which the social worker is seen as a change agent, the client is seen as a client system, and the two work together to effect change with a target system that may or may not be synonymous with the client system. The student will learn ways of assessing various size systems, how to develop a plan of action, and how to negotiate a contract for service. A variety of intervention strategies will be introduced. Termination, follow-up and evaluation complete the phases of the sequential helping process covered in this course.

Prereq: SWK 510.

SWK 521 Policy Analysis and Change. 3 hrs
This course focuses on current social policy and its intended and unintended effects on client populations. Students will develop skills in both analysis and strategies for policy development and change. A major focus will be development of human service programs.

Prereq: Social work students only or department permission.

SWK 526 People of Color: The Non-Deficit Perspective. 2 hrs
Examines the social realities in which people of color function and how these interact with developmental processes to establish the sense of identity. Provides students with non-deficit model explaining behavior and integrates this into an ethnic sensitive approach for practice.

Prereq: Graduate social work students only.

SWK 528 Practice with Women. 2 hrs
Focuses on women's unique experience in society and women's issues including violence, sexual exploitation, mental health, poverty, homelessness, and chemical dependency.

Prereq: Graduate social work students only.

SWK 530 Social Work Research Methodology. 3 hrs
This course is designed to provide beginning graduate students, with a limited knowledge of statistics or research methodologies, the basic knowledge of quantitative and qualitative methodology in the human services field. Students will be introduced to the use of the computer in data analysis and management.

SWK 540 Policies and Issues in Services to Families. 3 hrs
The course will examine in depth the field of family and children's services through the process of identifying and analyzing issues crucial to the field analyzing policies and legislation, and critically examining processes integral to the service delivery structure.

Prereq: Advanced-level MSW social work students or department permission.

SWK 541 Specialized Services for Families with Children in Placement. 3 hrs

This course provides practice knowledge and skills in working with families where out of home placement has become necessary, and children are in foster care, group residential or adoptive

settings. Emphasis will be on preventing placement and planning for permanence for children. The social worker's role in serving families where placement has occurred and children in placement will be the primary focus.

SWK 542 Family-Centered Practice. 3 hrs
Students will deepen their understanding of the family as a social psychological system which must meet the needs of both adults and children. In developing and implementing services to families and children, the prevention of placement whenever possible is seen as a primary goal. The course will enhance practice knowledge and skills in delivering preventive, supportive, therapeutic and supplementary services to families in need of help. Particular attention will be given to working with so called vulnerable families in which children have been identified as neglected or abused.

SWK 543 Practice with Children and Youth. 2 hrs
This course enables students to engage, assess and intervene on behalf of maltreated children and youth. Special developmental issues and needs will be examined. Strategies and roles of practice with children in their own families, foster and adoptive homes and residential settings will be addressed.

SWK 544 Divorce and Remarriage in Families. 2 hrs
Social Work with Families of Divorce and remarriage focuses on social work roles and intervention strategies in enhancing positive adaptation to divorce, especially in those families where interactions were dysfunctional and high risk before divorce. The long term impact of divorce on children will be examined, with emphasis on developing interventions to maximize their competence and health development.

Prereq: SWK 542 or department permission.

SWK 546 Law and Family. 3 hrs
Social workers and lawyers frequently find themselves operating together around issues and problems involving individuals and families, as in cases of divorce, child abuse and neglect, child custody, delinquency, and mental health. The student will examine both the legal and social work perspectives, in terms of client rights, needs, and professional goals. Particular attention will be paid to areas of possible conflict. Use of the court and legal authority in family affairs will be explored. Racism and sexism in relationship to the law and to the social work component of legal institutions will be considered.

SWK 548 The Family and Sexuality. 3 hrs
This course is designed to help students understand human sexuality and the role of the family in the development and maintenance of its member's sexual attitudes and modes of expression. The family can help foster healthy sexual development or inadvertently promote sex-related interpersonal problems. The course will allow for examination of these and other social determinants of sexual behavior and attitudes. Students will be helped to become more knowledgeable about human sexuality by looking at their own sexual attitudes, beliefs, and behavior and at how sexual misinformation and stereotyping impacts social work and social services.

SWK 550 Working with Aging People. 3 hrs
This course is designed to provide social work students and students in related disciplines with sensitivity, knowledge, and skills necessary to enhance their understanding of the pleasures, problems and needs of aging people and develop their effectiveness in providing services to and working with aging individuals, families, groups, agencies, and communities. This course will focus on the role of human service provider in relation to the direct provision of services. It will examine the political and psychosocial factors which effect the availability, provision, and acceptance of such services.

SWK 552 Policy Issues and Older People. 3 hrs
This course is designed to introduce students to basic policy concepts and to familiarize them with major aging policies including the Older Americans Act, Social Security, and Medicare. Also, the student will explore various key policy issues such as housing, health care, retirement, and pensions. Program and services that evolve out of aging policy initiatives will be considered.
Prereq: Advanced social work or gerontology students or department permission.

SWK 553 Ethnicity and Gender Issues among the Aged. 2 hrs
This course will examine research pertaining to gender and minority group differences in the aging process, and the implications for social work practice.
Prereq: SWK 502 or admission to the Gerontology Graduate Certificate program.

SWK 558 Intergenerational Dynamics of Individuals in the Later Stages of the Life Cycle. 3 hrs
This course emphasizes modern ego psychology and cognitive theories in the analysis of the individual and family dynamics. It also uses an ecological framework to study development in adulthood, middle years, and the aged adult within an intergenerational family context for review of the later stages of the life cycle.

SWK 560 Case Management. 3 hrs
The course is based on a six stage model of case management which includes: engaging, assessing, planning, accessing resources coordinating and disengaging. It is designed to provide an understanding of the theoretical basis of the model and to discuss a context for the main focus of the course which is on methods that can have practical application to case management in a variety of fields. The course offers a variety of hands-on experiences in a variety of techniques.

SWK 570 Supervising Staff and Volunteers. 3 hrs
Models of supervision and the roles of the social services supervisor will be examined. Attention will be given to the basic knowledge, skills, and values required for effective supervision and mid-level management of social services agencies. The course will review supervisory and managerial activities, such as planning, program implementation, marketing, program evaluation, budgeting, leadership, conflict resolution, and consultation. The role of the supervisee in utilizing supervision will also be examined.

SWK 588, 589 Field Experience I, II. 4 hrs each
The field placement agency in consultation with the Social Work department provides learning experience and supervision that are appropriate to the objectives of the graduate program and to the level of the student's knowledge and capacity. Students spend 16 hours per week in the field placement setting. A weekly seminar relating field learning to classroom content is an integral part of this course.

SWK 590/591/592 Special Topics. 1/2/3 hrs
Special topics integral to contemporary social work will be presented. The content and form of this course will vary, and will typically consider topics not given in usual course offerings. Since the topics change, students may take the course more than once.
Prereq: Department permission.

SWK 592 Special Topics: Family and the Social Environment. 3 hrs
This course covers basic human behavior theory related to families and children in their social environment. It will examine the diverse forms and structures of families, and also issues facing families in contemporary society.
Prereq: Department permission.

SWK 610 Empowerment: Social Justice and Social Change. 2 hrs
Focuses on the societal forces contributing to oppression and the resulting impact on individuals, communities and society. Concepts of social justice and empowerment as they relate to gender, race, class, age, sexual orientation, mental and physical status will be organizing themes. Skills will be developed in the range of social change intervention.

SWK 630 Action Research. 3 hrs
This covers procedures for conducting quantitative and qualitative research to social program evaluation and social practice. Planning will take place for a research project which will be initiated and eventually completed in SWK 695.

SWK 650 Policy Issues in the Health Care Setting. 3 hrs
This course will cover historical developments in the formation of mental health and substance abuse policy in the United States. Current policy directives will be analyzed with a focus on their impact on society in general and specifically on the severely mentally ill, those with dual problems of mental illness and substance abuse, people of racial and ethnic minorities, children, the elderly and women.
Prereq: Advanced social work students only.

SWK 651 Practice In Mental Health and Chemical Dependency Settings. 3 hrs
This course will prepare students for practice within the settings that specialize in mental health care to the severely and persistently mentally ill and to substance abusers. The emphasis will be on acute care and psychosocial rehabilitation for the mentally ill, treatment for persons with dual disorders (mental illness and substance abuse), and both acute and long term care for substance abuse. For both populations, issues relate to helping the family of identified ill person will be addressed.
Prereq: Advanced social work students only.

SWK 654 AIDS: Practice and Policy Issues. 3 hrs
This course is designed to help students become knowledgeable about HIV infection and those affected by it. The focus will be on the psychosocial and biological implications of the illness for practice and policy.. The course will cover medical realities of AIDS, psychosocial treatment, methods of prevention, and policy relevant to persons who have AIDS or who test antibody positive to HIV and their significant others.

SWK 656 Crisis Intervention. 2 hrs
This course will give the student an introduction to the history and theory of crisis intervention, characteristics of being in a crisis state or a condition that puts the person, group or community in a crisis or at risk for crisis, and detailed information on specific crisis situations. The class will view crisis from an ecological systems and non-deficit perspective. Instructions for intervention methods will draw on individual strengths and environmental systems.

SWK 658 Chemical Dependency. 3 hrs
Resource development strategies will be examined for implementing creative human services programs. Students will learn to assess resources within a community, plan and develop networks to address unmet needs, locate funding opportunities, and complete a grant writing and/or fund raising project.

SWK 662 Grant Writing and Resource Development. 3 hrs
Resource development strategies will be examined for implementing creative human services programs. Students will learn to assess resources within a community, plan and develop networks to address unmet needs, locate funding opportunities, and complete a grantwriting and/or fundraising project.

SWK 679/680/681 Special Topics. 1/2/3 hrs
 Special topics integral to contemporary social work will be presented. The content and form of this course will vary, and will typically consider topics not given in usual course offerings. Since the topics change, students may take the course more than once.
Prereq: Department permission.

SWK 681 Special Topics: Dynamics of Mental Illness and Chemical Dependency. 3 hrs
 This course will cover basic human behavior theory related to both mental illness and chemical dependency. This will include biological, psychological, and social factors in etiology. Diagnostic categories of psychopathology and the major categories of drugs typically abused will be examined.
Prereq: Department permission.

SWK 688, 689 Field Experience III, IV. 4 hrs each
 Students are required to take two successive semesters in field placement (SWK 688 and SWK 689) involving 16 hours per week in a placement supervised field setting. A two-hour field seminar designed to integrate field experience and the theoretical base for practice will be held weekly. The focus of the field experience courses will be to sharpen practice knowledge for skills related to client populations who have been victimized or discriminated against in their personal lives or by society. Students will be placed in field situations that work with these populations. Field sites will be set up in three ways: (1) A traditional field placement will have students for 30 hours per week with an agency-based qualified field supervisor for two semesters. A variation on this model will be the part-time placement in which a student will work fewer hours in the agency and extend the length of the placement in order to attain the requisite 480 hours. (2) Students who are employed in agencies serving oppressed clients may use these agencies as field sites providing a suitable learning experience can be worked out with the agencies and supervision given by a qualified social worker. (3) Students may be part of a student unit made up of five or six students placed in an agency serving one of the concentration areas with an EMU faculty member with the assistance of agency social workers, field instructors and clients. The underlying philosophy of the seminars is to establish a process in which agency personnel, faculty, students, and clients can all be both teachers and learners.
Prereq for SWK 688 : SWK 610, SWK 622. Prereq for SWK 689: SWK 688 (B average or better)

SWK 695 Research Project. 2 hrs
 Provides an opportunity for practitioner to gain experience with research competencies which are both quantitative and qualitative. The completion of an action research project culminates the graduate experience.
Prereq: SWK 630 (must be taken concurrently with SWK 695).

SWK 697/698/699 Independent Study. 1/2/3 hrs
 Intensive study in areas not provided in other courses or advanced study in areas of special interest to the student under the direction of a social work faculty person.
Prereq: Department permission.

OTHER COURSES

A maximum of nine hours of approved 400-level coursework may be permitted in the earning of any graduate degree. The following undergraduate courses may be taken for graduate credit.
If you intend to enroll in any of the following undergraduate courses for graduate credit, you must come to the Graduate School for written permission before enrolling in the course; otherwise you will receive undergraduate credit.

- GRT 488/489 Gerontology Practicum (2/3)
- SWK 463 Social Work Practice with Legal Offenders (3)

GRADUATE CERTIFICATE IN GERONTOLOGY

Elizabeth Oates Schuster
 Coordinator/Adviser
 421 King Hall
 487-0393

The Gerontology program, located within the College of Health and Human Services, is administered by the Social Work department through an interdisciplinary coordinating committee composed of faculty from at least twelve departments and programs throughout the University. The program offers an 18 hour multidisciplinary graduate certificate. It is intended for students who have a bachelor's degree from an accredited institution of higher education, and have an interest in specialized study in aging but do not wish to pursue a program as extensive as a master's degree. The program is targeted to those working in the field of aging who would like to gain formal educational experiences in gerontology and to persons considering a career change. The certificate also is intended for students interested in increasing their understanding of the aging process in order to enhance their own aging experience.

The certificate in gerontology is unusual in that it does not require the student to enroll in a graduate degree program. The certificate may be used, however, as a cognate or concentration to other graduate programs including clinical behavioral psychology, public administration, occupational therapy, leadership and counseling, sociology, the masters of liberal studies in technology, and the master's degree in individualized studies.

To accommodate busy lifestyles, most of the courses are offered in the evenings or week-ends. The program must be completed within three years. It is possible, however, to complete all of the requirements within one and a half years.

ADMISSION REQUIREMENTS

1. A Baccalaureate degree from an accredited institution with a minimum 2.5 GPA.
2. Acceptance in the Graduate School.
3. An interview with the gerontology program coordinator. Students must be admitted to the graduate certificate program before enrolling in required course work.

GRADUATE CERTIFICATE REQUIREMENTS

1. The program shall consist of at least 15 graduate level credit hours.
2. Not more than one 400-level course may be used on the graduate certificate program.
3. A minimum grade point average of 3.0 ("B") must be achieved to obtain the certificate.
4. Credits earned for the graduate certificate may apply, subject to applicability, to a graduate degree.
5. All requirements for the certificate must be completed within three years from the time of first enrollment.

Basic courses	10 hours
GRT 512 Applied Psychosocial Aspects of Aging	3
BIO 511 Biological Aspects of Aging or NUR 596 Chronic Illness and Aging	2
SWK 552 Policy Issues and Older People	3
SWK 553 Ethnicity and Gender Issues among the Aged ...	2
Gerontology Practicum	2-3 hours
GRT 688/689 Gerontology Practicum	2/3
Elective Courses	5-6 hours
GRT 417 Work and Retirement	2*
GRT 514 Caregiving and the Elderly	2
GRT 516 The Elderly and the Law	1

GRT 518 Issues in Caring for People with Alzheimer's Disease	2
GRT 590/591/592 Special Topics	1/2/3
GRT 697/698/699 Independent Study	1/2/3
G&C 573 Counseling Older Persons	2
FCS 642 Family in the Middle and Later Years	2
PSY 551 Psychology of Death and Dying	2
SWK 413 Women and Aging	3*

Additional applicable courses may be used in the elective area with prior approval of the coordinator of the program.

Total 18

**The student is allowed to take one approved 400-level course toward the certificate if it is taken for graduate credit.*

APPROVED 400-LEVEL COURSES

- GRT 417 Work and Retirement (2)
- SWK 413 Women and Aging (3)

GERONTOLOGY COURSES

GRT 512 Applied Psychosocial Aspects of Aging. 3 hrs
 An interdisciplinary overview of the gerontological aspects including psychological, social/psychological, sociological, and political and economic issues. Application will be made in such areas as leisure, education, housing, and intergenerational issues.
Prereq: Senior undergraduates, graduate level.

GRT 514 Caregiving and the Elderly. 2 hrs
 This course introduces issues affecting families who care for frail or dependent older relatives. Students learn practical interventions with families and examine policies that impact on them.

GRT 516 The Elderly and the Law. 1 hr
 This course discusses the legal issues and implications surrounding health care, long term care, public entitlement programs, termination of life support, guardianship and alternatives, and intergenerational family issues.

GRT 518 Issues in Caring for People with Alzheimer's Disease. 2 hrs
 This course is for students in health-related disciplines and for professionals who work with older people with dementia and their families. Topics will include a discussion of the causes, symptoms, and progression of Alzheimer's disease; impact on the family; community resources for families; designing specialized dementia programs; environmental interventions; evaluation of the designed environment; involving people with dementia in activities; and coping with difficult behaviors such as wandering and resistance to care. The course is held at Huron Woods, and Alzheimer's Care and Training Unit on Catherine McAuley Campus.

GRT 590/591/592 Special Topics. 1/2/3 hrs
 Content will change from semester to semester. An experimental course for subject matter not yet provided in other program offerings. Students may elect this course more than once as long as different topics are covered.

GRT 679/680/681 Special Topics. 1/2/3 hrs
 Content will change from semester to semester. An experimental course for subject matter not yet provided in other program offerings. Students may elect this course more than once as long as different topics are covered.

GRT 688/689 Gerontology Practicum. 2/3 hrs
 Integration and synthesization of knowledge and skills gained from other gerontology courses and life experiences. Also, the

humanities perspective in regard to gerontology and career opportunities, including visits to potential places of employment. Students who have not completed a field placement in a gerontology service setting will be required to complete a field placement.
Prereq: Graduate standing and final semester of study.

GRT 697/698/699 Independent Study. 1/2/3 hrs
 This course will provide the opportunity for the selection and the completion of an individual study under the direction of University faculty members.

COLLEGE OF TECHNOLOGY

Thomas K. Harden, Dean
150 Sill Hall
487-0354

DEPARTMENTS

Business and Industrial Education
Industrial Technology
Interdisciplinary Technology

BUSINESS AND INDUSTRIAL EDUCATION

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The Business and Industrial Education department offers programs leading to the Master of Business Education and the Master of Arts in industrial education.

MASTER OF BUSINESS EDUCATION (MBE)

The Master of Business Education program recognizes the need for broadly educated business teachers in a rapidly changing global economy and technological world. The program emphasizes the importance of a clear mission and a strong philosophy about the role of basic business education and the preparation of a highly educated business workforce. This program is intended for business teachers in secondary schools and community colleges who will assume leadership in the classroom, in the school, and in the various processes which shape business education today. The MBE degree provides a program for teachers of basic business and economic education, business services and technology education, and marketing education and teachers providing business education through other programs at secondary, adult, and post-secondary levels.

PROGRAM OBJECTIVES

- The goals of the Master of Business Education program are to:
1. strengthen the teacher's commitment to the philosophical foundations of business education as it relates to developing business, economic, and technological education and to developing a highly educated business workforce;
 2. develop professional involvement and leadership in business education through the organizations, agencies, and other processes which operate on a local, regional, national, and international basis;
 3. develop and restructure curricula which reflect sound educational principles and reflect the expressed needs of the economy and education/business/industry community;
 4. provide research foundations which enable the teacher to apply the findings of contemporary research to teaching and learning and to foster the spirit of inquiry and the ability to develop new knowledge for the improvement of instruction;
 5. develop advanced teaching approaches for the business education classroom;
 6. expand the teacher's knowledge of business and economic concepts, relevant technologies, occupational clusters, and workplace trends.

MBE PROGRAM ADMISSION

Candidates for admission must meet the following requirements:

1. have a bachelor's degree from an accredited institution, with a grade point average of at least 2.5 overall or at least 2.75 for the last half of the program.
2. have completed a minimum of 30 semester hours in business.
3. hold or be eligible for a secondary teaching certificate in business or a waiver of certificate. A waiver of certification

can be made for individuals with two or more years of teaching at the post-secondary level.

4. complete all Graduate School requirements. All students applying for degree admission for fall 1993 and beyond may be required to submit a Graduate Record Examination score that is not more than five (5) years old.
5. international students must meet requirements 1-4 above and meet the Graduate School requirements on the TOEFL and TWE or the MELAB.

Candidates must submit an application which includes a statement of goals for the graduate program. Upon review of the application, transcripts, and other qualifications by the graduate faculty, the candidate will be notified by the Graduate School of the admission recommendation. The candidate must then meet with the graduate adviser to design the program.

MIDPOINT CHECK

Midway through the program, the candidate and adviser will meet to discuss general progress and the candidate's plan for professional development and leadership activities. At this time, the candidate will also discuss options for the capstone research experience.

EXIT FROM THE PROGRAM

As part of the capstone course, the candidate must provide a review and evaluation of the program in terms of his/her educational goals, including continuing goals for professional growth and development. The candidate must report the results of the professional development and leadership plan. The candidate must complete a study which demonstrates the ability to select and research a significant question in business education and draw conclusions for the educational environment. The candidate may choose the thesis (BE 691) or the professional seminar (BE 694) as the capstone course.

MBE PROGRAM REQUIREMENTS

A minimum of 30 semester hours of graduate work which include:

Required Courses:

BE 569 Foundations of Business Education	2
BE 611 Curriculum Models in Business Education	3
BE 678 Research in Business Education: Analysis and Application	3
One advanced methods course	2-3

Capstone Experience:

<i>Choose one:</i>	2
BE 694 Business Education Professional Seminar (2)	
BE 691 Thesis (2)	

Electives
 Business Education electives to ensure at least 12 but not more than 24 semester hours in Business Education. These are selected in consultation with the graduate adviser.

Cognate Area
 At least six hours but not more than 18 from offerings outside Business Education selected in consultation with the graduate adviser.

MASTER OF ARTS IN INDUSTRIAL EDUCATION

The program leading to a Master of Arts degree in industrial education provides advanced preparation in professional, technical, and related fields as a foundation for career advancement and professional upgrading. The curriculum consists of regular class

work, field experiences in industry and education, research activities, technical laboratory work, and cognate courses. As a result of this advanced preparation, technology and industrial-vocational educators should develop an understanding of the philosophical, social, psychological, and economic foundations as a basis for developing and implementing industrial education programs.

The student's program of study is planned with a graduate adviser in industrial education. Each graduate program is customized to meet the needs, interests and abilities of the individual students.

PROGRAM OBJECTIVES

The program in industrial education is designed to:

1. provide advanced preparation in professional, technology, and cognate areas.
2. develop an awareness and understanding of the philosophical, social, and economic foundations as bases for technology and industrial-vocational programs.
3. produce professional personnel who have the appropriate knowledge and competencies to promote and develop comprehensive and viable technology and industrial-vocational education programs.
4. enable a student to acquire and manage a broad knowledge of the literature in technology and industrial-vocational education.
5. provide a strong foundation for student and program evaluation.
6. develop a basic competence in applied research.
7. provide a strong foundation for professional participation and leadership.

ADMISSION REQUIREMENTS

An applicant for admission must:

1. meet the Graduate School degree admission requirements. All students applying for degree admission for fall 1993 and beyond may be required to submit a Graduate Record Examination score that is not more than five (5) years old.
2. have completed an undergraduate major in technology education, vocational education, industrial arts education, industrial technology, or other technically related field;
3. hold, be eligible for, or have a waiver for a valid teaching certificate. The teaching certificate requirement may be waived for prospective or currently employed community college personnel;
4. have at least a 2.75 undergraduate grade point average or a 3.0 in the last half of the bachelor's program;
5. receive the recommendation of the Graduate Committee in the Business and Industrial Education department.
6. international students must meet requirements 1-5 above and meet the Graduate School requirements on the TOEFL and TWE or the MELAB.

MIDPOINT CHECK

Midway through the program, the candidate and adviser will meet to discuss general progress and the candidate's plan for professional development and leadership activities. At this time, the candidate will also discuss options for the capstone research experience.

EXIT FROM THE PROGRAM

To complete the degree program, the candidate must provide a review and evaluation of the program in terms of his or her goals, including continuing goals for professional growth and development. The candidate must report the results of the professional development and leadership plan. The candidate must complete a capstone experience which demonstrates the ability to select and research a significant question and draw conclusions for the educational setting.

PROGRAM REQUIREMENTS

An applicant for the master's degree must:

1. have earned a minimum of 30 semester hours of graduate credit applicable to the program. All courses are selected in consultation with the graduate adviser. The program of study must be planned with the adviser and submitted within the first 12 hours of the program.
2. have completed a concentration of no fewer than 24 semester hours in one of the following areas:
Technology Education
Industrial-Vocational Education

Included in the 24 hours are the following:

Eight hours in the required core:

- | | |
|---|---|
| IE 551 Philosophy of Industrial Education | 2 |
| IE 562 Curriculum Development in Industrial Education | 2 |
| IE 661 Evaluation in Business and Industrial Education | 2 |
| IE 677 Research in Industrial Education | 2 |

Capstone Experience:

Choose one: 2-6

IE 694 Seminar (2)

IE 690, 691, 692 Thesis (6)

Six to ten hours of professional electives in industrial education. A maximum of four hours of application courses.

3. have earned a minimum of six semester hours in cognate courses from offerings other than industrial education;
4. have a minimum of a 3.3 (B+) grade point average in the core courses in the major;
5. have a minimum of a 3.0 (B) grade point average for all graduate courses applicable to the master's degree program;
6. receive the recommendation of the student's adviser, the Graduate Committee in the Business and Industrial Education department, and the Graduate School of the University.

COOPERATIVE PROGRAMS WITH EDUCATIONAL LEADERSHIP

Candidates for the advanced degree in either business education or industrial education who have interests in educational administration may select cognate courses from educational leadership which meet some of the requirements for administrator certification. They may, following completion of the degree, work with the Educational Leadership department to complete these requirements.

BUSINESS EDUCATION COURSES

BE 520 Current Issues in Marketing Education. 2 hrs
Major contemporary issues in marketing education will be identified, researched, and discussed. Potential issues emanating from social, economic, and political forces will be addressed. Position and reaction papers will be developed.

BE 524 Microcomputers in Business Education. 2 hrs
Hands-on experience using software with applications for classroom management (such as grade records and test banks) and classroom instruction (such as simulation).
Prereq: Graduate standing; senior standing (2.5 grade point average) with permission of department and Graduate School.

BE 525 International Business Education. 2 hrs
Study of global factors which influence Business Education curricula and an analysis of comparative curricula of several countries. May involve experiences in foreign environment, including attendance at annual ISBE/SIEC conferences.

BE 526 Consumer Economic Education for Teachers. 2 hrs
Current consumer economic concepts and issues with applied teaching methodology. Topics such as personal resource management, economic principles and marketplace decisions, environmental and energy conservation, international trade, health care.
Prereq: Six semester hours of economics or department permission.

BE 530 Teachers Exploring Marketing. 2 hrs
Marketing occupations will be studied with emphasis on major areas of employment. Business field trips, speakers, and publications will be utilized to investigate selected areas. Course may be repeated as selected areas rotate.

BE 568 Coordination of Cooperative Education Programs. 2 hrs
Analyzes the duties and responsibilities of the cooperative education coordinator. Focus on human public relations, related instruction, and program development. Required of all potential coordinators. Recommended for school administrators and vocational teacher education students.

BE 569 Foundations of Business Education. 2 hrs
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.

BE 587 Cooperative Education. 3 hrs
A cooperative education experience integrating classroom theory with a paid work experience in an area related to the student's field of study. Work sites must be approved by the coordinator of Cooperative Education and the Department of Business and Industrial Education. Additional assignments may be required. *Credit/no credit.*
Prereq: Department permission.

BE 590/591/592 Special Topics. 1/2/3 hrs
Provides for intensive study of selected topics drawn from current developments in the total field of business education.
Prereq: Admission to graduate study

BE 607 Colloquium. 2 hrs

BE 611 Curriculum Models in Business Education. 3 hrs
Objectives, levels, and patterns of business education programs will be studied and comparisons made with recent research.

BE 614 Advanced Approaches to Marketing Education Curriculum and Instruction. 2 hrs
Advances in (a) curriculum, (b) methods, (c) DECA, (d) school store, and (e) coop will be evaluated. Plans, procedures, and products will be developed for implementation and utilization. Emphasis will be on areas of primary concern to enrollees.

BE 615 Information Processing. 2 hrs
Centers on office functions and the role of information processing, information processing concepts and careers, information processing skills (basic and advanced), and alternatives for information processing education.
Prereq: Graduate standing or department permission.

BE 626 Administrative Practices In the Contemporary Office. 3 hrs
Contemporary office administration practices are studied and related competencies developed. Specific activities in office management are dealt with, technical work tasks and personnel responsibilities are applied to various office situations.

BE 651 Administration of Vocational-Technical Education. 2 hrs
Focuses on the legislation, programs, planning, and regulations that are unique to vocational education and the administrative functions which are directly related. Recommended for school administrators and vocational teacher education students.

BE 661 Evaluation in Business and Industrial Education. 2 hrs
Principles and methods of student and program evaluation, standards as they relate to evaluation, and instructional effectiveness, program evaluation, and the application of standards in secondary and post-secondary education.

BE 675 Office Education Block. 3 hrs
Study of philosophy, planning, and evaluation procedures for office education block programs. Prepare instructional materials for block programs.

BE 678 Research in Business Education: Analysis and Application. 3 hrs
A review of basic research techniques applied to business education, including office and marketing education areas. Studies completed in business education are analyzed in light of research processes and conclusions. Students become involved in the design and application of research methodology to projects appropriate to business education classes.

BE 679/680/681 Special Topics. 1/2/3 hrs
Provides for intensive study of selected topics drawn from current developments in the total field of business education.
Prereq: Admission to graduate study

BE 682/683 Workshop. 1/2 hrs
Modern methods, procedures, and materials for improving the effectiveness of the classroom teacher in the areas of shorthand, typewriting, bookkeeping, and basic business.

BE 690/691/692 Thesis. 1/2/3 hrs
Intensive research into a problem in business or marketing education under the direct supervision of a graduate faculty member. *Credit/no credit.*
Prereq: Department permission

BE 693/694/695 Business Education Professional Seminar. 1/2/3 hrs
This course provides a culminating experience for students completing the master's degree in business education. It will include discussion and experiential activities that encourage students to apply academic achievements to functional professional situations.
Prereq: Must have completed 24 hours on MBE degree program.

BE 697/698/699 Independent Study. 1/2/3 hrs
An intensive study of a problem or group of problems under the direction of a University faculty member.
Prereq: Department permission.

INDUSTRIAL EDUCATION COURSES

IE 500 Crafts. 2 hrs
Basic craft ideas of wood, metal, graphics, plastics, leather, and ceramics are explored. Additional elective areas also are available. *Not open to departmental majors.*

IE 501 Crafts for Special Education. 2 hrs
The development of craft activities to supplement the curriculum, provide therapeutic manipulative experiences and leisure activities in the special education classroom. Emphasis is given to the identification of industrial employment opportunities. *Not open to departmental majors.*

IE 502 Career Education for the Elementary Child. 2 hrs
A study of the concepts and methods used to develop an awareness of the careers of society with elementary school children. Emphasis is on individual and group activities relevant to integrated curriculum studies. Also open to departmental majors.

IE 504 Career Exploration and Preparation. 2 hrs
Practical applications of experience-based career education will be examined as related to secondary school industrial education. Field visitations and public school resource personnel will illus-

trate to the experienced teacher practical applications of the exploratory and preparatory concepts of career education. Also open to departmental majors.

IE 524 Computer Applications for Vocational-Technical Instruction. 2 hrs

Description and illustration of computer hardware and software for vocational-technical education. Mainframe and microcomputer systems will be reviewed. Opportunity to prepare and develop computer instructional materials for the microcomputer.

Prereq: Industrial education majors or minors or department permission.

IE 525 Robotics Applications in Industrial Education. 2 hrs
An overview of the history, principles of operation, manufacture, and use of robots and robotic systems. Emphasis provided to the analysis of these topics for programs of study in technology and industrial-vocational education.

Prereq: Industrial education majors or minors or department permission.

IE 530 Teachers Exploring Technology. 2 hrs

The applications of technology in business, industrial, and service institutions will be viewed through a series of field visitations. Implications for educational programs that prepare employees for those institutions will be defined.

Prereq: Industrial education major or minor or department permission.

IE 550 Development of Industrial Education. 2 hrs

The historical development of industrial education programs; the influence of industrial, technological, and societal change; institutions, professional associations, movements, and leaders in the field.

IE 551 Philosophy of Industrial Education. 2 hrs

Philosophical viewpoints concerning technology education and industrial-vocational education; historical development and philosophical justification of modern programs.

IE 562 Curriculum Development in Industrial Education. 2 hrs

Development and current status of curriculum in technology and industrial-vocational education, principles and procedures for curriculum development, criteria for content selection, contemporary curriculum patterns, and factors involved in curriculum change.

IE 568 Coordination of Cooperative Education Programs. 2 hrs

Analyzes the duties and responsibilities of the cooperative education coordinator. Focuses on human and public relations, laws and regulations, student placement, related instruction, and program development. Required of all potential coordinators. Recommended for school administrators and vocational teacher education students.

IE 587 Cooperative Education. 3 hrs

A cooperative education experience integrating classroom theory with a paid work experience in an area related to the student's field of study. Work-sites must be approved by the coordinator of Cooperative Education and the Business and Industrial Education department. Additional assignments may be required. *Credit/no credit.*

Prereq: Department permission.

IE 590/591/592 Special Topics. 1/2/3 hrs

IE 594/595/596/597 Workshop. 1/2/3/4 hrs

IE 607 Colloquium. 2 hrs

IE 650 Industrial Education in Colleges and Universities. 2 hrs

The philosophy, history, and development of industrial teacher education programs; current trends in selected institutions.

IE 651 Administration of Vocational-Technical Education. 2 hrs

Focuses on the legislation, programs, planning, and regulations that are unique to vocational education and the administrative

functions that are directly related. Recommended for school administrators and vocational teacher education students.

IE 652 Technical Programs in Community Colleges. 2 hrs

Nature, scope and functions of vocational and technical programs in community colleges; recent developments.

IE 655 Supervision of Industrial Education. 2 hrs

Principles and problems involved in the improvement of instruction in industrial education. Open to majors in industrial education and to majors in administration.

IE 661 Evaluation in Business and Industrial Education. 2 hrs

Principles and methods of student and program evaluation. Standards as they relate to evaluation and instructional effectiveness. Program evaluation and the application of standards in secondary and post-secondary education.

IE 663 Instructional Media in Industrial Education. 2 hrs

Recent developments in instructional media and technology, the relationship of media to the psychology of learning, implications for programs of industrial education.

IE 664 Laboratory Planning. 2 hrs

Analysis of space and equipment requirements of technology and industrial-vocational education laboratories. Consideration of specific functions, safety, efficiency, location, and design as they relate to educational philosophy and objectives.

IE 677 Research in Industrial Education. 2 hrs

Basic research types, methods, and procedures; extent and sources of studies; the development of investigations; consumption of reported studies and the role played in the improvement of technology education; and industrial-vocational programs.

IE 679/680/681 Special Topics. 1/2/3 hrs

IE 682/683/684/685 Workshop. 1/2/3/4 hrs

IE 686 Practicum in Industrial Education. 2 hrs

An examination and evaluation of a variety of instructional methods. Direct experiences are provided in developing and utilizing instructional materials.

IE 688 Internship in Industrial Education. 2 hrs

A supervised experience in education. Opportunities are provided for directing a variety of teaching-learning experiences contracted with a University faculty member. *Credit/no credit.*

IE 690/691/692 Thesis. 1/2/3 hrs

A research-based study conducted under the supervision of a University graduate faculty member and departmental graduate committee, under the guidelines described in the EMU Industrial Education Thesis Manual. *Credit/no credit.*

Prereq: Department permission, 3.5 GPA

IE 693/694/695/696 Seminar. 1/2/3/4 hrs

A discussion of problems and issues in technology education and industrial-vocational education with emphasis on literature review and appraisal. *To be taken during last semester before graduation.* *Prereq: Topics must be approved by the department during the semester prior to the study.*

IE 697/698/699 Independent Study. 1/2/3 hrs

Opportunities are provided for the selection and completion of an individual study under the direction of a University faculty member. An approved written proposal is required. Both "Independent Study" (technical study without the prerequisite of IE 677) and "Research Proposal Format" guideline sheets are available from the department.

Prereq: Department permission. Topics must be approved by the department during the semester prior to the study.

INDUSTRIAL TECHNOLOGY

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 Department Head
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Max Kanagy
 Coordinator of Advising
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Graduate Faculty Advisers:
 Construction management concentration: John Weeks
 Manufacturing concentration: Erik Lokensgard, Thomas Soyster,
 and Walter Tucker
 Quality concentration: Robert Chapman and Daniel Fields
 Graduate certificate in quality technology: Daniel Fields

MASTER OF SCIENCE IN INDUSTRIAL TECHNOLOGY

The Master of Science in Industrial Technology (MSIT) is a program designed to extend the undergraduate degree in industrial technology or develop new career options for other majors. The program is intended to increase the student's understanding of industrial processes, production techniques, design functions, and research and management methods.

The program is designed for managers, production supervisors, and other related industrial personnel. It also is planned for upgrading individuals or providing advancement opportunities for employees already established with a company.

PROGRAM OBJECTIVES

- The industrial technology program is designed to:
1. develop advanced competencies associated with technical, supervisory, and related positions in industry;
 2. broaden the career potential of individuals through experiences in construction, manufacturing, or quality;
 3. provide advanced preparation in construction, manufacturing, or quality in relating the technical and human components of industry; and
 4. develop a broad perspective needed for those employed in or aspiring to mid-management industrial positions.

ADMISSION REQUIREMENTS

- All applicants for admission must:
1. meet degree admission requirements of the Graduate School;
 2. possess a minimum undergraduate grade point average of 2.50; and
 3. possess a baccalaureate degree in industrial technology, engineering, technology, related fields of engineering, or become admitted under a conditional provision.
 4. Conditional students may be required to complete undergraduate coursework in construction, manufacturing, or quality to meet prerequisite requirements.

NOTE:

5. International students must score at least 550 on the TOEFL or 85 on the MELAB before starting the graduate degree program;
6. a student may not earn two graduate degrees in the Industrial Technology department.

REQUIREMENTS FOR COMPLETING THE PROGRAM

An applicant for the master's degree must:

1. complete all conditional requirements before starting the degree program;
2. have earned a minimum of 30 semester hours of graduate credit applicable to the program;
3. have earned a minimum of 16 semester hours with a 3.0 GPA ("B") in Industrial Technology Departmental courses;
4. have earned a 3.0 GPA ("B") to qualify for graduation;
5. have completed all of the requirements for a program concentration in either construction, manufacturing, or quality;
6. have completed a thesis/development option if elected or required as a part of the graduate program; and
7. have received the recommendation of the program adviser and the Graduate School.
8. 400-level courses may not be taken for graduate credit.

Construction Management Concentration Requirements

1. Develop a 30-semester-hour approved program with assistance from a graduate adviser;
2. complete all University Graduate School requirements;
3. earn 30 semester hours in 500- and 600-level courses; or
4. if admitted conditionally, complete all of the required conditional undergraduate courses totaling not more than 24 semester hours.

Construction Management Concentration 30 hours

Industrial Core 4 hours

IT 645 Occupational Safety and Health 2

IT 648 Principles of Construction Technology 2

Construction Core 14-18 hours

IT 501 Project Estimating (2)

IT 502 Project Scheduling (2)

IT 503 Construction Delays and Claims (2)

IT 504 Project Management (2)

IT 591 Special Topics (2)

IT 616 Analysis of Commercial Structures (3)

IT 624 Project Productivity and Cost Control (3)

IT 626 Construction Processes (2)

IT 689 Industrial Internship (2)

IT 691 Development Project (4)

IT 698/699 Independent Study (2/3)

Business Core 9-12 hours

ACC 501 Accounting Principles (3)

FIN 502 Financial Principles (3)

INS 586 Risk and Risk Management (3)

*MGT 501 Management: Concepts, Principles and Practice (3)

MGT 568 Managerial Communication (3)

MGT 576 Corporate Social Policy (3)

MGT 580 Management of Organizational Behavior (3)

LAW 503 Legal Environment of Business (3)

LAW 530 Modern Commercial Law (3)

ORI 502 Business Information Systems (3)

Cognates 9-12 hours

Chosen in consultation with an adviser.

* Limited offerings

Conditional requirements for the construction management concentration:

1. conditional coursework is to be completed before starting the degree program;
2. develop a sequence of prerequisite needs in consultation with an advisers;
3. conditionally admitted students may validate the required competencies by taking undergraduate courses, testing out of courses, or by well-documented experiences;
4. conditionally admitted students may be required to complete some or all of the following undergraduate courses:
 IT 125 Introduction to Construction (2)
 IT 201 Construction Systems (3)

- IT 228 Construction Drawing (3)
- IT 229 Analysis of Commercial Prints (3)
- *IT 301 Planning and Scheduling (3)
- *IT 302 Contract Documents, Regulations, and Specifications (3)
- *IT 401 Construction Estimating and Bidding (3)
- *IT 403 Production Control (2)
- *IT 406 Construction Law (2)
- *IT 450 Fundamentals of Construction Project Management (2)

**Minimum competency level required for graduate degree program.*

Manufacturing Concentration Requirements:

1. Develop a 30-semester-hour approved program with assistance from a graduate adviser;
2. complete all University Graduate School requirements;
3. if admitted conditionally, complete the required conditional undergraduate courses totalling not more than 27 semester hours.

Manufacturing Concentration 30 hours

- Manufacturing Technology* 20-22 hours
- IT 505 Managing Engineering and Technology 2
- IT 509 Manufacturing Project Planning 2
- IT 550 Advanced Statistical Process Control 2
- IT 556 Human Factors in Continuous Improvement 2
- IT 636 Analysis of Manufacturing Processes 2
- IT 641 Materials of Industry 2
- IT 649 Manufacturing Process Planning 2
- IT 650 Computer-Aided Manufacturing 2
- IT 691 Development Project/Thesis 4-6
- Cognates* 6-9 hours
- ACC 501 Accounting Principles (3)
- ECO 522 Collective Bargaining (2)
- FIN 502 Financial Principles (3)
- LAW 503 Legal Environment of Business (3)
- *MGT 501 Management: Concepts, Principles, and Practice (3)
- MGT 576 Corporate Social Policy (3)
- MGT 580 Management of Organizational Behavior (3)
- ORI 501 Introductory Probability and Statistics for Business (3)
- ORI 502 Business Information Systems (3)
- PSY 565 Industrial Psychology (2)
- PSY 567 Engineering Psychology (3)
- Electives* 1-2 hours

** Limited offerings*

Conditional requirements for the manufacturing concentration:

1. conditional coursework is to be completed before starting the degree program;
2. develop a sequence of prerequisite needs in consultation with an adviser;
3. conditionally admitted students may validate the competencies by taking undergraduate courses, testing out of courses or by well documented experiences;
4. conditionally admitted students may be required to complete some or all of the following undergraduate courses:
 - IT 106 Industrial Computer Applications for Manufacturing (3)
 - IT 123 Manufacturing Processes and Methods I (3)
 - IT 124 Manufacturing Processes and Methods II (3)
 - *IT 316 Manufacturing Tooling (3)
 - *IT 420 Industrial Quality Control (3)
 - IT 425 Advanced Manufacturing Methods (3)

**Minimum competency level required for graduate degree program.*

Quality Concentration Option Requirements

1. Develop a 30-semester-hour approved program with assistance from a graduate adviser;
2. complete all University Graduate School requirements;
3. earn 30 semester hours in 500- and 600-level courses;
4. satisfactorily complete a development project or thesis;
5. if admitted conditionally, complete all of the required conditional undergraduate courses totalling not more than 24 semester hours.

Quality Concentration Program 30 hours

Core 22-24 hours

- IT 550 Advanced Statistical Process Control 2
- IT 551 Quality Assurance Experiments 2
- IT 552 Quality Planning 2
- IT 553 Metrology, Inspection, and Testing 2
- IT 554 Reliability, Maintainability, and Product Safety ... 2
- IT 555 Quality System Appraisal 2
- IT 556 Human Factors in Continuous Improvement 2
- IT 647 Industrial Research 2
- IT 651 Advanced Quality Assurance Experiments 2
- IT 691 Development Project/Thesis 4-6

Cognate (6-8 hours required outside the IT department) courses in either Management or Operations Research and Information Systems are recommended.

- *MGT 501 Management: Concepts, Principles, and Practice (3)
- MGT 567 Business Communication: Specialized Organizational Report Writing (3)
- MGT 576 Corporate Social Policy (3)
- ORI 501 Introductory Probability and Statistics for Business (3)
- ORI 502 Business Information Systems (3)
- ORI 565 Applied Linear Statistical Models (3)

Electives 0-2 hours

** Limited offerings.*

Conditional requirements for the quality concentration

1. Conditional course work is to be completed before starting the degree program;
2. conditionally admitted students may validate the required competencies by taking undergraduate courses, testing out of courses, or by well-documented experiences;
3. develop a sequence of prerequisites in consultation with an adviser;
4. conditionally admitted students may be required to complete some or all of the following undergraduate courses:
 - *IT 105 Computer Applications for Industry (3)
 - *IT 122 Engineering Graphics I (3)
 - *Manufacturing laboratory processing courses (6)
 - *IT 420 Industrial Quality Control (3)

** Minimum competency level required for graduate degree concentration.*

GRADUATE AND ADVANCED GRADUATE CERTIFICATE PROGRAMS IN QUALITY TECHNOLOGY

These programs were developed in cooperation with the American Society of Quality Control (ASQC). They are based on the body of knowledge required of the ASQC Certified Quality Engineer (CQE). Graduates are encouraged to seek the CQE through the ASQC upon completion of the EMU Graduate and Advanced Graduate Certificates. This body of knowledge and applied technologies include, but are not limited to: application and analysis of testing and inspection procedures; the ability to apply metrology and statistical methods to diagnose and correct

improper quality control practices which assure product and service conformity to prescribed standards; an understanding of human factors and motivations; facility with quality cost concepts and techniques; the knowledge and ability to develop and administer management information systems and to audit quality systems for deficiency identification and correction.

PROGRAM OBJECTIVES

- The quality certificate programs are designed to:
1. prepare personnel to assist organizations in meeting their need for continuous quality improvement in order to remain competitive;
 2. provide education in quality to organizations geographically located in the state of Michigan and, in particular, the south-eastern region;
 3. facilitate the needs of quality professionals in attaining professional certification;
 4. provide graduate- and advanced graduate-level education in quality to meet the needs of adult learners; and
 5. help Eastern Michigan University meet its obligation of providing academic programs which represent state-of-the-art technology.

GCPQ ADMISSION REQUIREMENTS

All applicants for admission into the graduate certificate program must:

1. meet the graduate admission requirements of the University; and
2. meet the Industrial Technology Department's graduate certificate program in quality (GCPQ) admission requirements:
 - a. possess a minimum undergraduate GPA of 2.5,
 - b. have completed an undergraduate course in industrial quality control or be admitted under conditional provision,
 - c. international students must score at least 550 on the TOEFL or 85 on the MELAB before starting the GCPQ program, and
 - d. admission into the GCPQ is not to be interpreted as admission into any master's degree program.

AGCPQ ADMISSION REQUIREMENTS

All applicants for admission into the advanced graduate certificate program must:

1. have completed a master's degree program
2. have not completed a master's degree program in quality; and
3. meet the Industrial Technology department's advanced graduate certificate program in quality (AGCPQ) admission requirements:
 - a. have completed an undergraduate or graduate course in industrial quality control or be admitted under conditional provision,
 - b. international students must score at least 550 on the TOEFL or 85 on the MELAB before starting the AGCPQ program, and
 - c. admission into the AGCPQ is not to be interpreted as admission into an advanced graduate degree program.

REQUIREMENTS FOR COMPLETING THE PROGRAM

- An applicant for the GCPQ and AGCPQ must:
1. complete any conditional requirements of the program;
 2. not complete any GCPQ or AGCPQ courses before being admitted into the program and without prior permission of the student's adviser, or the courses will not count;
 3. maintain a 3.0 GPA overall in the program;
 4. have completed all courses in the program; and

5. receive the recommendation of the program adviser and the Graduate School for receiving the certificate.

Quality Technology Certificate Requirements

- IT 550 Advanced Statistical Process Control (2)
- IT 551 Quality Assurance Experiments (2)
- IT 552 Quality Planning (2)
- IT 553 Metrology, Inspection, and Testing (2)
- IT 554 Reliability, Maintainability, and Product Safety (2)
- IT 555 Quality System Appraisal (2)
- IT 556 Human Factors in Continuous Improvement (2)
- IT 651 Advanced Quality Assurance Experiments (2)
- IT 691 Development Project/Thesis (4)

INDUSTRIAL TECHNOLOGY COURSES

IT 501 Project Estimating. 2 hrs
An investigation into the estimating and bidding practices used within the construction industry in order to prepare, analyze, and submit an estimate of the costs for a project.
Prereq: IT 401 Construction Estimating and Bidding.

IT 502 Project Scheduling. 2 hrs
An investigation into advanced scheduling techniques and the application of these within the construction industry.
Prereq: IT 301 Planning and Scheduling and IT 403 Production Control.

IT 503 Construction Delays and Claims. 2 hrs
An investigation into the risks, liabilities, and responsibilities involved in today's construction industry. The areas of liability, contract interpretation, changes, changed conditions, delays, damages, documentation, and dispute resolution are addressed.
Prereq: IT 406 Construction Law.

IT 504 Project Management. 2 hrs
An investigation of the typical problems associated with construction projects and applicable management practices for solving managerial problems.
Prereq: Department permission.

IT 505 Managing Engineering and Technology. 2 hrs
An investigation of the functions and problems unique to managing engineering and technical operations. Topics include: engineering ethics and professionalism; managing research, design, and other technical operations; technology impact; and the role of the technical professional.

IT 509 Manufacturing Project Planning. 2 hrs
A study of planning activities undertaken prior to the implementation of a manufacturing project. Topics include: identification and sequencing of events, time and cost estimating, resource utilization, and monitoring/evaluation plans.

IT 550 Advanced Statistical Process Control. 2 hrs
An advanced course in statistical process control. Topics will include special purpose control charts and procedures; analysis of runs, trends, and cycles; process and gage capability; and underlying distribution analysis.
Prereq: IT 420 Industrial Quality Control or a course in introductory statistical process control.

IT 551 Quality Assurance Experiments. 2 hrs
A study of the design and analysis of experiments to improve product quality. Topics include basic concepts applying to experiments, one and two or more factor experiments, and Taguchi methods.
Prereq: A course in quality assurance and an introductory probability and statistics course.

- IT 552 Quality Planning.** 2 hrs
Procedures utilized to organize and implement the quality function including planning, budgeting information and test procedures, customer complaints, and quality function deployment.
Prereq: IT 420 Industrial Quality Control.
- IT 553 Metrology, Inspection, and Testing.** 2 hrs
A course in the technology of measurements related to the procedures for conducting inspection and tests: including control, gage capability, repair, and maintenance of measurement devices.
Prereq: IT 420 Industrial Quality Control.
- IT 554 Reliability, Maintainability, and Product.** 2 hrs
A study of the long term performance of products concerned with failure and the ability to bring the products back into use. Product safety improvement and responsibility of manufacturers.
Prereq: IT 420 Industrial Quality Control.
- IT 555 Quality System Appraisal.** 2 hrs
Interpreting the effectiveness of an organization's quality system through proper information handling. Emphasis on analysis of prevention, appraisal and failure costs, and quality systems audit.
Prereq: IT 420 Industrial Quality Control.
- IT 556 Human Factors in Continuous Improvement.** 2 hrs
Employment of the human resource in the continuous improvement of the manufacturing system. Theory and practice of successful actions and programs implemented to remove attitudinal barriers and encourage participation in the problem-solving organization.
- IT 590/591/582 Special Topics.** 1/2/3 hrs
- IT 616 Analysis of Commercial Structures.** 3 hrs
An investigation into the construction industry practices associated with the use of working drawings to analyze project requirements for bidding, planning, scheduling, and controlling construction projects.
- IT 624 Project Productivity and Cost Control.** 3 hrs
An investigation into the contemporary problems related to construction productivity and methods to be employed to control construction costs.
Prereq: IT 403 Production Control.
- IT 626 Construction Processes.** 2 hrs
An investigation of the more accepted and standard practices associated with the process of construction.
- IT 636 Analysis of Manufacturing Processes.** 2 hrs
An advanced course in the technical aspects of manufacturing cast, formed, and machined products. Emphasis is on the determination of production parameters, such as shapes, forces, and temperatures required to process various materials.
Prereq: IT 123 Manufacturing Processes and Methods I and IT 214 Manufacturing and Processing Methods II.
- IT 641 Materials of Industry.** 2 hrs
Selected industrial materials: sources, properties, characteristics, analysis, and testing.
Prereq: IT 123 Manufacturing Processes and Methods I.
- IT 645 Occupational Safety and Health.** 2 hrs
An exploration of occupational safety and health from a human behavior perspective. Attention will be given to the development of safety management systems. Legislative safety and health policies will be analyzed to determine their effectiveness.
- IT 647 Industrial Research.** 2 hrs
A study of the roles, purposes, and procedures for conducting research in technical fields.
- IT 648 Principles of Construction Technology.** 2 hrs
A study of the production system of the construction industries, utility systems, housing construction, and city and regional planning practices.
- IT 649 Manufacturing Process Planning.** 2 hrs
The design of the manufacturing as required by product design specifications. Selection of processes, tooling, workholding, gauging, routing, and material handling, as well as the development of human interface.
Prereq: IT 316 Manufacturing Tooling and IT 425 Advanced Manufacturing Methods.
- IT 650 Computer-Aided Manufacturing.** 2 hrs
The use of the computer in planning manufacturing operations, solving manufacturing and related problems, and in controlling manufacturing processes for batch and continuous production.
Prereq: IT 420 Industrial Quality Control and IT 426 Manufacturing Information Systems.
- IT 651 Advanced Quality Assurance Experiments.** 2 hrs
Advanced work in quality experiments with emphasis on in-plant applications relative to on-line and off-line investigation for the purpose of process and product improvement.
Prereq: IT 420 Industrial Quality Control, ORI 501, and ORI 501.
- IT 679/680/681 Special Topics.** 1/2/3 hrs
- IT 688 Cooperative Education.** 3 hrs
The industrial technology student will be placed on a job that relates to his or her primary area of study for one semester. During this period, regular employee benefits may be received. *Limited to students without a baccalaureate in industrial technology who do not possess relevant industrial experience. Credit/no credit.*
Prereq: Department permission.
- IT 689 Industrial Internship.** 2 hrs
A field study of industrial theory and practice through directed internship experiences with cooperating industries. Designed for students desiring experiences beyond those obtained in their previous or present employment. *Credit/no credit.*
- IT 690/691/692 Development Project/Thesis.** 1/2/3 hrs
Development Project: A theory application project conducted under the supervision of an advisor and departmental graduate committee.
Prereq: Department approval plus 12 prescribed credit hours in one's graduate concentration.

Thesis: A research-oriented study conducted under the supervision of an advisor and departmental graduate committee and under the guidelines described in the EMU Thesis Manual.
Prereq: A 3.50 graduate GPA and department permission.
- IT 697/698/699 Independent Study.** 1/2/3 hrs
Opportunities are provided for the selection and completion of an individual study under the direction of a University faculty member. An approved written proposal is required. Both "Independent Study" and "Research Proposal Format" guideline sheets are available from the department.
Prereq: Department permission.
- NOTE:** Effective winter 1992, unless the course already appears on a student's program of study, the Industrial Technology department will no longer allow the following 400-level courses to be taken for graduate credit: IT 409, 410, 416, 417, 420, 421, 425, 427, 428, 431, 432, 433, 434, 485.

INTERDISCIPLINARY TECHNOLOGY

Paul Kuwik
Department Head
Sill Hall
487-1161

Wayne Hanewicz
Coordinator of Advising
MLS—Technology
Sill Hall
487-1161

Taki Anagnostou
Coordinator of Advising
MS—Polymer Technology
Sill Hall
487-1235

The Interdisciplinary Technology department offers two graduate programs: Master of Liberal Studies in technology and Master of Science in polymer technology with a concentration in coatings.

MASTER OF LIBERAL STUDIES IN TECHNOLOGY

The MLS in technology addresses the social and economic impacts of technology. The main objective of this interdisciplinary degree program is to help prepare students for managerial, administrative or consulting positions with technology-based organizations. The master of liberal studies in technology is flexible in format. Students may tailor their program of study to meet specific educational and employment objectives. In particular, MLS students will acquire:

1. comprehension of the central concepts and issues related to the study of technology and society;
2. knowledge of significant technical developments in history and the effects of these developments on individuals, societies, and the environment;
3. an understanding of technological systems and the present and future impact of such systems on the quality of life;
4. the ability to integrate information from a variety of sources and disciplines in solving social-technical problems; and
5. a knowledge of technology assessment techniques and the ability to identify, describe, discuss, and utilize the major tools and methodologies for assessing technology.

SPECIAL FEATURES

Flexibility—Students can custom design a program to suit their educational and employment objectives.

Evening classes—Mature students/career changers can pursue their degree on either a full-time or part-time basis.

Internships—Placement within business or industry is an option for the final project.

Contact—with practitioners in business or industry. Lectures, seminars, and conferences with outside experts are an established part of this program.

ADMISSION REQUIREMENTS

Students with a bachelor's degree from an accredited institution who have an overall GPA of 2.75 (or 3.0 in their final 60 hours of undergraduate study) are eligible to apply for admission. Individuals with degrees in business, technology, humanities, arts, and sciences are encouraged to apply. Two letters of recommendation are required as is a program planning interview with an adviser.

All students applying for degree admission for fall 1993 and beyond may be required to submit a Graduate Record Examination Score that is not more than five years old.

Conditional Admission

Conditional Admission Condition 1: Curriculum Deficiencies is a conditional admission for students who meet the degree admission requirements of the Graduate School, but have curricular deficiencies in their undergraduate program and/or other departmental standards and therefore do not meet departmental admission requirements.

Non-Degree Admission Status

For those students who show promise but do not meet the undergraduate grade point average (2.5) requirement of the Graduate School or the departmental GPA requirements, whichever is higher, non-degree admission (status I: academic deficiencies) may be granted. (See Non-Degree Admission Status, page 19.) Students may not repeat courses to attain the required grade point average.

Students who successfully meet the probationary requirements of conditional or non-degree admission will be granted regular admission.

PROGRAM REQUIREMENTS

A total of 30-32 semester hours is required for the MLS:
14 semester hours of the core curriculum;
12 semester hours of complementary concentration; and
4 to 6 semester hours of final project work.

The core curriculum of the M.L.S. degree consists of five courses in technology studies that are required for every student.

Core Curriculum

IDT 500 Introduction to Interdisciplinary Technology (3)
IDT 501 History of Technology (3)
IDT 601 Multidisciplinary Seminar in Technology (2)
IDT 602 Contemporary Issues in Technology (2)
IDT 680 Technology Assessment (3)

Complementary Concentrations

Students can select two or more complementary concentrations in other fields. A minimum of four hours is required in each of the complementary areas of study (12 hours total required).

Possible complementary concentrations:

Communication
Computer science
Economics
Educational leadership
Geography
Industrial education
Industrial technology
Labor studies
Management
Marketing
Physics
Public administration
Psychology
Sociology
Technical writing
Training management

Other areas are available. For example, the School of Police Staff and Command allows graduates to apply their earned credits to their complementary concentrations. Students should consult with the M.L.S. advisor for additional information and specific course approval.

Capstone Experience

Four to six hours of final project work are required. Students may elect Option I or Option II. Those contemplating doctoral study should elect Option I.

- Option I - Thesis
IDT 690, 691, 692 Thesis (6)
- Option II - Independent Study
IDT 697/698/699 Independent Study (4)

Additional information about the master of liberal studies in technology can be obtained from the program coordinator. Applications for admission should be submitted to EMU's Graduate School Office.

MASTER OF SCIENCE IN POLYMER TECHNOLOGY

The main objective of this program is to graduate chemists with a strong background in coatings who would either be employed by the coatings industry or who would continue their education at the Ph.D. level. As such, graduates from this program receive the best possible training which implies that they must have an ACS approved chemistry degree, or equivalent, for admission into the program. The program is interdisciplinary in nature and utilizes courses from various departments. A faculty committee, composed of faculty from chemistry and interdisciplinary technology, will function as the graduate committee for the program.

ADMISSION REQUIREMENTS

- All applicants for admission must:
1. meet degree admission requirements of the Graduate School;
 2. possess a baccalaureate degree in chemistry (minimum 24 hours in chemistry);
 3. have had one year of physical chemistry;
 4. have had one year of organic chemistry;
 5. have had an instrumentation class.
- Exceptions can be made providing the student elects and passes the approved undergraduate course(s) at Eastern Michigan University.

PROGRAM DESCRIPTION AND REQUIREMENTS FOR THE DEGREE

A total of 30 semester hours is required for the MS in polymer technology: 10 semester hours of the core curriculum; 20 semester hours coatings specialization.

- Core Curriculum 10 hours**
- CHM 562 Statistical Mechanics and Chemical Kinetics (2)
 - CHM 564 Physical-Chemical Characterization of Polymers (2)
 - CHM 610 Information Retrieval in Chemistry (1)
 - CHM 665 Physical Chemistry of Polymers (2)
 - CHM 675 Advanced Organic Polymer Chemistry (3)
 - CHM 693 Seminar (1)

Choose one:

- Option I Coatings Concentration* 12
- IDT 400 Polymers and Coatings Technology I 3
- IDT 402 Polymers and Coatings Technology II 3
- IDT 403 Polymers and Coatings Technology II
Laboratory 3
- CHM 572 Spectrometric Organic Structure
Determination 3
- Option II Management Concentration* 12
- MGT 501 Management: Concepts, Principles, and
Practice 3
- MGT 567 Business Communication: Specialized
Organization Report Writing 3
- MKT 510 Marketing 3

Students who have already taken the 400 coating series may take Option II which may be graduate level courses in any other

discipline. The example illustrated above is the business management concentration.

- Capstone Experience* 8-12
- IDT 590/591/592 Special Topics 4-6
- IDT 697/698/699 Independent Study 4-6

Total 30-34

A non-thesis option may be elected by students from industry on the recommendation of the graduate advisory committee. These students may replace the research credits with approved graduate courses in any area approved by the graduate advisory committee.

INTERDISCIPLINARY TECHNOLOGY COURSES

IDT 500 Introduction to Interdisciplinary Technology. 3 hrs
An interdisciplinary overview of basic concepts and approaches to the study of technology and culture. Included are introductions to the philosophy of technology, history of technology, future studies and contemporary issues in technology.
Prereq: Graduate standing at Eastern Michigan University.

IDT 501 History of Technology. 4 hrs
An overview and in-depth examination of major technical developments that have affected the course of human history. Emphasis is placed on the inter-relationships of the technical to the socio-cultural milieu.
Prereq: Graduate standing at Eastern Michigan University.

IDT 502 Microcomputer Applications in Administration and Research. 3 hrs
This course is designed to teach students how to integrate the personal computer into the management of organizations. This includes research, data analysis, planning, project management, and presentations.
Prereq: Department permission. One previous course in microcomputers or qualification by examination.

IDT 505 Managing Your Career in Technology. 3 hrs
Designed for the mid-level professional or manager in a technology-based industry. Self-assessment of interests, values, skills, and motivation; job/career decision-making and mid-career change methodology.

IDT 510 Principles of Managing Technological Enterprises. 3 hrs
Characteristics of high-tech markets; motivating high-tech researchers and developers; manufacturing products with short life cycles, finance and planning in a high-tech environment; attracting and keeping the best human resources.
Prereq: IDT 500 or department permission.

IDT 514 Graphic Presentation. 2 hrs
The techniques, processes, and procedure of developing graphic presentation materials. Topics include designing, recording, reproducing, and storing and retrieving systems. Laboratory activities are required.
Prereq: IT 122 Engineering Graphics I.

IDT 517 Graphic Arts. 2 hrs
General graphic arts including layout and design, composition, photo mechanics, offset, and screen process reproduction.

IDT 520 Health Care Technology—The Societal Impact. 3 hrs
Computers in medicine; present and potential applications; medical biotechnology; winning the fight against disease; bionics: curing the blind, the lame, the deaf, and others; impact on health professions and on future society.

IDT 525 Managing A Police Agency. 2 hrs
This course addresses universal management functions. They are taught in the context of, and applied to, internal police administration, traffic, and criminal operations. The course also seeks to improve the knowledge about the nature and importance of the total administrative function along with the principles and techniques for achieving effective management of people and operations.

IDT 530 Administration of Police Agencies. 2 hrs
This course examines the role of the police which begins with the evolution of the police concept. How the role is seen today and the communities involvement in establishing that role are examined.

IDT 535 Planning Skills for Police Agencies. 2 hrs
This course strives to develop the conceptual skills necessary for effective staff work and command-level management. The need for planning in an organization is presented and the nature and need for change is presented, with the individuals' role either as a change agent, or a responder to change.

IDT 540 Police Personnel Administration. 2 hrs
This course is concerned with the issues of personnel management that are problematic. Job analysis, career development, and labor discipline issues are covered in the context of personnel management.

IDT 545 Technical Skills for Effective Police Management. 2 hrs
An examination of the budgeting process including line item budgets, zero-base budgeting, performance-based budgeting, etc. Also included is an examination of human resource allocation and its impact on budgeting. The use of computers is introduced at this level for ease in developing and maintaining budgets and human resources.

IDT 550 Issues and Skills for Senior Command and Staff Officers. 2 hrs
This course deals with problems facing the senior commander. An analysis of positions within an organization and how best to accomplish organizational objectives. Methods for assuming command, use of time, and how to select and manage subordinate commanders and staff.

IDT 555 Technology and Organization. 3 hrs
Development, analysis, and theory of technological organizations as well as practical problems confronting technological managers at a time of transition as exemplified by leading U.S. and Japanese corporations.
Prereq: Graduate standing in interdisciplinary technology or department permission.

IDT 556 Introduction and Implementation of Technological Change. 3 hrs
The course will focus on principles and theories of technological innovation, overcoming resistance to change, participative management in theory and in practice. Case studies will be used and discussed intensively.
Prereq: Graduate standing in interdisciplinary technology or department permission.

IDT 587 Cooperative Education. 3 hrs
Co-op is an educational strategy that integrates classroom theory with a semester of paid work experience in an area related to the student's field of study. Work sites must be approved by the coordinator of Cooperative Education and the Interdisciplinary Technology department. Additional assignments may be required. *Credit no credit.*
Prereq: Department permission.

IDT 590/591/592 Special Topics. 1/2/3 hrs
Content will change from semester to semester. An experimental course for subject matter not yet provided in other program offerings. Students may elect this course more than once as long as different topics are covered.

IDT 601 Multidisciplinary Seminar in Technology. 2 hrs
A multidisciplinary seminar which explores different philosophic and discipline-based perspectives of technology around a special topic. Usually a lecture series with outside speakers; held at a conference center. *May be repeated for credit if course content is different.*

IDT 602 Contemporary Issues in Technology. 2 hrs
An in-depth examination of a particular issue (or set of related issues) usually of topical interest related to technology and society. This course generally will take place in business and industry settings. *May be repeated for credit if course content is different.*
Prereq: IDT 500 or department permission.

IDT 617 Visual Communications. 2 hrs
Application of visual communication theories in the production of media including photography, photo mechanics, offset, and screen processes.

IDT 680 Technology Assessment. 3 hrs
A survey of the field of technology assessment that includes theoretical bases, unique modes of inquiry, major assumptions, institutional activities, major problems, and future trends.
Prereq: Completion of IDT 500 and IDT 501.

IDT 690/691/692 Thesis. 1/2/3 hrs
Prereq: Department permission.

IDT 697/698/699 Independent Study. 1/2/3 hrs
Prereq: Department permission.

OTHER COURSES/PROGRAMS

The Department of Interdisciplinary Technology currently offers programs and courses in polymers and coatings technology, rubber technology, energy management, communications technology, coating finishes and wire technology. Among the courses offered are:

- IDT 400 Polymers and Coatings Technology I (3)
- IDT 401 Polymers and Coatings Technology I Laboratory (3)
- IDT 402 Polymers and Coatings Technology II (3)
- IDT 403 Polymers and Coatings Technology II Laboratory (3)
- IDT 404 Photo Communication Workshop (3)
- IDT 405 Coating Process I (3)
- IDT 406 Coatings Processes I Laboratory (3)
- IDT 407 Coating Processes II (3)
- IDT 409 Emerging Technologies in Storage and Retrieval (3)
- IDT 410 Mechanical and Physical Properties of Polymers (3)
- IDT 411 Mechanical and Physical Properties of Polymers Laboratory (1)
- IDT 412 Energy Measurement (3)
- IDT 413 Computers in Aviation (3)
- IDT 414 Rubber Technology II (2)
- IDT 415 Computer Programming for Energy Management (3)
- IDT 420 Women and Technology (3)
- IDT 422 Senior Seminar in Aviation Management (3)
- IDT 425 Communication Technology and Social Change (3)
- IDT 430 Senior Seminar in Energy Management Technology (3)
- IDT 431 Aviation Facilities/Construction (3)
- IDT 460 Advanced Coatings Topics (3)
- IDT 495 Technology, Values, and the Future (3)

The above upper-division undergraduate courses may be taken for graduate credit. *A maximum of nine hours of approved 400-level coursework may be permitted on the department's degree program. See the undergraduate catalog for course descriptions.*

If you intend to enroll in any of the following undergraduate courses for graduate credit, you must come to the Graduate School for written permission before enrolling in the course; otherwise, you will receive undergraduate credit.

SPECIAL STUDENT SERVICES

ADVISING

In an effort to provide guidance for all students who are granted admission to a graduate degree program, a system of advising has been established. Upon notification of admission to a degree program by the Graduate School, the student is given the name, office address and telephone number of the designated adviser. The advising program assists in the exploration of degree requirements, evaluation of applications for admission to a degree program, preparation of a plan of study, approval of program changes, and recommendation for graduation.

Each prospective degree student is therefore encouraged to make use of this service since a program of study is valid only when properly authorized by a designated adviser and when it conforms with the minimum requirements of the Graduate School. Students who desire advising prior to making a decision on a degree program should contact the assistant dean of the Graduate School. Students who are interested in completing a Provisional or Continuing Certificate should contact the Office of the Registrar or the Office of Professional Certification for specific requirements. *Because credits earned to satisfy certification do not apply automatically to a degree program, students seeking certification are also urged to contact a degree adviser if the completion of a master's program is contemplated for a later date.*

COORDINATORS OF ADVISING BY PROGRAM AREA

COLLEGE OF ARTS AND SCIENCES

Applied Economics
Raouf S. Hanna
703-D Pray-Harrold (487-0003)

Art Education, MA
Art Studio, MA; MFA
Christopher Bocklage
116 Ford Hall (487-1268)

Biology
Merlyn Minick
316 Mark Jefferson (487-0441)

Chemistry
Krishnaswany Rengan
B-106 Mark Jefferson (487-0086)

Communication and Theatre Arts
Kate Strand-Evans
121 Quirk (487-3032)

Computer Science
Ranjan Chaudhuri
512-A Pray-Harrold (487-3207, 487-1063)

Computer Science Teacher Education
Mildred D. Lintner
511-B Pray-Harrold (487-1104, 487-1063)

Criminology and Criminal Justice
Christina Johns
712-A Pray-Harrold (487-0012)

Development Trade and Planning, MA, MFA
Raouf S. Hanna
703-D Pray-Harrold (487-0003)

Drama/Theatre for the Young, MA; MFA
Karen Smith
103 Quirk (487-0033)

Economics
Raouf S. Hanna
703-D Pray-Harrold (487-0003)

English
James A. Reynolds
613-J Pray-Harrold (487-1363)

Foreign Languages
219 Alexander (487-0130)
French: J. Sanford Dugan
German: Sharon A. Robertson
Spanish: William J. Cline

General Science
Jon K. Wooley
303 Strong Hall (487-4144)

Geography
Robert Ward
213 Strong Hall (487-3140)
C. Nicholas Raphael
118 Strong Hall (487-1480)

Historic Preservation Planning
Marshall McLennan
225 Strong Hall (487-0232)

History
JoEllen Vinyard
701-Q Pray-Harrold (487-0053)

Language and International Trade
William Cline
219 Alexander Building (487-0130)

Liberal Studies
Social Science and American Culture
JoEllen Vinyard
701-Q Pray-Harrold (487-0053)

Women's Studies
Ellene Tratras Contis
720 Pray-Harrold (487-1177)

Mathematics
Kenneth Shiskowski
614-R Pray-Harrold (487-1294, 487-1444)

Mathematics, Computer Science
Kenneth Shiskowski (Mathematics)
614-R Pray-Harrold (487-1294, 487-1444)
Ranjan Chaudhuri (Computer Science)
511 Pray-Harrold (487-3207, 487-1063)

Music
Mary D. Teal
N-101 Alexander (487-1044)

Physics
Richard Roth or Nathi Sharma
303 Strong Hall (487-4144)

Physics Education
Daniel Trochet
303 Strong Hall (487-4144)

Psychology, General

John Knapp
510 Mark Jefferson (487-0104)

Psychology, Clinical

Kay Hodges
537 Mark Jefferson (487-1155)

Psychology, Clinical Behavior

Peter Holmes
Marilyn Bonem
513 Mark Jefferson (487-0123)

Public Administration

Raymond A. Rosenfeld
601 J-K Pray-Harrold (487-2522)

School Psychology

Gary Navarre
227 Rackham (487-0026)

Social Science

JoEllen Vinyard
701-Q Pray-Harrold (487-0053)

Sociology

Patricia Ryan
712-S Pray-Harrold (487-0372)

Spanish (Bilingual-Bicultural Education)

Phyllis Noda
219 Alexander Building (487-0130)

TESOL (Teaching English to Speakers of Other Languages)

JoAnn Aebersold
219 Alexander Building (487-0130)

Women's Studies

Ellene Tratras Contis
720 Pray-Harrold (487-1177)

COLLEGE OF BUSINESS

Accounting

Thomas Cianciolo
406 Owen (487-1306)

Business Administration

William Whitmire
401 Owen (487-4444)

Computer-Based Information Systems

V. M. Rao Tummala
412 Owen (487-2454)

Finance

William Whitmire
401 Owen (487-4444)

Human Resource Management Organizational Development

Raymond E. Hill
466 Owen (487-3240)

COLLEGE OF EDUCATION

Teacher Education

Thomas Gwaltney
Graduate Coordinator
234-U Boone Hall (487-3260)

Social Foundations

Maureen McCormack
234-F Boone Hall (487-3260)

Educational Psychology

Kishor Wahi
201 Boone Hall (487-3260)

Education Media and Technology

Louise Jerningan
234-O Boone Hall (487-3185)

Early Childhood Education

Karen Paciorek
210-D Boone Hall (487-3260)

Elementary Education, Middle School Education, Secondary School Teaching, K-12 Curriculum, CASCI

Marvin Pasch
714-C Pray-Harrold (487-3187)

Educational Leadership

William M. Hetrick
13 Boone Hall (487-0255)

Guidance and Counseling

John W. Waidley
13 Boone Hall (487-0255)

Physical Education

Terry A. Rupert
217 Warner (487-0092)

Special Education, General

Joan Quinlan
230 Rackham (487-3302)

Special Education-Speech and Language Pathology

Carole W. Gorenflo
123 Rackham (487-4413)

COLLEGE OF HEALTH AND HUMAN SERVICES

Human, Environmental, and Consumer Resources

Elizabeth A. Rhodes
108 Roosevelt (487-2310)

Occupational Therapy

Ruth Ann Hansen
324 King Hall (487-0461)

Social Work

Linda Kurtz
411 King Hall (487-0343 or 487-1361)

Social Work/Gerontology

Elizabeth Oates Schuster
416 King Hall (487-0393)

COLLEGE OF TECHNOLOGY

Business Education

Ann Remp
17 Sill Hall (487-4330)

Industrial Education

James L. Barnes
20 Sill Hall (487-4330)

Industrial Technology

Max Kanagy
118 King Hall (487-2040)

Liberal Studies Technology

Wayne Hanewicz
122 Sill Hall (487-1161)

Polymer Technology
Taki Anagnostou
122 Sill Hall (487-1161)

CAREER SERVICES CENTER

J. Michael Erwin, PhD
Director
Fourth Floor, Goodison Hall
487-0400

Adjunct Office: 210 Owen
487-4099

The center offers active assistance to graduates and alumni in seeking employment after graduation and in professional advancement throughout their career. Notices of career opportunities are provided in business, industry, government, health and human services, and education from pre-school through university level.

Such assistance includes (1) credential reference services, (2) resume and letter of application assistance, (3) interview preparation and technique, (4) the Education Bulletin, listing current vacancies, employers' addresses and method of contact, (5) on-campus interview appointments with employer representatives, (6) employer career literature, directories and job description materials and (7) a computerized candidate referral service.

It is recommended that each graduate register at the Career Services Center and develop a credential file for future reference use.

CENTER FOR RESEARCH SUPPORT

Stuart A. Karabenick
Director
215 Library
487-2254

The CRS provides a full range of support services for faculty and graduate students engaged in research and scholarly activity. Individual consultation is available at all project phases. Services include:

- Research Design
- Proposal Development
- Sampling
- Questionnaire Design
- Data Management
- Statistical Analysis
- Presentation Graphics
- Manuscript Editing

The CRS also presents workshops and demonstrations on topics relevant to the research process, and houses Inter-University Consortium for Political and Social Research (ICPSR) code books and the Sage Series: Quantitative Applications in the Social Sciences.

UNIVERSITY CHILDREN'S INSTITUTE

Lindy Buch
Director

Lorraine Paffenroth
Coordinator of Services

Terry McVicar
Coordinator of Programs

Snow Health Center (313) 487-1126
Rackham Building (313) 487-2348

The University Children's Institute offers a play-based, developmental child care program for children eighteen months through five years of age, as well as a kindergarten enrichment

program. The program operates primarily as a service to students, faculty and staff, but also is open to community families. Hours are 7:30 a.m. to 5:30 p.m., Monday through Friday, year-round. Hours are reduced during University breaks and holidays. Evening care also is available Monday through Thursday from 4:45 p.m. to 9:45 p.m.

The toddler programs are housed in Snow Health Center, while the preschool and evening programs are housed on the lower level of the Rackham Building.

The kindergarten enrichment program will supplement regular public school kindergarten schedules. Children will attend the Children's Institute mornings or afternoons to complement their kindergarten programs. EMU will provide transportation to and from Ypsilanti's Perry Child Development Center for kindergartners who participate. Please call the University Children's Institute office at 487-1126 for complete program, registration, and fee information.

OFFICE OF FOREIGN STUDENT AFFAIRS

Paul Dean Webb
Coordinator
209 Goodison Hall

487-3116

The Office of Foreign Student Affairs operates to assist the nearly 1,100 foreign students at Eastern Michigan University to achieve their educational and career goals. The OFSA provides 28 specialized services for these students from 92 different countries. Included are pre-arrival contact, initial orientation, on-going advising on any matter that relates to their stay, the preparation of documents needed to verify enrollment and cost of studying at Eastern Michigan, as well as assistance in maintaining a favorable immigration status. The office regularly promotes cross-cultural programs and acts as a consultant on foreign student related questions.

HANDICAPPED STUDENT SERVICES

Bette C. White
Dean
215 Goodison Hall
487-3118

The Office of Special Student Services utilizes resources of both the campus and the community and its agencies to meet the needs of handicapped students and to support them in meeting their educational goals. Michigan Vocational Rehabilitation and the Michigan Commission for the Blind are both used as supportive agencies in assisting some students.

Students may also request aid in finding note-takers, relocating classrooms, assistance with wheelchairs, special housing accommodations, and procedures for applying for interpreters. Since it is the intent of the office to respond to students' unique needs, students are urged to contact the office *personally* for information and/or assistance.

HOUSING AND DINING SERVICES

Rebecca Figura
Director
Dining Commons #1
487-1300

University Housing and Dining Services offers a variety of housing and dining services as an aid to the academic achievement of both married and single graduate students.

Student families enjoy apartment style living offered in the University's three family housing communities that are convenient, low-cost, and offer an environment that shares an appreciation of the academic needs of the married student. One- and two-bedroom

furnished apartments are available, as are a limited number of unfurnished units. Unmarried graduate students are welcome in any residence hall facility that appropriately meets their life style needs. Many, however, choose the graduate floor in Walton Hall. Walton-Putnam Hall is open year round for the convenience of graduate students who may have a more independent life style or who wish to pursue their studies during vacation breaks. Only double room occupancy is available. The unmarried graduate student interested in apartment-style living will be particularly pleased with the Brown-Munson apartments. These furnished one and two bedroom units, located in the heart of campus, have variable rental rates, depending on apartment size and number of occupants. All apartments are carpeted, air-conditioned, include basic utilities, and have security monitors for the exterior doors.

As space is limited, you should contact the University Housing/Dining Services Office for information on rental rates and food service fees as soon as you are admitted. University Housing and Dining Services is located on the lower level of Dining Commons #1 (313) 487-1300.

University Dining Services provide several options to meet the varying appetites and dining habits of today's on-the-go lifestyles. Graduate students who wish to minimize food preparation time but not choose a board plan may purchase an A la Carte card that permits them to spend their prepaid balance at any dining commons, Eastern Eateries, and other designated eating establishments. Inquires should be directed to Housing/Dining Services.

VETERAN SERVICES OFFICE

Robert E. Teehan
201-202 Goodison Hall
487-3119

The Veterans Services Office coordinates all campus services for veterans entering or returning to the University to complete their education. It is the resource center for veterans' benefits and the office where veterans must report successful academic progress to maintain benefits, class drops and adds, or changes in personal status affecting benefits. Students receiving benefits and not obtaining a satisfactory grade point average will be ineligible for further certification for such benefits at a point no later than one consecutive semester after the student initially failed to maintain satisfactory academic progress.

The office also assists veterans in obtaining housing and financial aid, and works closely with disabled veterans to provide full educational benefits. Any questions veterans may have should be directed to a representative in this office. For information regarding payment of tuition and other matters of interest to the veteran, please contact the Veterans Affairs Office, 201 Goodison Hall.

Eastern Michigan University provides information about students receiving educational assistance benefits to the Veterans Administration; in accordance with federal mandate and University policy.

UNIVERSITY ADVANCEMENT

OFFICE FOR ALUMNI RELATIONS

George G. Beaudette
Director
15 Welch Hall
487-0250

Alumni are Eastern Michigan University's lifeline to every community in the state of Michigan, to business and industry across the country, and to the world-at-large. The continuing interest of graduates and former students is a major investment in the progress and future of EMU.

The Office for Alumni Relations is the coordinating body for all alumni activity and the means by which personal relationships established during student days can be maintained and renewed.

It is responsible for updating the computerized list of 87,000 known alumni, assisting in special reunions of various constituent groups of alumni, providing programs for special alumni meetings and giving staff support to the Alumni Association and various other alumni groups. Special activities include Homecoming, a dinner dance honoring distinguished alumni, golf outings, concerts and an active outreach program.

In August 1983, it initiated a new alumni periodical, *Eastern Today*, published four times yearly in cooperation with the Offices of Public Information and Publications. The magazine is designed to enhance communications about and among alumni, faculty, administration, and friends of EMU. The *National Edition Alumni Newsletter* was added in 1992.

The Alumni Association plans programs of interest for alumni and serves as the vehicle for communicating to the University faculty and administration the concerns of EMU's alumni as they relate to the development of the University.

Active in fund raising campaigns, the association is responsible for the Memorial Chimes and Pierce Hall clocks given in former years, and more recently for gifts to the University Library, various established funds and scholarships, and additional scholarships and aid to student organizations. Charles McKenny Union, completed in 1931 and built through the cooperative efforts of alumni and the University, stands as a visible symbol of the association's ongoing service to EMU.

The association is governed by a 24-member board of directors elected in the spring of each year by a vote of all eligible association members. The president of the University and the executive vice president are ex-officio members of the board; the director of the Office for Alumni Relations serves as secretary.

OFFICE OF DEVELOPMENT

Kathleen Tinney
Acting Director

Beverly J. Farley
Associate Director
487-0252

The Office of Development was established in 1975 to create a new awareness of the University's ever-increasing need for private support and to organize a University-wide development program.

Its primary functions include the identification, cultivation and solicitation of alumni, friends, parents, corporations, foundations, and civic and labor organizations; the design and implementation of direct-mail, telemarketing and personal solicitations to meet specific annual capital and endowment objectives; the receipt, acknowledgment and accurate recording of all gifts to the

University; and the coordination of all fund-raising activities undertaken in the name of Eastern Michigan University.

OFFICE OF RESEARCH DEVELOPMENT

David L. Clifford
Director and Associate Graduate Dean

Michelle Barnes
Associate Director

Dorothy Spurlock
Research Associate

B-18 Goddard Hall
487-3090

The Office of Research Development's objectives are to simulate, initiate, develop, and administer externally sponsored activities in the University by working with faculty, administration, and students interested in obtaining funds for research, demonstration programs, training, instruction, service, experimental projects, and other efforts directed toward expanding the scope and quality of the University.

Its activities include:

1. identification of funding sources through liaison with governmental and private agencies, screening of program announcements and requests for proposals, and personal contacts;
2. providing information on funding opportunities;
3. maintaining informational files on private, state and federal funding programs and updating changing priorities or funding levels of potential sponsors;
4. assisting faculty and staff in developing workable project plans and budgets;
5. assisting proposal writers in developing budgets and plans, editing, and preparing proposals for submission, obtaining all necessary University approvals, and formally submitting the completed application to the funding agency;
6. assisting in the administration of externally sponsored programs by providing post-award support services to grant recipients, including negotiation and writing of grant and contract agreements;
7. exercise oversight of research and other projects to assure compliance with applicable federal regulations such as those covering the use of human subjects, the care and use of animals, and scientific misconduct.

STUDENT REFERENCES

Bette White
Dean of Students
205 Goodison Hall
487-3118

Official policies regarding student conduct and grade grievance procedures are established by the University's Board of Regents. Copies of the Student Conduct Code may be obtained in the Dean of Students' Office.

CONDUCT CODE AND JUDICIAL STRUCTURE FOR STUDENTS AND STUDENT ORGANIZATIONS

Section I.

A. University-Wide Regulations

The following conduct, should it take place on University owned or controlled property or at a University sponsored or supervised event, may result in disciplinary action by the University, including dismissal from the University.

1. Use of alcohol

Consumption or possession of alcoholic beverages by persons under 21 years of age. Consumption or possession of alcoholic beverages by any person at any place or at any time where not specifically permitted by University policy or regulation. NOTE: Transportation in sealed containers to and from an authorized area or place is permissible if the person in possession has attained the legal age as prescribed by Michigan law for the legal possession of alcoholic beverages.
2. Drugs
 - (a) Drug distribution. Distribution of narcotic or drug substance in violation of local, state, or federal drug or narcotic laws.
 - (b) Drug usage. Use or possession of any drug or narcotic in violation of local, state, or federal drug or narcotic laws.
3. Property
 - (a) Theft of University property or property of a member of the University or visitor.
 - (b) Damage, destruction, or defacement of University property or property of a member of the University or visitor.
 - (c) Wrongful appropriation of University property or property of a member of the University or visitor.
4. University facilities
 - (a) Unauthorized use: including entry to, occupation of, or blocking ingress or egress of University facilities such as but not limited to buildings, classrooms, hallways, entryways, conference rooms, campus grounds, as well as unauthorized use of vehicles, equipment, or services or University name or logo (including University Computing Center).
 - (b) Gambling: on campus for money or other things of value except as provided by law.
 - (c) Pets: Dogs, cats, reptiles, or other animals are prohibited in University buildings or on University grounds, except where properly authorized.
5. Disruptive conduct
 - (a) Active participation in or instigation of disruption or obstruction of any University activity.
 - (b) Disturbance of or harassment of any member of the University community or visitor.
6. Physical abuse
 - (a) Physical abuse or threat of physical abuse or unwarranted inflammatory provocation to physical abuse against any member of the University community or any person on University property or

conduct which threatens or endangers the mental or physical health or safety of any such person.

- (b) Sexual harassment: Sexual harassment means unconsented physical contact of a sexual nature, unwelcome sexual advances, unwelcome requests for sexual favors, and other verbal or physical conduct or communications constituting sexual harassment.

7. Discrimination and discriminatory harassment

It is the policy of Eastern Michigan University to maintain an educational environment free from harassment, humiliation, and intimidation of students and other members of the University community. Discriminatory harassment, as defined herein, is prohibited and offenders are subject to disciplinary action under Section 3, *infra* (Judicial Structure for Students and Organizations). Speech or other expression constitutes discriminatory harassment under any of the following circumstances.

- (a) If it:
1. is intended to insult or otherwise injure an individual on the basis of personal characteristics such as, but not limited to, race, ethnicity, color, national origin, creed, religion, ancestry, age, handicap, or sexual orientation, and
 2. is addressed directly to the individual whom it insults, and
 3. amounts to "fighting words."
"Fighting words" are those personally abusive epithets which, when directly addressed to any ordinary person are, in the context used and as a matter of common knowledge, inherently likely to provoke a violent reaction, whether or not they actually do. Such words include, but are not limited to, derogatory references to the personal characteristics described in Section 1.
 4. This section (a) shall be construed as a proscription of all so-called "fighting words."
- (b) If it:
1. constitutes a violation of MCL 750.147b, prescribing criminal and civil penalties for ethnic intimidation. See PA 1988 No. 371-1, effective March 30, 1989.
- (c) If it:
1. presents a clear and present danger of substantial disorder, violence, interruption of classes, or material interference with the operation of the University.
- (d) If it:
1. consists of extreme or outrageous acts or communications intended to harass, intimidate, or humiliate the person to whom it is directed on account of the personal characteristics described in Section A-1 and reasonably causes such person or persons to suffer severe emotional distress.

Severability

Any part of the foregoing provisions of Section 7 which shall be found by a court of competent jurisdiction to unconstitutionally abridge a person's rights to free speech and expression shall be severed, held for naught, and the balance of such Section 7 shall remain fully enforceable.

8. Falsification of records
- (a) Furnishing false information to the University.
 - (b) Forgery, alteration, or improper use of University documents, records, or identification.
9. Firearms, weapons, and explosives
- (a) Possession or use of firearms and other weapons.

- (b) Possession or use of firecrackers, gunpowder, explosives or incendiary devices, or other materials which endanger health or safety.

10. Fires or fire alarm systems and equipment

- (a) Tampering with or misuse of fire alarm systems or firefighting equipment.
- (b) Intentionally or recklessly burning or setting fire to or in any building or starting unauthorized fire on University property.

11. Academic dishonesty

Students are not to engage in any form of academic dishonesty including, but not limited to, plagiarism, alteration of records, substitution of another's work representing it as the student's own, and knowingly assisting another student in engaging in any such activity.

For purposes of this section, plagiarism is defined as the knowing use, without appropriate approval, of published materials, expressions, or works of another with intent to represent the material(s) as one's own.

12. Other University regulations:

Violation of any of the following posted or published University regulations:

- (a) EMU policy manual(s);
- (b) Terms and conditions of the residence hall contract;
- (c) EMU published undergraduate and graduate catalogs;
- (d) Rules and regulations specific to University buildings.

B. Off-Campus Conduct

Individual or group conduct described in the regulations in Part A which occurs off-campus also may result in disciplinary action by the University when:

1. such conduct has or tends to have a substantial adverse impact on the interest of the University or an individual within the University community, *and*
2. there is a showing to that effect to the satisfaction of a University hearing board to which the case is referred.

Section II. Conduct Code for Student Organizations

Recognized student organizations have considerable freedom to accomplish their goals. However, they must conform to the policies, regulations, and procedures for student organizations and the Code of Conduct. Any group in violation of these standards is subject to disciplinary action. Original jurisdiction for conduct cases for all recognized student organizations is held by the Dean of Students Office.

A. University-Wide Regulations

The following conduct, should it take place on University owned or controlled property or at a University sponsored or supervised event, may result in disciplinary action by the University, including separation from the University.

1. Non-discrimination by organizations
 - (a) Every student organization registered and approved by the University is expected to be free to select its membership upon the basis of individual merit. Any student organization selecting its membership upon the basis of restrictive clauses involving race, religion, color, national origin, sex, age, or handicap will be considered to be operating in conflict with University policy.
 - (b) Exceptions to this policy include religious qualifications which may be required by organizations whose aims are primarily sectarian, and social fraternities and sororities that are permitted by federal and state law to discriminate on the basis of sex.
 - (c) Should a student organization be in conflict with University policy in the selection of its members,

- the group will be asked to submit evidence that action has been or is being taken to remove such restrictive membership provision such as a request for a waiver of the restriction from the national organization. A reasonable period of time as determined by the Dean of Students Office may be granted to remove the restrictive provisions. Continued restriction of membership by constitutional requirements or other binding enactment contrary to University policy will result in withdrawal of University registration of the student organization.
2. Property
 - (a) Theft of University property or property of a member of the University or visitor.
 - (b) Damage, destruction, or defacement of University property or property of a member of the University or visitor.
 - (c) Wrongful appropriation of University property or property of a member of the University or visitor.
 - (d) Unauthorized possession of University property or property of a member of the University or visitor.
 3. University facilities
 - (a) Unauthorized use including entry to, occupation of, or blocking ingress or egress of University facilities such as but not limited to buildings, classrooms, hallways, entryways, conference rooms, outside grounds as well as unauthorized use of vehicles, equipment, services, or University name or logo (including University Computing Center).
 - (b) Misuse of University facilities, vehicles, equipment, services, or University name or logo including but not limited to use for purposes other than intended for or authorized.
 4. Falsification of records
 - (a) Furnishing false information to the University.
 - (b) Forgery, alteration, or improper use of University documents, records, or identification.
 5. Disruptive conduct
 - (a) Active participation in or instigation of disruption or obstruction of any University activity.
 - (b) Disturbance of or harassment of any member(s) of the University community or any person(s) on campus in an official capacity or visitor(s).
 6. Physical abuse
 - (a) Physical abuse or threat of physical abuse or unwarranted inflammatory provocation to physical abuse against any member of the University community or any person on University property or conduct which threatens or endangers the mental or physical health or safety of any such person.
 - (b) Sexual harassment: Unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct or communications constituting sexual harassment as defined and otherwise prohibited by state or federal statutes.
 - (c) In cases where the activity is performed by an individual member of a student organization, the total organization may be held responsible when those members not directly involved participate in said activity by encouraging, witnessing, or condoning the act in any manner.
 7. Discrimination and discriminatory harassment

It is the policy of Eastern Michigan University to maintain an educational environment free from harassment, humiliation, and intimidation of students and other members of the University community. Discriminatory harassment, as defined herein, is prohibited and offenders are subject to disciplinary action under Section 3, *infra* (Judicial

Structure for Students and Organizations). Speech or other expression constitutes discriminatory harassment under any of the following circumstances.

- (a) If it:
 1. is intended to insult or otherwise injure an individual on the basis of personal characteristics such as, but not limited to, race, ethnicity, color, national origin, creed, religion, ancestry, age, handicap, or sexual orientation, and
 2. is addressed directly to the individual whom it insults, and
 3. amounts to "fighting words."
"Fighting words" are those personally abusive epithets which, when directly addressed to any ordinary person are, in the context used and as a matter of common knowledge, inherently likely to provoke a violent reaction, whether or not they actually do. Such words include, but are not limited to, derogatory references to the personal characteristics described in Section 1.
 4. This section (a) shall be construed as a proscription of all so-called "fighting words."
- (b) If it:
 1. constitutes a violation of MCL 750.147b, prescribing criminal and civil penalties for ethnic intimidation. See PA 1988 No. 371-1, effective March 30, 1989.
- (c) If it:
 1. presents a clear and present danger of substantial disorder, violence, interruption of classes, or material interference with the operation of the University.
- (d) If it:
 1. consists of extreme or outrageous acts or communications intended to harass, intimidate, or humiliate the person to whom it is directed on account of the personal characteristics described in Section A-1 above and reasonably causes such person or persons to suffer severe emotional distress.

Severability

Any part of the foregoing provisions of Section 7 which shall be found by a court of competent jurisdiction to unconstitutionally abridge a person's rights to free speech and expression shall be severed, held for naught, and the balance of such Section 7 shall remain fully enforceable.

8. Hazing

- (a) Eastern Michigan University students as individuals or members of registered student organizations are expressly forbidden from engaging in hazing. Initiation into University organizations is permissible excluding any activities construed as hazing.
- (b) Hazing shall be defined as the performing of an act or insisting that another, including the initiate, perform an act for initiation individually or with any student or other organization which may cause or create an unnecessary risk or cause mental or physical harm to any person or which is not deemed socially acceptable.

Such acts include, but are not limited to: requiring an initiate to consume alcohol or any other substance, preventing an initiate from having at least six hours sleep in any 24-hour period, branding, paddling, causing excessive fatigue—mental or physical, expecting participation in acts which cause embarrassment, humiliation, discomfort, pain, fright, or injury or which violate any federal, state, or local statute, or University policy.

- (c) In cases where the activity is performed by an individual member of a student organization, the total organization may be held responsible, when those members not directly involved participate in said activity by encouraging, witnessing, or condoning the act in any manner.
 - (d) Any individual and/or organization found guilty of hazing will be subject to a minimum penalty of suspension.
9. Other University regulations
- Violation of any other posted or published University regulations, including but not limited to:
- (a) EMU policy manual(s);
 - (b) Terms and conditions of the residence hall contract;
 - (c) EMU published bulletins (undergraduate and graduate catalogs);
 - (d) *The Eastern Echo*;
 - (e) Rules and regulations specific to University buildings;
 - (f) Campus Life Council regulations and guidelines for organizations;
 - (g) Student government monetary allocation guidelines.

B. Off-Campus Conduct

Conduct described in the regulations in Part A which occurs off campus also may result in disciplinary action by the University under the same provisions as the individual conduct code.

Note: Nothing in the foregoing shall subject an organization to liability under the provisions of this code for the acts of individuals unless such acts are committed under the formal or informal sponsorship, authority, direction, or as a group action of the organization.

Section III. Judicial Structure for Students and Student Organizations

A. Procedural Rights of the Student/Student Organization

1. The student/student organization shall have the right to remain silent.
2. The student/student organization shall have a right to a voluntary adviser of their choice. Such adviser shall be selected from the University community and may participate in the disciplinary proceedings. The student also shall be informed by the dean of students that assistance is available through Student Government's Student Defender's Union. The student shall be informed of the availability of such assistance prior to the discipline process when applicable.

When criminal prosecution is pending on charges stemming from the same incident, the student/student organization shall have a right to engage an attorney, at their own expense, of their choice to be present at a University hearing. The attorney shall not represent the student/student organization nor be a participant in the hearing but shall be permitted to consult with the student/student organization at all stages of the proceedings.

The student/student organization shall be given a written statement of the charges against them prior to the commencement of the disciplinary process.
4. The student/student organization must be presented with a written list of their rights. Rights 1-4 shall extend to all judicial proceedings, all investigations conducted by the Dean of Students Office, and before any statement is made to the Dean of Students Office.
5. The student/student organization may confront their accuser and is guaranteed the right to cross-examine all those testifying against them.

6. The student/student organization shall have the right to bring witnesses to testify in their defense. The University Judicial Board and the Judicial Appeals Board shall have the authority to limit the number of witnesses by a two-thirds (2/3) vote of those members present, in order to avoid dilatory tactics.
7. The student/student organization shall have the right to an open or closed hearing at their discretion. A hearing shall be deemed to have been open if provision for twenty (20) spectators was made in the hearing room and no person was excluded until the room's capacity was reached except for sequestration or if such person's behavior was disruptive of the atmosphere for the conduct of a fair hearing.

A closed hearing means participants only: student/student organization charged, adviser(s), dean of students and/or designee(s), witnesses, members of the board.
8. The student/student organization may submit to the dean of students, University Judicial Board, or the Judicial Appeals Board, in writing, a supportive report of any individual organization that chooses to intervene in their behalf.
9. The student/student organization shall have the right to challenge for cause any member of the University Judicial Board or Judicial Appeals Board. Each body shall determine the validity of such challenges.
10. No member of the University Judicial Board or Judicial Appeals Board who is involved with the investigation of a case or is a party to the case shall sit on the board while the case is being heard. Rights 5-10 shall extend to all cases before the University Judicial Board or Judicial Appeals Board.
11. With the assistance of the Dean of Students Office, the University Judicial Board and the Judicial Appeals Board must keep official records of each case which the student/student organization may examine.

B. Dean of Students Office

1. The dean of students shall have the power to investigate each student/student organization disciplinary case.
2. After investigation, the dean of students will make one of the following decisions:
 - (a) charge the student(s)/student organization with misconduct and assign a penalty;
 - (b) charge the student(s)/student organization with misconduct and refer the case to the UJB for action;
 - (c) refer the case to the UJB for review and action;
 - (d) not charge the student(s)/student organization.
3. In all cases where a student/student organization is charged, a written notice shall be prepared by the Dean of Students Office and served on the student(s)/student organization involved. It will satisfy this provision if such a notice is given to the student(s)/student organization's last known address registered with the University. The notice shall include the following:
 - (a) A recitation of the facts which surround the violation giving, so far as possible, the date, time, and location of the behavior in question.
 - (b) A recitation of the specific regulation violated.
 - (c) Any penalty assigned or other action taken.
 - (d) The student/student organization has ten (10) calendar days to appeal the finding in writing.
 - (e) Failure to appeal the decision within ten (10) calendar days shall result in the penalty taking effect.
4. When a case is taken to the University Judicial Board (or Judicial Appeals Board), the complaint should be submitted in writing to the hearing board by a representative from the Dean of Students Office or by an appointee of the Dean of Students Office.

5. In case of a hearing before the University Judicial Board (or Judicial Appeals Board), the dean of students shall notify the student(s)/student organization involved of the date, time, and place of the hearing and/or pre-hearing conference. The date of the pre-hearing conference shall not be less than two (2) days prior to the date of the hearing—except by mutual consent.

C. Pre-hearing Conferences

At least two days prior to any hearing by the University Judicial Board or hearing officer, the dean of students shall schedule a pre-hearing conference for any student(s)/student organization charged with conduct violations. Such conference shall be attended by:

1. The presiding officer of the University Judicial Board or Judicial Appeals Board, or the hearing officer or a designee of one of these officers.
2. The dean of students or his/her designee and may be attended by:
 - (a) Any employee of the University who may be designated to represent the University.
 - (b) The student(s)/student organization involved.
 - (c) Any member of the University community in good standing selected by the student(s)/student organization to serve as an adviser or representative.

The purpose of such conference shall be to identify those issues and facts which will be presented at the hearing, to exchange information as to witnesses likely to be called, to answer procedural questions so far as possible, and to settle those matters which may be agreeably concluded. This conference will not determine questions of innocence or guilt or recommendation of penalty. The failure of the student(s)/student organization or their adviser or representative to appear shall in no way affect any procedural rights of the student(s)/student organization in subsequent disciplinary proceedings and such failure will not prohibit a hearing from being set and a hearing being held.

D. The University Judicial Board

1. Composition
 - (a) The University Judicial Board shall consist of five (5) enrolled students and two (2) alternates, two (2) full-time faculty members and one (1) alternate, and two (2) full-time members of the University community and one (1) alternate (which includes current faculty, staff, employees, and students).
 - (b) No member shall be on any probationary status and no member shall have any pending disciplinary action which may lead to a change of status.
2. Selection of members
 - (a) The student members shall be appointed by the Student Senate as directed by their constitution and by-laws; with one student member from the Office of Campus Life.
 - (b) The faculty members shall be selected by the Faculty Council.
 - (c) The president or his/her designee shall appoint the members from the University community.
3. Term of office
 - (a) Members shall be appointed for up to a two-year period. They may be reappointed by the person or body who appointed them.
 - (b) Members may be removed from the board for poor attendance by a simple majority vote of the total board.
4. The chief justice shall be elected from within the body by a majority of the body.

E. Jurisdiction of the University Judicial Board

1. The University Judicial Board shall have original jurisdiction in all cases involving violations of University regulations.
2. The University Judicial Board shall exercise superintending control if there is probable cause to believe that elementary principles of fairness and justice are being or will be violated.

F. Appeals to the University Judicial Board

All appeals to the University Judicial Board shall be governed by the following:

1. Appeal may be granted on any basis.
2. Appeals shall be made to the University Judicial Board in writing through the Dean of Students Office.
3. The University Judicial Board shall decide whether or not to hear the case by majority vote.
4. All cases shall be heard from the beginning.
5. Upon motion of the student(s)/student organization party, any case may be removed directly to the Judicial Appeals Board, which shall assume original jurisdiction.

G. Procedure of the University Judicial Board

1. Prior to any discipline hearing, a pre-hearing conference will be held (see Item C, Pre-Hearing Conferences).
2. Quorum
 - A quorum shall exist with the presence of any six (6) members.
3. Disposition of cases
 - (a) A simple majority of the board members present shall be required for any action taken.
 - (b) Decisions of the University Judicial Board shall be in writing. The decision shall be based on the evidence presented. The decision shall state what rule was violated, the behavior constituting the violation and, if known, the date, time, and place of the violation. Within forty-eight (48) hours, the decision will be submitted in writing to the dean of students for mailing to the student(s)/student organization's last known address. Also a copy will be sent to the Judicial Appeals Board.
 - (c) All decisions of the University Judicial Board shall be final and shall be implemented after five (5) working days, unless appealed or as provided under Section 5, Item A. These decisions may be appealed by either party to the Judicial Appeals Board. The appeal must be in writing to the chair of the Judicial Appeals Board and delivered to the Dean of Students Office within five (5) working days from the date of the decision.
 - (d) The University Judicial Board shall have authority to decide on penalties sanctioned by the University (see Section 4) and/or other action deemed appropriate.

H. Judicial Appeals Board

1. Composition
 - (a) The Judicial Appeals Board shall consist of two (2) enrolled students, two (2) full-time faculty members, and two (2) full-time members of the University community.
 - (b) No members shall be on any probationary status, and no member shall have any pending disciplinary action which may lead to a change of status.
2. Selection of members
 - (a) The student members shall be appointed by the Student Senate as directed by their constitution and by-laws.
 - (b) The faculty members shall be selected by the Faculty Council.
 - (c) The president or his/her designee shall appoint the members from the University community.

3. Term of office
 - (a) Members shall serve for up to a three-year term. They may be reappointed by the person or body that appointed them.
 - (b) Members may be removed from the board for poor attendance by a simple majority vote of the total board.
 4. Chair

The chair of the Judicial Appeals Board shall be elected by a majority vote of the board.
- I. Jurisdiction of the Judicial Appeals Board**
1. The Judicial Appeals Board shall have appellate jurisdiction in all cases heard before the University Judicial Board and shall have original jurisdiction on the motion of the student/student organization party in any case.
 2. In the event the University Judicial Board shall fail to convene and decide any case within a reasonable time, the Judicial Appeals Board will have the power to assume jurisdiction.
 3. The Judicial Appeals Board shall exercise superintending control over lower courts if there is probable cause to believe that elementary principles of fairness and justice are being violated or will be violated.
- J. Appeals to the Judicial Appeals Board**
1. Student/student organization appeals or administrative appeals shall be made in writing to the chair of the Judicial Appeals Board and submitted to the Dean of Students Office within five (5) working days. In case of administrative appeal, the student/student organization involved shall be notified at least five (5) working days prior to their hearing before the Judicial Appeals Board.
 2. All cases on appeal will be heard from the beginning.
- K. Procedure of the Judicial Appeals Board**
1. Prior to any discipline hearing, a pre-hearing conference will be held (see Item C, Pre-Hearing Conferences).
 2. Quorum

A quorum shall exist with the presence of any four members.
 3. Disposition of cases
 - (a) A simple majority of those present shall be required for any action taken by this board.
 - (b) Decisions of the Judicial Appeals Board shall be in writing. The decision shall be based on the evidence presented. The decision shall state what rule was violated, the behavior constituting the violation and, if known, the date, time, and place of the violation.
 - (c) Decisions of the Judicial Appeals Board shall be submitted to the president for review with copies to the Dean of Students Office, University Judicial Board, and the student(s)/student organization.
 - (d) The president will make the final decision by accepting, modifying or rejecting the Judicial Appeals Board decision. If the decision is modified or rejected, then the president shall provide the student(s)/student organization and the Judicial Appeals Board with the reason(s) for the modification or rejection in writing.
 - (e) Judicial Appeals Board and/or presidential decisions shall be in writing with specific factual findings, citing rule(s) violated and setting forth discipline to be imposed, if any.
 - (f) For cases on which there has been no presidential action within five (5) working days after submission, the Judicial Appeals Board decision is deemed to be approved.
 - (g) All decisions approved and permitted to stand shall become effective immediately.

- (h) Decisions shall be made in writing and made available to the student(s)/student organization on the first day following Judicial Appeals Board action and following acceptance by the president or his/her designee. In cases permitted to stand without presidential action, the decision shall be made available to the student(s)/student organization no later than the sixth (6th) working day following the submission for review of the decision of the Judicial Appeals Board.
- (i) Application for additional review and modification of the Judicial Appeals Board and presidential decision may be made to the Board of Regents through the secretary of the Board of Regents. The Board of Regents, at its discretion, may agree to review the findings and decision of the president or the Judicial Appeals Board.

L. Alternate Hearing Procedure

1. In the event the University Judicial Board shall fail to convene and/or act within a reasonable time, the president shall be authorized to refer the case directly to the Judicial Appeals Board.

In the event the Judicial Appeals Board shall fail to convene and/or act within a reasonable time, the president shall be authorized, after consultation with and approval by the Board of Regents, to appoint a hearing officer, not otherwise employed by the University, who shall conduct such hearings and perform the functions otherwise specified for the Judicial Appeals Board. The hearing officer shall submit his/her findings and recommendations to the president or his/her designee in the same manner and within the time as required for the Judicial Appeals Board.

2. Discipline by administrative action

It is the policy and practice of the University to handle disciplinary cases administratively without involvement of the student/student organization judicial systems when the judicial bodies are not in sessions.

Section IV. Penalties for misconduct

Discipline is intended to be corrective and educational as well as punitive. It is intended that the student(s)/student organization will learn from disciplinary experience and develop a more mature attitude toward group living problems. The penalties which may be incurred include, but are not limited to, the following:

A. Penalties for students

1. Reprimand

An official written statement of the University's disapproval of an individual or group action.
2. Administrative warning

Will be issued to students for lesser offenses than those subject to administrative probation. A breach of conduct will be viewed not only as the breach of conduct itself but a violation of this warning, which may result in dismissal.
3. Administrative probation

Defines the student's status to be conditional and may require exclusion from some programs and curricular or extracurricular activities. In each case, the length and nature of the exclusions, if any, shall be determined according to the nature of the offense. Any breach of conduct while on administrative probation will be viewed not only as the breach of conduct itself, but a violation of probation which may result in dismissal.
4. Suspension

Suspension is an involuntary separation of the student from the University which may extend for one

semester, until a specified date, and/or until a stated condition is met.

5. Dismissal

Dismissal, like suspension, involves separation from the University but it is for an indefinite period of time.

In case of a judicial decision requiring that a commitment or action or other stated condition be met by a student, the person or body setting this condition shall be responsible for making their expectations clear to the student and for superintending and monitoring its implementation.

B. Penalties for Student Organizations

1. Reprimand

An official written statement of the University's disapproval of an individual or group action.

2. Administrative warning

Issued to student organizations for lesser offenses than those subject to administrative probation. Any breach of conduct will be viewed not only as the breach of conduct itself, but a violation of this warning, which may result in suspension of said organization's status as a student organization. The misconduct may be reported to said organization's national office, if applicable.

3. Administrative probation

Defines the student organization's status to be conditional and may require exclusion from campus activities, forfeiting of student monetary allocations, and withdrawal of Campus Life status for a minimum of one semester. Any breach of conduct while on administrative probation will be viewed not only as the breach of conduct itself, but a violation of probation that may result in suspension of said organization's status as a student organization.

4. Suspension or termination

The involuntary withdrawal of status of the student organization from the University permanently, for a specified period of time, and/or until a stated condition is met. During this period the University will not in any way recognize nor support the continued operation of said organization. The student organization must re-apply to the Office of Campus Life for renewed recognition following any period of suspension. The suspension action shall be reported to said organization's national office, if applicable.

Action taken against a student organization also may result in separate action being taken against individual members of said group, when appropriate. In this case, the sections of the conduct code referring to student conduct will be applied.

Section V. Presidential Responsibility

A. Presidential Review

1. The authority to suspend or dismiss a student/student organization from the University for conduct in violation of University rules and regulations is vested in the president as the chief executive officer of the University or in his/her designated representative.
2. All disciplinary penalties assigned through the University judicial and review system that would result in suspension or dismissal of a student/student organization from the University shall be reviewed by the president or his/her designee.
3. The president or his/her designated representative may:
 - (a) Accept the decision of the judicial review system, or
 - (b) Reject the decision. If the decision rejected is:
 - 1) A dean of students decision, the rejection will constitute an automatic appeal to the University Judicial Board.

2) A University Judicial Board decision, the rejection will constitute an automatic appeal to the Judicial Appeals Board.

3) A Judicial Appeals Board decision, the procedure stated in Procedure of the Judicial Appeals Board, Item K, 3, b, c, will be followed.

B. Interim Suspension

The president, as the chief executive officer of the University, is directly responsible to the Board of Regents for the enforcement of the University policies, rules, and regulations and is charged with the maintenance of that degree of order and safety necessary to the successful continuation of the University's lawful mission, and he/she is further charged with the authority to protect the members of the University community and University property.

Although such authority has always existed in the Office of the President, it is herein made explicit that the president or his/her designated representative is authorized to suspend a student/student organization prior to a hearing and procedure through the University judicial process when in the judgment of the president or his/her designated representative, the misconduct of the student(s)/student organization threatens or endangers University property, and that such student's/student organization's continued presence on campus creates a clear and present danger to the safety of students, faculty, administrators, and University property and/or that constitutes an interference with the maintenance of the University's educational processes and missions.

The student(s)/student organization shall be notified of their suspension status orally, by written notice served on the student(s)/student organization, or written notice sent to the last address on record. Within five (5) days after the notice, the student(s)/student organization shall be provided with the opportunity for an informal hearing before the president or his/her designee. At this hearing, the student(s)/student organization shall be permitted to present their side of the story. After the hearing, the president or his/her designee may lift suspension and direct that a hearing follow within eight (8) days before the University Judicial Board, or maintain the student(s)/student organization on suspension status and direct that a hearing follow within eight (8) days before the University Judicial Board.

The above provisions concerning judicial power are the official policy of the University, subject to such specific amendments as shall hereafter be made and subject to those exceptions to these procedures implicit in the emergency powers of the president. Nothing in the above shall be construed as affecting the standard of conduct or rules of behavior as established by the regents.

All publications of the University that contain rules and procedures—other than the above that describes the judicial structure or the procedures of student/student organization courts, greek courts, or residence hall courts—shall not be construed as controlling those courts, but rather shall be merely descriptive of the system and procedures that the student(s)/student organization have themselves enacted as controlling their institutions.

C. Emergency Powers of the President

When faced with mass disruptions, activity of a violent and destructive nature, or other dangerous violations of University rules, the president may take note in a general statement of the seriousness of the threat to the University. As chief executive officer of the University, the president is charged with the maintenance of that degree of order necessary to the successful continuation of the University's lawful mission. Such responsibility carries with it the necessity for a certain degree of authority. Such authority has always existed in the Office of the President. It is herein made explicit but to the extent that the courts of the land may deem such authority to be inherent or implicit, it is not limited.

The president, after consultation with and approval of the Board of Regents, may:

1. Impose and have enforced a curfew on all or portions of the campus of the University.
2. Curtail or suspend services.
3. Close the University or portions of the University entirely for the period of emergency.
4. Suspend student(s)/student organizations and forbid their presence on campus if they have been sufficiently identified to him/her as participants in activities violative of University policy leading to the conditions described above. Suspensions shall continue for the period of emergency.
5. Appoint a hearing board on an ad hoc or extraordinary basis to make a recommendation as to whether individual interim suspension shall be continued. Such a hearing board shall convene and make its recommendations within ten (10) days from the effective date of the interim suspension.

In making more explicit the authority of the president to take necessary actions in the interest of the University, the Board of Regents in no way restricts its own powers and prerogative to carry out its obligations and duties as imposed by the constitution and laws of the State of Michigan.

GRADE GRIEVANCE PROCEDURE

The grade grievance procedure provides each student with the opportunity to appeal formally a final grade in a course because he or she believes that the grade has been awarded capriciously or unfairly. This procedure is not intended to handle disputes that may arise about the grading of individual exams or assignments during the semester. When such disputes arise, the student should contact the instructor immediately, rather than waiting until the end of the semester. Each grade grievance submitted according to this procedure must be an individual action by an individual student, and class action grievances by one student on behalf of several students or an entire class are not permitted.

STEP I

If a student wishes to appeal a final grade, the student must contact the instructor within **five (5) working days** after the start of the next semester; i.e., the semester following the one in which the disputed grade was given (see General Notes for the spring-summer policy). If the instructor is teaching on campus the next semester, but is temporarily unavailable or simply cannot be reached during this five-day period, then the student should deliver a written request for an appointment with him/her, stating the reason, to the department head no later than the final day of the five (5) day period. With the aid of the department head in scheduling an appointment, the instructor and student must then meet as soon as possible and discuss the disputed grade privately. In the event that the department head has difficulty in assisting the student in scheduling the appointment, a detailed written record of communication or attempts to communicate between the department head and the instructor will be maintained by the department head. Whenever possible, conflicts over grades should be resolved informally between the instructor and the student as a result of this Step I discussion.

If the instructor has left the University permanently or is not available for a period of sixty (60) days or more (e.g., if the instructor is away on sabbatical leave, medical leave, or is in his/her off semester on a Plan C appointment), then the department head shall act in his/her behalf and make a decision either in support of or against the grievance. In making this decision, the department head shall review all available grade records, discuss the matter with the student, and with the written consent of the student, request and evaluate a written statement submitted within ten (10) working days by the instructor concerning the disputed grade. The department head cannot act in this manner on behalf of

the instructor during the spring-summer period simply because the instructor is not teaching during either the spring or summer session, unless the disputed grade affects the student's plans to graduate that year.

STEP II

If the grade dispute is not resolved in Step I to the student's satisfaction and he or she still believes that the grievance has merit based on the facts of the case, the student has the right to file a formal written grievance to the department head who will forward it immediately to the Department Grade Grievance Committee. Guidelines for filing a formal grievance are as follows:

1. A grievance must be based on evidence that the instructor has been capricious and/or unfair in awarding a grade. The written grievance must describe specifically the perceived capricious or unfair action of the instructor. The student also should present all other evidence or documentation in support of his or her allegations. Disagreement with an instructor's judgment in and of itself is not a basis for a grievance, nor is disagreement with an instructor's grading standards, if such standards have been described in advance for the class and have been applied fairly to all students in the class.
2. A grievance must be filed within **fifteen (15) working days** after the start of the next semester following the one in which the disputed grade was given.

Within **ten (10) working days** after receipt of the written grievance, the department head must schedule a hearing before the Department Grade Grievance Committee. The department head cannot simply make a personal judgment that the grievance is without merit, and thus refuse to give it to the Department Grade Grievance Committee. However, after scheduling the hearing, the department head may request a closed three-person meeting in his/her office with just the instructor and the student, to discuss informally the disputed grade one final time. If either the instructor or the student refuses to attend such a meeting, the department head cannot require his/her attendance, and the grievance hearing is then held as previously scheduled. If the closed meeting is held, the department head shall act only as a facilitator or mediator. His/her role is restricted solely to promoting further discussion, not to imposing his/her judgment and/or making a decision in the case. If the dispute is resolved in this meeting, the written grievance shall be withdrawn and the scheduled hearing cancelled. If the dispute is not resolved, the grievance hearing is then held as previously scheduled. In such cases, the department head shall not communicate his/her opinions/judgments regarding the grievance and/or the discussions in the closed meeting to the members of the Department Grade Grievance Committee.

The Department Grade Grievance Committee shall be composed of three (3) faculty members and two (2) students. The faculty members shall be selected by appropriate department procedures. The students shall be selected from the list of representatives designated annually (no later than October 15 each year) by Student Government for that particular college. It is preferred that one student on the committee be a graduate student in those departments that offer graduate courses. In graduate student grievances, at least one of the student committee members must be a graduate student.

The student grievant may, however, request in advance in writing that the two (2) student be excused and that his or her grievance be heard only by the three (3) faculty members. The committee shall conduct a hearing according to the following guidelines:

1. Prior to the hearing, any written information of support for either the student or the instructor should be distributed to committee members.
2. A detailed record shall be kept of the hearing, preferably a taped sound recording. If a written record is kept, that record should be signed by the Grievance Committee, asserting that the written record is a true record of the hearing proceedings. If a tape serves as the hearing record, the Grievance Committee shall sign a statement attesting that the tape is the true record of the hearing proceedings.

Written or recorded records of any Step II Grievance shall be kept on file in the college dean's office and copies shall be provided, upon request, to the student who has filed the grade grievance or the faculty member against whom the grievance was filed. Costs associated with duplicating grade grievance records shall be borne by the individual(s) requesting copies.

3. The hearing shall be open unless the student or instructor requests a closed hearing. This request should be conveyed in writing to the department head prior to the hearing.
4. Both the student and instructor shall be permitted an adviser. Advisers must be members of the University community, i.e., students or full-time faculty or staff members.
5. The department grade grievance chair shall begin the hearing by beginning the tape recorder (or announcing the name of the person who will be taking minutes) and reviewing the guidelines and procedures under which the hearing shall be conducted.

The committee chair will then announce, "This Step Level II Grade Grievance Hearing is being held on (date). (Name of student) is grieving the grade of (grade) received during the (semester) in (class prefix, number, and section I.D. taught by (instructor). The following committee members are in attendance today: (members give their names)."

6. In order, the student and the instructor will present their cases. Both the student and the instructor may call witnesses, and the student, instructor, adviser(s), and committee members all have the right to question any witnesses that are called. The student and the instructor should be asked for brief closing statements.
7. The chair will then close the hearing with "This Step Level II Grade Grievance Hearing is now concluded. The committee will meet in executive session and will present its findings, in writing, to the department head within (5) working days. The written decision/recommendations must contain a numerical report of the vote and must be signed by the members of the committee. The department head will notify the student and the instructor of this committee's decision/recommendation."
8. Either the student or the instructor may appeal the decision/recommendations of the Department Grade Grievance Committee to the University Grade Grievance Committee under the conditions listed below. This appeal must be filed within **five (5) working days** of receipt of the decision.

STEP III

Either the instructor or the student grievant may submit a written appeal of the prior decision at Step II by the Department Grade Grievance Committee within **five (5) working days** of written receipt of that decision, if one of the following conditions is met:

1. The Office of the Provost determines that there is evidence that established procedures for Step II were violated; or

2. There was at least one dissenting vote at the Step II level; or
3. New evidence or new witnesses not previously considered or heard at Step II become available.

In the absence of 1, or 2, or 3 above, simple disagreement with the decision rendered at Step II is not sufficient basis for an appeal. In other words, there is no automatic right of appeal in every case requiring that the University Grade Grievance Committee reconsider the entire grievance case. If the appeal is based on new evidence or new witnesses, the written appeal statement must explain precisely how this evidence or testimony relates directly to the alleged unfair or capricious awarding of the disputed grade. If said evidence or witnesses had been available prior to the Step II hearing, the hearing shall be remanded back to the Step II departmental committee. Only newly discovered evidence and/or witnesses may be introduced at the Step III hearing level (it shall be the responsibility of the petitioner to demonstrate that the evidence and/or witness were not available at Step II).

The appeal shall be submitted to the associate provost, (or a substitute designated by the provost) with a copy to the dean of the appropriate college. The University Grade Grievance Committee shall be chaired by the associate provost and shall have the following additional members: the dean of the involved college or his/her designee; two (2) faculty members, one of whom is from the involved college, but not from the department in which the grievance originated; and one (1) student, appointed by Student Government. The two faculty members shall be selected by the associate provost from an available pool of nominees representing all the colleges.

The University Grade Grievance Committee shall review all written documents which were available to the Department Grade Grievance Committee, the written or taped recording of the Step II hearing, and the final report and decision of the Step II Committee. The University Grade Grievance Committee may reconvene the participants in the Step II hearing to answer questions, if desired.

Within **twenty (20) working days** of the receipt of the appeal, the University Grade Grievance Committee shall issue a written Step III decision to both the instructor and the student. This decision shall be final; no further appeal is possible.

RECORDS

When the Grade Grievance Procedure results in an instructor's grade being changed without his or her agreement, then all University records containing that grade in which the name of the instructor appears shall be identified by an asterisk (*). On these records, the asterisk will be footnoted with the following statement: "This grade is a result of an appeal procedure." On those records in which the instructor's name does not appear, the grade will not be asterisked, nor will there be any other indication that the original grade was changed.

GENERAL NOTES

1. The time limits/deadlines for submitting grievances/appeals, holding meetings, and making decisions are to be followed by all parties. However, extensions of the time limits may be requested in writing by any of the involved parties. Such requests must originate prior to the expiration of the stated time limit. The dean of the involved college will make the decision to approve or to deny each request for a time limit extension at Step I or Step II. Decisions regarding Step III time limit extensions will be made by the Office of the Provost.

2. Each academic department shall select the faculty members for the Department Grade Grievance Committee at the beginning of the academic year in September. The committee will hear all grade grievances during the next 12 months. Substitute members shall be selected to replace any committee member who is involved in a grade grievance. Also, substitute members shall be selected to replace any faculty committee member who is unavailable for an extended period of time (e.g., spring and/or summer).
3. Each college shall select two (2) faculty members plus one alternate who will be available over a 12-month period for assignment to the University Grade Grievance Committee. These selections shall be made by the appropriate college-level faculty advisory council/committee at the beginning of the academic year in September. Unlike the Department Grade Grievance Committee, this Step III University Grade Grievance Committee may of necessity have a different membership for each grievance.
4. Grievances relating to grades awarded for the winter semester ending in April shall normally be pursued the next fall, measuring all stated deadlines with respect to the start of the fall semester in September. However, if the instructor is teaching on campus during the spring or summer session and the student is enrolled on campus during the same session, then with their mutual agreement, the grievance can be pursued during the spring or summer. However, should either the instructor or the student prefer to wait, then action of the grievance will be postponed until the fall semester. The only exception in which the grievance shall be pursued during the spring or summer session without the consent of the instructor who is teaching on campus is for any case in which the disputed grade affects the student's plans to graduate that year. In such cases, if the instructor is unwilling to participate, the department head may act on his/her behalf.
5. Throughout this procedure, the title department head shall be interpreted to include program directors or program coordinators for appropriate academic units in which there is no administrator with the title of department head.
6. Students are encouraged to seek advice from the REACT office.

STUDENT ADMINISTRATIVE GRIEVANCE PROCEDURE

STUDENTS MAY FILE A GRIEVANCE over a dispute arising from allegations of improper or incorrect interpretation or application of University policy, including any alleged discrimination in the application of such policy based upon race, religion, sex, age, national origin or any other illegal discrimination as established by the state or federal regulation or law. Traditionally, those matters have been handled in the following manner:

Step I. Administrator and Student (Informal)

Any student who is considering filing a grievance must first discuss the problem with the administrator or staff member whose responsibility it is to enforce the regulation or policy.

Step II. Department Supervisor (Formal)

If unable to resolve the dispute at this level, the student shall, if he or she wishes, carry the grievance forward by first reducing the grievance to writing, stating the nature of the grievance and what policy allegedly has been violated or incorrectly interpreted, and the date of the alleged violation or misinterpretation. This written grievance shall be presented to the head of the department, or immediate supervisor of the staff member or administrator enforcing the policy. The University shall not be expected to

consider any grievance that is not submitted in writing to the department head or supervisor within 21 calendar days of the alleged violation. Upon receipt of the written grievance, the supervisor or department head shall meet with the student (normally within one week of the receipt of the written grievance) to attempt to resolve the grievance and following such a meeting, promptly provide a written answer. No such written answer may be contrary to University policy.

Step III. Division Vice President

If the grievance is not resolved at Step II, then it shall be forwarded to the vice president in charge of the division in which the grievance has been filed. Usually within a week of receipt of the grievance, the vice president shall meet with the student filing the grievance and discuss the grievance. Following the discussion, the vice president shall render a decision in writing to the student.

Step IV. Presidential Appeal

If the grievance is not resolved in Step III, the student may appeal to the president of the University. As chief executive officer of the University, the president will make the final decision and he or she may consult with the Executive Council prior to making this decision. Also, the president, if he or she chooses, may elect to conduct an informal hearing with the student.

The Student Administrative Grievance Procedure is to be used for administrative decisions only and is not to conflict with established procedures in the areas of student employment, student discipline, academic affairs, and other published University student grievance procedures.

STUDENT GOVERNMENT provides services for students seeking to file a student grievance or encountering any other problems. Information must be submitted in writing to its office in Goodison Hall.

CORRESPONDENCE DIRECTORY

Please address specific inquiries to the following offices:

DEAN OF THE COLLEGE OF ARTS AND SCIENCES 411 Pray-Harrod Building	487-4344
DEAN OF THE COLLEGE OF BUSINESS 473 Gary M. Owen Building	487-4140
DEAN OF THE COLLEGE OF EDUCATION 117 Boone Hall	487-1414
DEAN OF THE COLLEGE OF HEALTH AND HUMAN SERVICES 212 King Hall	487-0077
DEAN OF THE COLLEGE OF TECHNOLOGY 150 Sill Hall	487-0354
DEAN OF THE GRADUATE SCHOOL Starkweather Hall	487-0042
DEAN, DIVISION OF CONTINUING EDUCATION 321 Goodison Hall	487-0407
Off-campus and in-service courses; speakers for special occasions; adult education; consultation services to schools	
DEAN OF STUDENTS 205 Goodison Hall	487-3118
General welfare of individual students	
REGISTRAR'S OFFICE - ACADEMIC RECORDS AND CERTIFICATION Third Floor, Pierce Hall	487-4111
Certification requirements and transcripts	
ACADEMIC PROGRAMS ABROAD 330 Goodison Hall	487-2424
ADMISSIONS OFFICE 401 Pierce Hall	487-3060
AFFIRMATIVE ACTION OFFICE 310 King Hall	487-0016
ALUMNI RELATIONS OFFICE 15 Welch Hall	487-0250
ATHLETICS OFFICE 200 Bowen Field House	487-0351
Athletic information and tickets	
CAMPUS LIFE, OFFICE OF 221 Goodison Hall	487-3045
Student Government; Residence Hall Association; University Judicial Board; <i>Eastern Echo</i> ; <i>Aurora</i>	
CAREER SERVICES CENTER Fourth Floor, Goodison Hall	487-0400
Teaching vacancies; registration of applicants for teaching, business and industrial positions; opportunities for earning a portion of University expenses.	
COUNSELING SERVICES Snow Health Center	487-1118

EQUITY PROGRAMS, OFFICE OF 204 Pierce Hall	487-2133
Support services to African American, Hispanic American, Native American, and Asian American students. The programs and services provided range from College Days to doctoral scholarships. Information; counseling; tutoring; assistance with grievance procedures for minority students.	
FINANCIAL AID OFFICE 403 Pierce Hall	487-0455
Loans and grants-in-aid; Graduate Assistantships funded by College Work-Study	
FOREIGN STUDENT AFFAIRS 208-209 Goodison Hall	487-3116
GRADUATE SCHOOL OFFICE Starkweather Hall	
Ronald E. Goldenberg, Dean	487-0042
Jeanne Clerc, Associate Dean	487-0042
James T. Bushey, (Interim) Assistant Dean	487-0048
Graduate Applications	487-3400
International Student Application	487-0205
Graduate School Admissions	487-3400
Graduate Records	487-0093
Graduate Advising	
See pages 217-219 for coordinators of advising listed by program areas.	
HOUSING OFFICE Basement Dining Commons #1	487-1300
LEARNING RESOURCES AND TECHNOLOGIES (Library)	487-0020
McKENNY BOOKSTORE McKenny Union Basement	487-1000
Textbooks; educational materials; class rings	
PARKING CONTROL Parking Structure	487-3450
PUBLIC SAFETY DEPARTMENT Parking Structure	487-1222
Police and fire	
REGISTRATION OFFICE 303 Pierce Hall	487-2300
Registration of students for on/off campus classes	
SNOW HEALTH CENTER	487-1122
Physician and nursing services; professional counseling; TB testing	
STUDENT ACCOUNTING 203 Pierce Hall	487-3335
University fees	
UNIVERSITY CHILDREN'S INSTITUTE Snow Health Center	487-1126
Child care for preschool children of students; summer and evening program through age 12	
VETERANS AFFAIRS OFFICE 201-202 Goodison Hall	487-3119
Veterans affairs and education benefits	

UNIVERSITY CAMPUSES

Eastern Michigan University occupies 420 acres on the north-western side of the city of Ypsilanti on high ground overlooking the Huron River valley.

The 217-acre main campus encompasses historic and new academic buildings, residence halls and physical education facilities including Bowen Field House and Olds Student Recreation Center. Nearby outdoor general recreational fields include the equivalent of four softball diamonds or two football fields—all under light for nighttime use—17 tennis courts, eight of which are lighted, and softball playing fields for women's sports.

The Clarence M. Loesell Field Laboratory, a 21-acre tract west of the main campus, was dedicated in 1958 in honor of the longtime head of the Natural Science Department (now the Biology Department). It provides an undeveloped, natural habitat for the study of wildlife, flora and fauna for teaching of natural sciences.

The west campus was created in 1965 and 1967 by the addition of 142 acres of land to allow expansion of the academic campus into the site of athletic areas. It includes a baseball stadium, football stadium, all-weather running track, six intramural fields, two practice football fields, apartment complexes and paved parking.

The Kresge Environmental Education Center at Fish Lake in Mayfield Township, Lapeer County, was created in 1965 as a resident field study center for experimentation and dissemination of environmental education programs. The 241-acre site is surrounded on three sides by 4,000 acres of the Lapeer State Game Area and has a wide variety of topography, a natural lake, a man-made impoundment and a bog for aquatic studies. Facilities include a 64-person dormitory, a dining commons that can feed 200, a remodeled one-room schoolhouse, and four modular units that house the center office, provide staff housing and a lab-classroom.

UNIVERSITY BUILDINGS

University buildings continue to increase in number to serve the needs of educational growth and change. Remodeling of old buildings is continuous to update facilities and to accommodate departmental reorganization as well as growth. Almost all of EMU's major classroom, administration, and residence halls are named in honor of early administrators and dedicated faculty who laid the foundation for educational advancement or for donors who have assured the University's future.

Frederick M. Alexander Music Building, completed in 1980, houses the departments of Music and Foreign Languages and Bilingual Studies. It features three large rehearsal rooms (band, choir, and orchestra), a 150-seat recital hall, an organ teaching recital facility, and 64 individual practice rooms. Designer/architect Robert C. Wakely, Sr. employed the latest in acoustical and sound isolation techniques to provide for music instruction.

The **Business and Finance Building**, adjacent to Pease Auditorium, is utilized by the Division of Business and Finance to administer the business operations of the University.

Richard G. Boone Hall, built in 1914 as an administration building, now houses the College of Education offices and classrooms. It is named for the ninth president of the Normal College (1893-1899).

Wilbur P. Bowen Field House, completed in 1955 and named for the founder and long-time head of the Department of Physical Education, is the home of the Eagle basketball teams. It also has an eight-laps-to-the-mile track, locker facilities, and a hard surfaced infield. Additions in recent years to both the south and north ends of the building have added to its ability to serve the needs of the University community.

Walter O. Briggs Hall was the first unit of the University's field house. The \$150,000 grant that provided the initial building was given by Briggs when he was owner of the Detroit Tigers baseball team.

The **University Library**, opened in 1967, has provided the University with more than five times the floor space and double the book capacity of the original Mark Jefferson Library (in what is now Ford Hall). The seating capacity is 1,800 and most library materials are on open shelves. The lower floors house the Media Services Center and the Instructional Support Center and include a computer laboratory for student use.

R. Clyde Ford Hall, created as the Mark Jefferson Library, bears the name of the modern literature professor who headed the library during his tenure from 1903-1940. It has been remodeled twice and since 1982 has provided office and classroom space and art galleries for the Art Department. The Department of Communication and Theatre Arts also holds most of its production classes in this building to utilize two television studios on a lower floor. The building was opened in 1929 and first remodeled in 1967.

Bertha M. Goodison Hall, dedicated in memory of the 1900-1937 Department of Art professor and head, houses the offices of Campus Life, Career Services, Continuing Education, Dean of Students, Faculty Council, Foreign Student Affairs, International Studies, Minority Affairs, Special Student Services, Student Government, student organizations, Student Media, Upward Bound, Veteran Services, and the Women's Commission.

J. M. Hover Laboratory, completed in 1941 and honoring the head of the Department of Natural Sciences and dean of admissions (1919-1940), holds the Department of Biology laboratories, a greenhouse and plant laboratory, plus the Biology Career Center.

Mark Jefferson Hall, new in 1970 and named for the internationally-known professor of geography (1896-1928), has completely equipped modern laboratories for the departments of Chemistry, Biology and Psychology, as well as classrooms and offices for teaching personnel.

Julia Anne King Hall, is the base of operations for the College of Health and Human Services, which uses a limited number of classrooms in this building as well as classrooms in Roosevelt Hall. It houses the offices of the dean of the College of Health and Human Services and the departments and programs of Nursing Education, Occupational Therapy, Social Work, Health Administration, Clinical Laboratory Sciences, and Gerontology. Other offices are those of the Institute for the Study of Children and Families, the National Center of Teaching and Learning, the director of Affirmative Action and the administrative offices of Human Resources. University Radio Station WEMU also is in this building.

Charles McKenny Hall, also named for a past president of EMU, is the student union and social center of the University. Completely remodeled in 1964-65, it is double its original size and now includes cafeteria and dining services, a snack bar, the Eastern Michigan University Bookstore, a bowling alley, a billiard room, offices for student organizations, lounges, meeting rooms, and a large ballroom. McKenny is currently undergoing renovations, which should be completed by Fall 1992.

The **Lloyd W. Olds Student Recreation Center** was dedicated in the fall of 1982. The \$18.2 million facility was named for the former faculty member and HPERD department head who founded the intramural program on campus in 1921. It is funded by student fees and provides recreation and intramural facilities for the entire campus community. Its most distinctive feature is the 50-meter swimming pool which is one of the largest indoor pools in Michigan and has 7-, 8- and 10-meter diving platforms.

The **Paint Research Laboratory**, completed in 1987, is utilized by the Paint Research Association for scientific paint research activity.

The Parking Structure, west of Bowen Field House, will accommodate 800 cars and houses the University Public Safety Department offices. It has direct access to Washtenaw via Oakwood Avenue, is adjacent to Pittman and Ford roads, which bisect the campus, and is accessible from North Huron River Drive via West Tower Drive and Oakwood Avenue. Numerous parking lots for students and faculty surround the campus.

Frederick H. Pease Auditorium, completed in 1914 and named for the long-time head of the Conservatory of Music, is the center for many University and civic activities as well as music events. In the auditorium is the \$100,000 Frederick Alexander Memorial Organ. Pease is currently closed, awaiting state funding for renovations.

John D. Pierce Hall, which in 1948 replaced the original building on campus, honors the first superintendent of public instruction in the state of Michigan. It houses Admissions and Financial Aid, the Office of the Registrar, Equity Programs, Cashier's Office, and Student Accounting.

Pray-Harold Hall provides classrooms and offices for the departments of English Language and Literature, History and Philosophy, Mathematics, Computer Science, Sociology, Economics, Political Science, and Women's Studies in the College of Arts and Sciences. The Administrative Computer Center is located on the first floor. Pray-Harold recognizes the services of Carl E. Pray, head of the History Department from 1913-1927, and Charles F. Harrold, professor of English literature from 1925-1943.

Daniel L. Quirk Jr. Dramatic Arts Building, original funds for which were made available by the Quirk family of Ypsilanti, opened in 1959. The building provided an instructional theatre seating 381, a flexible laboratory theatre, scene and costume shops, radio facilities, an outdoor amphitheater, classrooms and offices for drama, speech and radio activities. In 1966, a classroom-office wing was added to accommodate increased needs in all areas, especially TV broadcasting and film. In 1983, the Department of Communication and Theatre Arts and the University launched a major capital fund raising campaign to enclose the 200-seat outdoor amphitheater and expand the capabilities of technical studios, costume and scene shops. Construction of these additions was complete in the summer of 1985. The Sponberg Theatre, named for former EMU President Harold Sponberg, was added a few years later.

The Horace H. Rackham School of Special Education, constructed in 1938 as one of many educational projects of the Detroit lawyer and philanthropist, became the first building of its kind in the state dedicated to the needs of special children. It houses a school for impaired children, the Department of Special Education, a speech and hearing clinic, a diagnostic prescriptive clinic for learning-disabled children and their families, and facilities for physical therapy.

Roosevelt Hall, built on campus in 1925 as a laboratory school for training student teachers and providing private education for children of area residents, has been remodeled to house the departments of Human, Environmental and Consumer Resources, Military Science and Health Administration. It was named for President Teddy Roosevelt.

The Sculpture Studio, located on the west campus, is utilized by the Art Department.

William H. Sherzer Hall, erected in 1903 and named for the professor of geology and head of the Department of Natural Sciences (1892-1932), now provides offices and classrooms for the Art Department and contains the University's observatory.

J. M. B. Sill Hall houses classrooms and offices of the College of Technology, founded in 1980. Its large lecture halls are available to other departments. The Art Department retains offices and facilities for its ceramics, jewelry, and multi-media courses on the lower floor.

Glenadine C. Snow Health Center, named for the first medical director of health services (1915-1947) who created the plans for the building, opened in 1959, includes a pharmacy, medical laboratory, X-ray department, physicians' clinical offices, nurses' consulting rooms, examination and treatment areas, mental health counselors' offices, and the Employee Assistance Program. The Children's Center is on the lower level.

Mary Ann Starkweather Hall, erected in 1897 and designated as a student Christian center by the Ypsilanti donor, was remodeled and modernized in 1961. It currently houses the Graduate School.

The Edwin A. Strong Physical Science Building, opened in 1957, houses the departments of Physics and Astronomy and Geography and Geology, providing both laboratory and large lecture halls. Strong was head of the Physical Science Department between 1885-1919.

The Joseph E. Warner Physical Education Building, completed in 1964, is immediately adjacent to Bowen Field House and connected to the Olds Student Recreation Center. It houses offices of the Department of Health, Physical Education, Recreation and Dance, classrooms, gymnasiums, special purpose rooms, and a swimming pool designated for intramural use. Warner, for whom the building is named, was state representative for Washtenaw County, 2nd District.

Adonijah S. Welch Hall, erected in 1896 and the oldest standing building on campus, is named for the first head of the University. It was originally a training school for teachers and a public school and until 1982 housed University business offices. This facility now houses the main administrative offices of the University, Alumni Relations, University Development, Public Information, and State/Federal/Community Relations.

The Corporate Education Center opened in May 1989. It and the nearby Huron Golf Club are owned and operated by EMU. The adjoining Radisson on the Lake Hotel is privately owned. The Corporate Education Center has 38,000 square feet of conference and seminar meeting space, is designed to serve multiple needs, and has the most advanced communications and audio-visual equipment available. The development includes a 133-acre, eighteen-hole championship golf course.

The Gary M. Owen Building, located on Michigan Avenue in downtown Ypsilanti, houses the College of Business and provides classrooms and offices for the departments of Accounting, Finance, Management, Marketing, and Operations Research and Information Systems. The building also contains a library, computer laboratories, and facilities for other programs operated by the College of Business. The building is named for Gary M. Owen, who was Speaker of the Michigan House of Representatives at the time of the building's construction.

Athletic Fields

Two major athletic facilities, in addition to main campus physical education buildings, attract students to the west campus for football and baseball events. Both stadiums also are sites of community, state, and national events such as annual drum corps competitions, Special Olympics, and state high school baseball playoffs.

Rynearson Stadium, named for Elton J. Rynearson, Sr., who coached football for 26 years, is the football stadium. Rynearson is undergoing renovations that will increase the stadium's seating capacity to 30,000. Included are complete press box and locker room facilities.

The Ronald E. Oestrike Stadium, which in 1968 replaced Briggs Field (now the parking lot adjacent to McKenny Union), has a covered grandstand seating 2,500. It is among the finest baseball facilities in intercollegiate competition.

GRADUATE FACULTY

GRADUATE FACULTY STATUS

- Full (F)
- Provisional Full (PF)
- Associate (A)
- Provisional Associate (PA)

ACCOUNTING

- Baldwin-Morgan, Amelia A. (1991) Assistant Professor; PhD, Virginia Polytechnic Institute and State University (PF)
- Burllovich, Linda J. (1991) Assistant Professor; PhD, University of Michigan (A)
- Cianciolo, S. Thomas A. (1985) Professor; PhD, Michigan State University; CPA, State of Michigan (F)
- Clark, George S. (1973) Associate Professor; LL.M., Wayne State University; CPA, State of Michigan (F)
- Devine, Elton A. (1976) Professor; PhD, Louisiana State University (F)
- Ellis, Wayne C. (1979) Associate Professor; PhD, University of Michigan (F)
- Gledhill, Roger C. (1976) Associate Professor; PhD, Virginia Polytechnic Institute (A)
- Kattelus, Susan C. (1990) Assistant Professor; PhD, Michigan State University (A)
- Keros, John W. (1965) Associate Professor; MBA, University of Michigan; CPA, State of Indiana (F)
- Khan, Zafar U. (1989) Assistant Professor; PhD, Louisiana State University; CIA (F)
- Kramer, Morrey (1984) Associate Professor; PhD, University of Michigan (A)
- Okopyn, D. Robert (1988) Associate Professor; PhD, Texas A&M University; CMA, CIA (F)
- Ravenscroft, Susan P. (1988) Assistant Professor; PhD, Michigan State University; CPA, State of Michigan (F)
- Pathak, Chandra P. (1981) Professor; PhD, University of Tennessee; CPA, State of West Virginia (F)
- Senteney, David L. (1989) Assistant Professor; PhD, University of Illinois, Urbana-Champaign (F)
- Sharifi, Mohsen (1981) Professor, Department Head; PhD, Louisiana State University; CMA (F)
- Snyir, Andrew G. (1984) Associate Professor; PhD, Purdue University (A)
- Woodland, Linda M. (1983) Associate Professor; PhD, Purdue University (F)
- Young, Kenneth C. (1974) Associate Professor; PhD, Purdue University (F)

AFRICAN AMERICAN STUDIES

- Semmes, Clovis E. (1988) Associate Professor; PhD, Northwestern University (F)

ART

- Anderson, Marvin C. (1963) Professor; MFA, Cranbrook Academy of Art (F)
- Avedon, Barry (1966) Professor; MFA, Rochester Institute of Technology (F)
- Beginin, Igor (1968) Professor; MA, Wayne State University (F)
- Bocklage, Christopher J. (1985) Associate Professor; MFA, Southern Illinois University, Edwardsville (F)
- Chew, Robert F. (1968) Professor; MFA, University of Illinois (F)
- Fairfield, Richard T. (1963) Professor; MFA, University of Illinois (F)
- Field, Jan M. (1965) Professor; MFA, School of the Art Institute of Chicago (F)
- Freeman, Lawrence L. (1969) Professor; MFA, University of Oregon (F)

- Hunter, Fredrick C. (1967) Professor; MFA, University of Wisconsin (F)
- Iden, Sheldon S. (1968) Professor; MFA, Cranbrook Academy of Art (F)
- Kisor, Douglas R. (1984) Associate Professor; MFA, Western Michigan University (F)
- Kulisek, Diana (1991), Assistant Professor; MFA, New York State College of Ceramics (PF)
- Larou, George R. (1991), Assistant Professor; MFA, California Institute of Arts (PA)
- Loree, John P. (1962) Professor; MFA, Alfred University (F)
- Myers, Julia (1990) Assistant Professor; PhD, University of Maryland (F)
- Otto, Gretchen (1987) Associate Professor; MFA, Cranbrook Academy of Design (F)
- Pappas, John N. (1960) Professor; MA, Wayne State University (F)
- Rubinfeld, Richard L. (1986) Associate Professor; PhD, Ohio State University (F)
- Sandall, James (1977) Professor; MFA, Arizona State University (F)
- Schwartz, Ellen C. (1977) Professor; MA, Institute of Fine Arts, New York; PhD, New York University (F)
- Sharp, David W. (1962) Professor; MFA, State University of Iowa (F)
- Van Haren, John E. (1960) Professor, Department Head; MA, University of Wisconsin (F)
- Washington, Richard E. (1970) Associate Professor; MA, Eastern Michigan University (F)
- Williams, Patricia J. (1976) Professor; MFA, Indiana University (F)
- Witczak, Andrea (1991), Assistant Professor; MFA, University of Illinois at Urbana-Champaign (PA)
- Yager, Jay R. (1968) Professor; MFA, MS, University of Wisconsin (F)
- Zahratka, Michael C. (1960) Professor; MBA, Syracuse University (F)

ASSOCIATED HEALTH PROFESSIONS

- Atchinson, Bernard J. (1986), Assistant Professor; MEd, Georgia State University (A)
- Clerc, Jeanne M. (1983), Interim Associate Dean, Graduate School; Associate Professor; Program Director; EdD, University of Houston (F)
- Dickie, Virginia M. (1988), Assistant Professor; MS, Wayne State University (F)
- Douglass, Richard L. (1987) Associate Professor; PhD, the University of Michigan (F)
- Dreachslin, Janice L. (1987) Associate Professor; PhD, Wayne State University (F)
- Hansen, Ruth A. (1976) Associate Professor; PhD, Wayne State University (F)
- Renk, Clifford (1985) Professor; PhD, University of Florida (F)
- Sonstein, Stephen (1984) Professor, Department Head; PhD, Hahnemann Medical College (F)
- Torres, Roberto (1991), Assistant Professor; PhD, University of Michigan (PF)

BIOLOGY

- Bach, Catherine E. (1991), Associate Professor; PhD, University of Michigan (PF)
- Booth, Howard D. (1967) Professor; PhD, Michigan State University (A)
- Eisenbach, Jamin (1990) Assistant Professor; PhD, University of California-Berkley (A)
- Ghosheh, Najati S. (1965) Professor; PhD, University of Illinois (F)
- Guy, William L. (1989) Assistant Professor; PhD, Wayne State University (A)
- Hannan, Gary L. (1982) Associate Professor; PhD, University of California, Berkley (F)
- Hurst, Edith M. (1973) Professor; PhD, University of Michigan (F)

- Jackson, Dennis C. (1967) Professor; PhD, Michigan State University (F)
- Kurta, Alien (1988) Assistant Professor; PhD, Boston University (F)
- Liu, Stephen C. (1965) Professor; PhD, University of Minnesota (F)
- Milske, Paul W. (1967) Associate Professor; MA, University of Michigan (F)
- Minick, Merlyn C. (1966) Professor; PhD, Wayne State University (F)
- Neely, Robert K. (1984) Associate Professor; PhD, Iowa State University (F)
- Novak, John A. (1986) Assistant Professor; PhD, University of Michigan (A)
- Reinthal, Peter N. (1991) Assistant Professor; PhD, Duke University (F)
- Shapiro, Douglas Y. (1992) Professor, Department Head; MD, Case Western Reserve; PhD, Cambridge University (F)
- Simone, P. George (1977) Associate Professor; PhD, University of New Mexico (F)
- Stevens, Suzanne J. (1970) Professor; PhD, University of Michigan (A)
- VandenBosch, James L. (1987) Associate Professor; PhD, University of Michigan (F)
- Volz, Paul A. (1969) Professor; PhD, Michigan State University (F)
- Waffle, Elizabeth L. (1968) Associate Professor; PhD, Iowa State University (F)
- Walker, Glenn K. (1976) Professor; PhD, University of Maryland (F)
- Yu, Shih-An (1967) Professor; PhD, University of New Hampshire (F)

BUSINESS AND INDUSTRIAL EDUCATION

- Barnes, James L. (1987) Associate Professor; EdD, Virginia Polytechnic Institute and State University (F)
- Jennings, Gerald L. (1963) Professor; PhD, Michigan State University (F)
- Kieft, Lewis D. (1971) Professor; PhD, Ohio State University (F)
- Leapard, David W. (1992), Assistant Professor; PhD, University of South Carolina (PF)
- McDole, Thomas L. (1980), Associate Professor; PhD, Michigan State University (F)
- Meyer, Earl (1990) Associate Professor; MED, PhD, Georgia State University (A)
- PaDelford, Harold E. (1970) Professor; PhD, University of Minnesota (F)
- Remp, Ann M. (1984) Professor, Department Head; PhD, Michigan State University (F)
- Ristau, Robert A. (1973) Professor, Interim Dean of College of Technology; PhD, University of Wisconsin (F)
- Robek, Mary F. (1958) Professor; PhD, University of Michigan (A)
- Rokusek, H. James (1964) Professor; PhD, University of Maryland (F)
- Wilson, Herbert H. (1966) Associate Professor; MA, West Virginia University (F)
- Wingo, Rosetta C. (1968) Professor; PhD, Michigan State University (A)

CHEMISTRY

- Brabec, Michael J. (1986) Professor; PhD, University of Wyoming (F)
- Brewer, Stephen (1969) Professor; PhD, University of Wisconsin (F)
- Contis, Ellene T. (1980) Associate Professor; MS, University of Pittsburgh (F)
- Howard, Arthur S. (1990) Associate Professor; PhD, Cambridge University (A)
- Levy, Judith T. Z. (1986) Professor, Department Head; PhD, Johns Hopkins University School of Medicine (F)
- Millett, Maria C. (1986) Assistant Professor; PhD, University of Wisconsin (F)

- Nicholson, Elva M. (1972) Professor; PhD, Harvard University (F)
- Nord, Ross S. (1986) Associate Professor; PhD, Iowa State University (F)
- Phillips, Donald B. (1973) Professor; PhD, University of Georgia (F)
- Powell, Ralph R. (1966) Associate Professor; PhD, Purdue University (F)
- Ramsay, O. Bertrand (1965) Professor; PhD, University of Pennsylvania (F)
- Rengan, Krishnaswamy (1970) Professor; PhD, University of Michigan (F)
- Schullery, Stephen E. (1970) Professor; PhD, Cornell University (F)
- Scott, Ronald M. (1959) Professor; PhD, University of Illinois (F)
- Sullivan, John M. (1958) Professor; PhD, University of Michigan (F)
- Tornquist, Wade J. (1986) Associate Professor; PhD, University of Minnesota (F)
- Williamson, Jerry R. (1967) Associate Professor; PhD, University of Iowa (F)
- Work, Stewart D. (1964) Professor; PhD, Duke University (F)
- Yamauchi, Masanobu (1965) Professor; PhD, University of Michigan (F)

COMMUNICATION AND THEATRE ARTS

- Aldridge, Henry B. (1972) Professor; PhD, University of Michigan (F)
- Beagen, Dennis M. (1969) Professor, Department Head; MA, University of Michigan (F)
- Bird, P. George (1955) Professor; MS, University of Wisconsin (F)
- Bowen, Harry W. (1967) Professor; PhD, University of Pittsburgh (F)
- Capeci, John J. (1990) Assistant Professor; PhD, Southern Illinois University (F)
- Compton, Gail W. (1969) Professor; PhD, University of Wisconsin (A)
- Evans, Gary L. (1964) Professor; PhD, University of Michigan (F)
- Gousseff, James W. (1963) Professor; PhD, Northwestern University (A)
- Hammill, Geoffrey D. (1987) Assistant Professor; PhD, Bowling Green University (F)
- Liggett, Lucy A. (1983) Professor; PhD, University of Michigan (F)
- Martin, Annette (1963) Professor; PhD, University of Michigan (F)
- McCracken, Sally R. (1968) Professor; PhD, Wayne State University (F)
- McElya, Mitchel R. (1967) Professor; MFA, University of Wisconsin (F)
- Morgan, Willie B. (1968) Professor; MA, University of Virginia (F)
- Murray, Thomas J. (1963) Professor; PhD, University of Michigan (F)
- Robinson, James A. (1988) Assistant Professor; PhD, University of Michigan (F)
- Smith, Karen P. (1988) Assistant Professor; MFA, Eastern Michigan University (F)
- Stevens, Kenneth W. (1976) Professor; MA, University of Cincinnati (F)
- Strand-Evans, Katherine E. (1973) Professor; MFA, Ohio University (F)
- Watson, Mary A. (1990) Associate Professor; PhD, University of Michigan (F)
- Zimmer, Patricia M. (1980) Associate Professor; MFA, Florida State University (F)

COMPUTER SCIENCE

- Chaudhuri, Ranjan (1984) Associate Professor; PhD, University of South Florida (F)
- Cooper, John K., Jr. (1980) Assistant Professor; PhD, Michigan State University (F)
- Dempster, Andrew C. (1966) Associate Professor; PhD, University of Michigan (F)

- Haynam, George E. (1986) Professor, Department Head; PhD, Case Institute of Technology (F)
- Haynes, Susan M. (1992) Assistant Professor; PhD, University of Michigan (PF)
- Höft, Hartmut F. W. (1970) Professor; PhD, University of Houston (F)
- Lauckner, Kurt F. (1963) Professor; PhD, University of Michigan (F)
- Lintner, Mildred D. (1986) Professor; PhD, University of Michigan (F)
- McMillan, William W. (1984) Associate Professor; PhD, Case Western Reserve (F)
- Remmers, John H. (1968) Associate Professor; PhD, University of Michigan (F)
- Sachdev, Sushil K. (1980) Associate Professor; PhD, University of Arizona (A)
- Tehrani-pour, Aby (1990) Associate Professor; PhD, University of Nebraska (F)
- Zeiger, Michael (1979) Assistant Professor; PhD, University of Michigan (F)

ECONOMICS

- Abdullah, Dewan A. (1988) Assistant Professor; PhD, University of Kentucky (F)
- Anderson, John E. (1977) Professor; PhD, Claremont Graduate School (F)
- Chung, Young-Iob (1966) Professor, Department Head; PhD, Columbia University (F)
- Crary, David B. (1980) Assistant Professor; PhD, University of Maryland (F)
- Edgren, John A. (1979) Associate Professor; PhD, University of Michigan (F)
- Erenburg, Sharon J. (1987) Assistant Professor; PhD, University of Illinois (A)
- Esposito, Alfredo G. (1990) Assistant Professor; JD, PhD, Temple University (PF)
- Figart, Deborah M. (1990) Assistant Professor; PhD, American University (PF)
- Hanna, Raouf S. (1977) Associate Professor; PhD, Indiana University (F)
- Hayworth, Steven C. (1977) Associate Professor; PhD, Massachusetts Institute of Technology (F)
- Moreland, Kemper W. (1980) Associate Professor; PhD, University of Wisconsin (F)
- Multaso, Eija E. (1989) Assistant Professor; PhD, Purdue University (PF)
- Pearson, Donald W. (1969) Professor; PhD, University of Texas (F)
- Thornton, James (1991) Assistant Professor; PhD, University of Oregon (PF)
- Vogt, Michael G. (1978) Associate Professor; PhD, University of Wisconsin (F)
- Woodland, Bill M. (1981) Associate Professor; PhD, Purdue University (F)

ENGLISH LANGUAGE AND LITERATURE

- Aristar-Dry, Helen (1991) Professor; PhD, University of Texas at Austin (F)
- Arrington, Phillip (1984) Associate Professor; PhD, University of Louisville (F)
- Bruss, Paul S. (1969) Professor; PhD, University of Rochester (F)
- Case, Franklin D. (1962) Professor; A.M., University of Michigan (F)
- Cassidy, Cheryl (1990) Assistant Professor; PhD, University of Michigan (PF)
- Cross, B. Gilbert (1966) Professor; PhD, University of Michigan (F)
- Dalbey, Marcia A. (1988) Professor, Department Head; PhD, University of Illinois (F)
- Däumer, Elisabeth (1992) Assistant Professor; PhD, Indiana University (PF)

- Denning, Keith (1989) Assistant Professor; PhD, Stanford University (F)
- Devers, James (1968) Professor; PhD, University of California, Los Angeles (F)
- Duncan, Jeffrey L. (1971) Professor; PhD, University of Virginia (F)
- Dunlap, Elaine (1990) Assistant Professor; PhD, University of Massachusetts (PA)
- Dye, Jean E. (1987) Associate Professor; PhD, Miami University (F)
- Eiss, Harry E. (1987) Associate Professor; PhD, University of North Dakota (F)
- Eshleman, Clayton (1986) Professor; MA, Indiana University (F)
- Flanagan, Brenda Phillips (1988) Associate Professor; PhD, University of Michigan (F)
- Fleischer, Catherine (1990) Assistant Professor; PhD, University of Michigan (F)
- Geherin, David J. (1969) Professor; PhD, Purdue University (F)
- Harris, Arthur J. (1967) Professor; PhD, University of Birmingham, England (F)
- Hauer, William R. (1969) Assistant Professor; PhD, University of Illinois-Urbana (F)
- Hayden, Lucy Kelly (1988) Professor; PhD, University of Michigan (F)
- Helbig, Alethea K. (1966) Professor; MA, University of Michigan (F)
- Hennings, Thomas P. (1969) Associate Professor; PhD, University of Wisconsin (F)
- Ingersoll, Sheila M. (1971) Professor; PhD, Northwestern University (A)
- Ingram, Elizabeth M. (1967) Professor; PhD, University of Pennsylvania (F)
- Jernigan, E. Jay (1965) Professor; PhD, Kansas State University (A)
- Jordan, Eunice L. (1970) Professor; PhD, Wayne State University (F)
- Kauffman, Janet (1988) Professor; PhD, University of Chicago (F)
- Klaus, Meredith M. (1966) Associate Professor; PhD, University of Michigan (F)
- Kraft, Robert G. (1969) Professor; PhD, University of Washington (F)
- Larson, Russell R. (1970) Professor; PhD, University of Michigan (A)
- Lawniczak, Donald A. (1967) Professor; PhD, Kent State University (A)
- McGlynn, Paul D. (1964) Professor; PhD, Rice University (F)
- Miller, Bernard A. (1987) Associate Professor; PhD, Purdue University (F)
- Norton, Alexandra M. (1989) Assistant Professor; PhD, University of California-Berkeley (F)
- Perkins, George B. (1967) Professor; PhD, Cornell College (F)
- Reynolds, James A. (1967) Professor; PhD, University of Michigan (F)
- Seely, T. Daniel (1988) Assistant Professor; PhD, University of Massachusetts-Amherst (F)
- Shichtman, Martin B. (1984) Associate Professor; PhD, University of Iowa (F)
- Shuter, William F. (1968) Professor; PhD, University of Wisconsin (F)
- Smith, Lawrence R. (1970) Professor; PhD, University of California, Berkeley (F)
- Staal, Arie (1968) Professor; PhD, University of Michigan (F)
- White, Patrick T. (1967) Professor; PhD, University of Michigan (F)
- Wojcik-Andrews, Ian (1990) Assistant Professor; PhD, University of Connecticut (F)

FINANCE AND COMPUTER INFORMATION SYSTEMS

- Ahmad, S. Imtiaz (1980) Professor; PhD, University of Ottawa (F)
- Diallo, Alahassane (1985) Associate Professor; PhD, Ohio State University (A)

- Esteva, Juan C.** (1990) Assistant Professor; PhD, Wayne State University (F)
- Farah, Badie N.** (1982) Professor; PhD, Ohio State University (F)
- Garg, Ramesh C.** (1978) Professor; D.B.A., Kent State University (F)
- Hutchins, Ronald E.** (1977) Associate Professor; PhD, University of Missouri-Columbia (F)
- Khailany, Asad** (1972) Professor; DSc, Washington University (F)
- Khorshid, Wafa** (1990) Assistant Professor; PhD, Wayne State University (F)
- Kiss, Robert M.** (1990) Assistant Professor; PhD, Kent State University (A)
- Mirshah, Hassan** (1986) Associate Professor; PhD, Pennsylvania State University (F)
- Mitri, Michel** (1992) Assistant Professor; PhD, Michigan State University (PF)
- Moeller, Susan E.** (1990) Acting Associate Dean, College of Business; Associate Professor; PhD, Michigan State University (A)
- Mrdalj, Stevan** (1987) Assistant Professor; PhD, University of Belgrade, Yugoslavia (F)
- Rahman, Mahmud** (1991) Assistant Professor; PhD, University of Texas at Arlington (PA)z
- Sanchez, Pedro P.** (1972) Professor; PhD, University of Michigan (F)
- Saxon, Charles S.** (1976) Professor; PhD, University of Michigan (F)
- Sokkar, Fathi F.** (1971) Professor; PhD, University of Illinois (F)
- Tessema, Asrat** (1985) Professor, Department Head; PhD, University of Iowa (F)
- Tummala, V.M. Rao** (1981), Professor; PhD, Michigan State University (F)
- Truax, Terry D.** (1978) Assistant Professor; MS, University of Michigan (A)
- Wu, Nesa L-J** (1974) Professor; PhD, Purdue University (F)

FOREIGN LANGUAGES AND BILINGUAL STUDIES

- Aebersold, Jo Ann** (1984) Professor; PhD, University of Michigan (F)
- Cere, Ronald C.** (1985) Professor; PhD, New York University (F)
- Cline, William J.** (1970) Professor; PhD, State University of New York, Buffalo (F)
- Day, Emily Catherine** (1982) Professor; PhD, University of Illinois-Champaign Urbana (F)
- Dugan, J. Sanford** (1974) Professor; PhD, Washington University-St. Louis (F)
- England, Elizabeth T.** (1987) Associate Professor; PhD, University of Illinois-Champaign Urbana (F)
- Gomez, Pedro** (1988) Assistant Professor; MA, New York University (A)
- Holoka, James P.** (1976) Professor; PhD, University of Michigan (F)
- Hubbard, John R.** (1969) Professor; PhD, Michigan State University (F)
- Kirby, Steven D.** (1991) Professor, Department Head; PhD, University of Kentucky (F)
- McCoy, Ana Maria** (1972) Associate Professor; PhD, University of Michigan (F)
- Morgan, Elisabeth J.** (1991) Assistant Professor; PhD, State University of New York at Buffalo (F)
- Nerenz, Anne G.** (1986) Associate Professor; PhD, University of Wisconsin-Madison (F)
- Palmer, Benjamin W.** (1970) Professor; PhD, Northwestern University (F)
- Pisoni, John C.** (1969) Professor; PhD, University of Michigan (A)
- Robertson, Sharon A.** (1983) Associate Professor; PhD, University of Michigan (F)

- Ruiz, Reynaldo** (1979) Associate Professor; PhD, University of New Mexico (F)
- Vosteen, Thomas R.** (1991), Assistant Professor; PhD, University of Iowa (PF)

GEOGRAPHY AND GEOLOGY

- Cherem, Gabriel J.** (1987) Associate Professor; PhD, University of Michigan (F)
- Cichanski, Allan** (1966) Assistant Professor; MS, Ohio State University (F)
- Jaworski, Eugene** (1971) Professor; PhD, Louisiana State University (F)
- Kasenow, Michael C.** (1989), Assistant Professor; MS, Western Michigan University (A)
- Ligibel, Theodore J.** (1991) Associate Professor; MA, Bowling Green University (PA)
- MacMahan, Horace A.** (1969) Professor; EdD, University of Colorado (F)
- Mancell, Robert B.** (1969) Professor; PhD, the University of Michigan (A)
- McDonald, James R.** (1965) Professor; PhD, University of Illinois (F)
- McLennan, Marshall S.** (1970) Professor; PhD, University of California-Berkeley (F)
- Nazzaro, Andrew A.** (1969) Professor, Department Head; PhD, Michigan State University (F)
- Ojala, Carl F.** (1970) Professor; PhD, University of Georgia (F)
- Raphael, C. Nicholas** (1967) Professor; PhD, Louisiana State University (F)
- Tyler, Norman R.** (1990) Assistant Professor; DArch, University of Michigan (PF)
- Ward, Robert M.** (1969) Professor; PhD, University of Michigan (F)

HEALTH, PHYSICAL EDUCATION, RECREATION, AND DANCE

- Adams, John R.** (1960) Professor; PhD, University of Michigan (F)
- Banks, Gary C.** (1969) Associate Professor; JD, Detroit College of Law (A)
- Beller, Jennifer M.** (1991) Assistant Professor; PhD, University of Idaho (PF)
- Briggs, Douglas W.** (1990) Associate Professor; PhD, Indiana University (A)
- Cavanaugh, Patric L.** (1968) Professor, Department Head; PhD, University of Michigan (F)
- Folkerth, Jean E.** (1985) Associate Professor; ReD., Indiana University (F)
- Moyer, Steve W.** (1988) Associate Professor; EdD, Temple University (F)
- Oestrike, Ronald E.** (1964) Assistant Professor; MS, University of Michigan (A)
- Paciorek, Michael J.** (1981) Professor; PhD, Peabody College (F)
- Pedersen, Erik J.** (1968) Professor; PED., Indiana University (F)
- Ricciardo, Jerry L.** (1988) Associate Professor; PhD, Texas A&M University (A)
- Rupert, Terry A.** (1991) Associate Professor; EdD, University of Southern Mississippi (PF)
- Saunders, Ronald J.** (1963) Associate Professor; PhD, Michigan State University (F)
- Sheard, John E.** (1963) Professor; PED., Indiana University (F)
- Venis, Ronald M.** (1966) Assistant Professor; MS, Indiana University (A)
- Williams, Roger L.** (1968) Professor; EdD, University of Missouri-Columbia (F)
- Witten, Charles X.** (1969) Professor; PhD, Ohio State University (F)
- Witten, Winifred A.** (1974) Associate Professor; PhD, Michigan State University (PF)
- Yeakle, Myrna A.** (1965) Professor; PhD, Ohio State University (F)

HISTORY AND PHILOSOPHY

- Abbott, Richard H. (1966) Professor; PhD, University of Wisconsin (F)
- Boyer, Lee R. (1970) Professor; PhD, University of Michigan (F)
- Briggs, W. Donald (1965) Professor; PhD, University of Michigan (F)
- Cassar, George H. (1968) Professor; PhD, McGill University (F)
- Citino, Robert M. (1991) Associate Professor; PhD, Indiana University (PF)
- Crouch, Margaret A. (1987) Associate Professor; PhD, University of Minnesota (F)
- Duley, Margot I. (1992) Professor, Department Head; PhD, University of London, England (F)
- Flusche, Della M. (1968) Professor; PhD, Loyola University (F)
- Gimelli, Louis B. (1966) Professor; PhD, New York University (A)
- Goff, Richard D. (1964) Professor; PhD, Duke University (F)
- Haftner, Daryl M. (1969) Professor; PhD, Yale University (F)
- Hamel, Michael W. (1970) Professor; PhD, University of Chicago (F)
- King, H. Roger (1967) Professor; PhD, Vanderbilt University (A)
- Long, Roger D. (1990), Assistant Professor; PhD, University of California, Los Angeles (A)
- Mehuron, Kate (1989) Assistant Professor; PhD, Vanderbilt University (F)
- Moss, Walter G. (1970) Professor; PhD, Georgetown University (F)
- Scherer, Lester B. (1969) Professor; PhD, Northwestern University (F)
- Terry, Janice J. (1968) Professor; PhD, University of London, England (F)
- Upshur, Jiu Hwa L. (1971) Professor; PhD, University of Michigan (F)
- Vinyard, JoEllen M. (1986) Professor; PhD, University of Michigan (F)
- Waltz, James C. (1968) Professor, Acting Associate Dean, College of Arts and Sciences; PhD, Michigan State University (F)
- Wilson, Francille R. (1988) Assistant Professor; PhD, University of Pennsylvania (F)

HUMAN, ENVIRONMENTAL, AND CONSUMER RESOURCES

- Bornemeier, Betty L. (1965) Professor; PhD, Texas Woman's University (F)
- Buchanan, Pauline W. (1980) Associate Professor; MS, Michigan State University (F)
- deLaski-Smith, Deborah L. (1978) Associate Professor; PhD, Michigan State University (F)
- Jones, Louise (1990) Assistant Professor; MS, Virginia Polytechnic Institute and State University (A)
- Krieger, Mary L. (1964) Professor; PhD, University of Michigan (F)
- Laws, Duane M. (1971) Professor; EdD, Columbia University (A)
- Mels, Ruby L. (1964) Professor; EdD, Pennsylvania State University (F)
- North, Virginia (1980) Associate Professor; BA, Michigan State University (F)
- Reichbach, Gwendolyn M. (1973) Associate Professor; PhD, University of Michigan (F)
- Rhodes, Elizabeth A. (1986) Professor, Department Head; PhD, University of Tennessee (F)
- Silverman, Deborah A. (1979) Assistant Professor; MS, University of Cincinnati (F)

INDUSTRIAL TECHNOLOGY

- Fields, Daniel J. (1986) Associate Professor; PhD, Michigan State University (F)
- Israel, Everett N. (1986) Professor, Department Head; EdD, West Virginia University (F)
- Jellema, John Jan (1982) Professor; PhD, Michigan State University (F)

- Kanagy, Max E. (1986) Professor; PhD, Ohio State University (F)
- Lin, Su-Chen Jonathon (1988) Associate Professor; PhD Iowa State University (F)
- Lokensgard, Erik (1986) Associate Professor; PhD, Iowa State University (A)
- Shiue, Tony F. (1990), Assistant Professor; PhD, Iowa State University (F)
- Soyster, Thomas G. (1982) Associate Professor; EdD, Temple University (A)
- Tillman, Tracy S. (1990) Assistant Professor; PhD, Purdue University (F)
- Tucker, Walter W. (1978) Professor; PhD, University of Michigan (F)
- Weeks, John A. (1968) Professor; PhD, University of Michigan (PF)

INTERDISCIPLINARY TECHNOLOGY

- Aldridge, Alexandra (1981) Associate Professor; PhD, University of Michigan (F)
- Anagnostou, Taki J. (1987) Professor; PhD, North Dakota State University (F)
- Boyle, John E. (1977) Assistant Professor; MA, Eastern Michigan University (F)
- Dirllikov, Stoil K. (1987) Professor; PhD, Czechoslovak Academy of Science (F)
- Doyle, Timothy (1986) Assistant Professor; MA, Eastern Michigan University (F)
- Gore, David K. (1983) Assistant Professor; MS, Eastern Illinois University (F)
- Hanewicz, Wayne B. (1987) Professor; PhD, University of Michigan (A)
- Jones, Frank (1991) Professor; PhD, Duke University-Durham (F)
- Kuwik, Paul D. (1970) Professor, Department Head; PhD, Ohio State University (F)
- Lawver, Gerald V. (1987) Associate Professor; MS, Eastern Michigan University (A)
- Preston, John M. (1983) Associate Professor; MS, Eastern Michigan University (A)
- Stavros, Demo A. (1984) Professor; PhD, Texas A & M University (F)

LEADERSHIP AND COUNSELING

- Ametrano, Irene M. (1981) Professor; EdD, Rutgers University (F)
- Berry, James (1991) Assistant Professor; EdD, University of Missouri-Columbia (PA)
- Callaway, Yvonne L. (1992) Assistant Professor; PhD, Wayne State University (PA)
- Ditzhazy, Helen R. (1987) Associate Professor; PhD, University of Michigan (F)
- Goodman, Jane S. (1991) Assistant Professor; PhD, Wayne State University (PA)
- Harmon, Alison J. (1990) Assistant Professor; EdD, University of Akron (PA)
- Hetrick, William M. (1990) Associate Professor; EdD, Western Michigan University (PF)
- Mitchell, Charles, Jr. (1988) Associate Professor; EdD, Wayne State University (A)
- Pappas, John G. (1966) Professor; PhD, Kent State University (F)
- Phelps, Christine E. (1992) Assistant Professor; PhD, University of Iowa (PF)
- Price, William (1991) Associate Professor; PhD, Michigan State University (PA)
- Schmitt, Donna M. (1975) Professor, Acting Associate Dean; EdD, Western Michigan University (F)
- Stickel, Sue A. (1991) Assistant Professor; PhD, University of Wyoming (PA)
- Tack, Martha W. (1990) Professor, Department Head; PhD, University of Alabama (F)
- Thayer, Louis C. (1969) Professor; EdD, University of Illinois (F)

Tracy, Jaclynn R. (1992) Assistant Professor; PhD, Michigan State University (PA)
Waidley, John W. (1968) Professor; EdD, New York University (F)

MANAGEMENT

Blanchard, P. Nick (1978) Acting Department Head; Professor; PhD, Wayne State University (F)
Camp, Richard R. (1978) Professor; PhD, Wayne State University (F)
Chowdhry, Pradeep (1980) Associate Professor; PhD, University of Arkansas (A)
Conley, James H. (1969) Professor; PhD, Michigan State University (F)
Croner, Robert P. (1975) Associate Professor; MS, Butler University (F)
Ettington, Deborah (1991), Assistant Professor; MBA, Harvard Business School (PF)
Hendrickson, Lorraine U. (1981) Professor; PhD, University of Michigan (F)
Hermon, Mary E. Vielhaber (1977) Professor; PhD, University of Michigan (F)
Hill, Raymond E. (1989) Professor; PhD, Purdue University (F)
Hoyer, Denise T. (1985) Professor; PhD, University of Michigan (F)
Huszczko, Gregory E. (1978) Professor; PhD, Michigan State University (F)
McEnery, Jean (1980) Professor; PhD, Wayne State University (F)
Nightingale, John P. (1980) Assistant Professor; MA, University of North Dakota (A)
Patrick, Floyd A. (1970) Professor; PhD, University of Iowa (F)
Tubbs, Stewart L. (1974) Professor, Dean, College of Business; PhD, Cornell University (F)
Victor, David A. (1985) Associate Professor; PhD, University of Michigan (F)
Wagner, Fraya W. (1982) Professor; D.B.A., Memphis State University (F)
Waltman, John L. (1985) Professor; PhD, University of Texas (F)

MARKETING

Barton, Daryl L. (1975) Assistant Professor; JD, University of Michigan (A)
Belskus, Albert W. (1969) Associate Professor; PhD, University of Michigan (F)
Defebaugh, Sandra J. (1987) Assistant Professor; JD, Detroit College of Law (PA)
Dodge, H. Robert (1991) Professor, Department Head; PhD, Ohio State University (F)
Edwards, Elizabeth A. (1992) Assistant Professor; PhD, University of Michigan (PA)
Fullerton, Sammy D. (1982) Associate Professor; PhD, Michigan State University (F)
McSurely, Hugh B. (1981) Professor; PhD, Syracuse University (F)
Merz, G. Russell (1982) Associate Professor; PhD, Michigan State University (F)
Neuhaus, Colin F. (1969) Professor; PhD, University of Michigan (F)
Sauber, Matthew H. (1990) Associate Professor; PhD, University of Texas (P)
Peterson, Roger A. (1981) Professor; DBA, University of Tennessee (F)
Sachdev, Harash (1991) Assistant Professor; PhD, Georgia State University (PA)
Victor, Gary M. (1974) Associate Professor; JD, University of Toledo (F)
Welher, Joel S. (1984) Assistant Professor; JD, Wayne State University (F)

MATHEMATICS

Al-Kafaji, Mahmoud (1983) Assistant Professor; PhD, New Mexico State University (A)

Ahlbrandt, Gisela E. (1984) Associate Professor; PhD, University of Illinois, Chicago (F)
Badli, Larry L. (1965) Professor; PhD, Oregon State University (F)
Bartle, Robert G. (1990) Professor; PhD, University of Chicago (F)
Buckeye, Donald A. (1968) Professor; EdD, Indiana University (F)
Carroll, Timothy B. (1986) Associate Professor; PhD, Western Michigan University (F)
Chattopaday, Rita (1984) Associate Professor; PhD, University of South Florida (F)
Chu, Shenghul (1980) Associate Professor; PhD, University of Michigan (PA)
Folk, David B. (1987) Associate Professor; PhD, University of Michigan (A)
Gardiner, Christopher J. (1984) Associate Professor; PhD, University of Illinois, Urbana-Champaign (F)
Ginther, John L. (1965) Professor; PhD, University of Illinois (F)
Goosey, Bob L. (1959) Associate Professor; PhD, University of Michigan (F)
Green, Geraldine A. (1989) Professor; PhD, University of Michigan (PA)
Hee, Christopher E. (1969) Associate Professor; PhD, University of Notre Dame (A)
Howard, Paul E. (1970) Professor; PhD, University of Michigan (F)
Janardan, K.G. (1986) Professor; PhD, Pennsylvania State University (F)
Johnson, David C. (1973) Associate Professor; EdD, University of Georgia (F)
Lick, Donald R. (1985) Professor, Department Head; PhD, Michigan State University (F)
Marshall, Richard W. (1968) Professor; EdD, University of Michigan (PA)
Northey, James H. (1957) Professor; PhD, University of Michigan (F)
Parry, Walter (1984) Associate Professor; PhD, University of California-Berkeley (F)
Rafiq, Mohammed A. (1970) Associate Professor; PhD, Wayne State University (A)
Ramanathan, Jayakumar (1990) Associate Professor; PhD, University of Chicago (PF)
Rankin, Joanne S. (1963) Professor; PhD, University of Michigan (A)
Rescorla, Kim L. (1985) Associate Professor; PhD, University of Utah (PA)
Shiskowski, Kenneth M. (1983) Associate Professor; PhD, Lehigh University (F)
Tayeh, Carla (1989), Assistant Professor; PhD, Southern Illinois University (F)
Ullman, Nelly S. (1963) Professor; PhD, University of Michigan (F)
Walter, James R. (1964) Assistant Professor; PhD, Wayne State University (F)
Warren, Bette (1984) Associate Professor; PhD, Indiana University (F)

MUSIC

Abramson, Armand R. (1967) Professor; MMus, Eastman School of Music (A)
Amos, C. Nelson (1975) Professor; PhD, University of Iowa (F)
Brandon, Ernest M. (1975) Associate Professor; MN, Northwestern University (A)
Eggers, Carter J. (1967) Professor; MMus, Ithaca College (PF)
Foster, Daniel L. (1987) Assistant Professor; MM, University of Illinois (F)
Gajda, Anne B. (1979) Associate Professor; MMus, University of Michigan (F)
Gurt, Joseph (1967) Professor; MS, Julliard School of Music (F)
Hartmann, Donald C. (1990) Assistant Professor; MMus, University of North Carolina (PF)

- Hause, James B.** (1971) Professor, Department Head; EdD, University of Michigan (F)
- Henry, Oscar M.** (1968) Professor; PhD, Ohio State University (F)
- Hill, Rodney L.** (1969) Professor; DMA, University of Michigan (F)
- Iannaccone, Anthony J.** (1971) Professor; PhD, University of Rochester (F)
- Kalib, Sylvan S.** (1969) Professor; PhD, Northwestern University (F)
- Kirkland, Glenda E.** (1973) Professor; MA, Eastern Michigan University (F)
- Mehta, Dady** (1969) Professor; Master of Piano Performance, State Academy of Music, Vienna, Austria (F)
- Meretta, Kristy L.** (1986) Associate Professor; MM, the University of Michigan (F)
- Miller, Kevin D.** (1991) Assistant Professor; BA, Duke University (PF)
- Patrick, Louise R.** (1990) Associate Professor; PhD, Michigan State University (F)
- Pedersen, Garik L.** (1989) Assistant Professor; DMA, University of Iowa (F)
- Pierce, David M.** (1990) Assistant Professor; DMA, University of Illinois (F)
- Plank, Max E.** (1968) Professor; DMA, University of Michigan (F)
- Prince, J. Whitney** (1981) Professor; DMA, University of Colorado-Boulder (F)
- Reed, Russell D.** (1979) Professor; MMus, University of Michigan (F)
- Riccinto, Leonard L.** (1985) Professor; DMA, Michigan State University (F)
- Smith, John R.** (1969) Assistant Professor; MA, Eastern Michigan University (A)
- Teal, Mary D.** (1968) Professor; PhD, University of Michigan (F)
- Winder, Diane L.** (1988) Assistant Professor; MM, Converse College (F)
- Wolke, David O.** (1990) Assistant Professor; PhD, Ohio State University (F)
- Yost, Mary Ida** (1968) Professor; PhD, University of Michigan (F)
- Zirk, Willard** (1981) Associate Professor; MM, Catholic University of America (F)

NURSING EDUCATION

- Beard, Betty J.** (1976) Professor; PhD, University of Michigan (F)
- Williams, Regina M.** (1990) Professor, Department Head; PhD, University of Michigan (A)

PHYSICS AND ASTRONOMY

- Gabl, Edward F.** (1990) Associate Professor; PhD, University of Iowa (F)
- Jacobs, Diane A.** (1985) Associate Professor; PhD, University of Texas, Austin (F)
- Oakes, Alexandria** (1987) Associate Professor; PhD, Lehigh University (F)
- Porter, James C.** (1967) Professor; PhD, Purdue University (F)
- Roth, Richard F.** (1969) Associate Professor; PhD, Princeton University (A)
- Sharma, Natthi L.** (1986) Associate Professor; PhD, Ohio University (F)
- Shen, Weldian C.** (1991) Assistant Professor; PhD, Wayne State University (PF)
- Sheerin, James P.** (1991) Associate Professor; PhD, University of Michigan (PF)
- Silver, Robert** (1966) Professor; PhD, University of California (F)
- Thomsen, J. Marshall** (1986) Associate Professor; PhD, University of Michigan (F)
- Trochet, P. Daniel** (1968) Professor, Department Head; PhD, University of Michigan (F)
- Wooley, Jon K.** (1967) Professor; PhD, University of Michigan (F)
- Wylo, Bonnie L.** (1988) Assistant Professor; MS, Eastern Michigan University (A)

POLITICAL SCIENCE

- Brown, Ronald E.** (1986) Associate Professor; PhD, University of Michigan (F)
- Grady II, Robert C.** (1971) Professor; PhD, Vanderbilt University (F)
- Hortin, David W.** (1968) Associate Professor; JD, University of Michigan (A)
- Hourani, Benjamin T.** (1968) Professor; PhD, Michigan State University (F)
- Johnson, James D.** (1968) Professor; PhD, University of Michigan (F)
- Lindenberg, Karen E.** (1968) Professor; PhD, University of Oregon (F)
- Lottie, Adrian J.** (1992) Assistant Professor; MA, Wayne State University (PA)
- Martin, F. Elaine** (1984) Associate Professor; PhD, University of Oklahoma (F)
- Ohren, Joseph F.** (1985) Professor; PhD, Syracuse University (F)
- Racz, Barnabas A.** (1968) Professor; PhD, University of Michigan (F)
- Reese, Laura A.** (1985) Associate Professor; PhD, Wayne State University (F)
- Rosenfeld, Raymond A.** (1983) Associate Professor; PhD, Emory University (F)
- Scott, Joanna V.** (1990), Professor, Department Head; PhD, University of Strathclyde, Scotland (F)

PSYCHOLOGY

- Bonem, Marilyn K.** (1987) Associate Professor; PhD, Utah State University (A)
- Brackney, Barbara E.** (1975) Associate Professor; PhD, University of Michigan (F)
- Dansky, Jeffrey L.** (1976) Professor; PhD, Bowling Green State University (F)
- Delprato, Dennis J.** (1969) Professor; PhD, Michigan State University (F)
- Friedman, Monroe P.** (1964) Professor; PhD, University of Tennessee (F)
- Gordon, Norman G.** (1975) Professor; PhD, Wayne State University (F)
- Hodges, V. Kay** (1989) Professor; PhD, University of Maryland (F)
- Holmes, Peter A.** (1968) Professor; PhD, University of Delaware (F)
- Karabenick, Stuart A.** (1966) Professor; PhD, University of Michigan (F)
- Knapp, John R.** (1971) Professor; PhD, University of Denver (F)
- McManus, John L.** (1981) Associate Professor; PhD, Ohio State University (F)
- O'Dell, Jerry W.** (1966) Professor; PhD, University of Michigan (F)
- Roff, James D.** (1976) Professor; PhD, University of Minnesota (A)
- Rusiniak, Kenneth W.** (1981) Professor; Department Head; PhD, University of California-Los Angeles (F)
- Todd, James T.** (1990) Assistant Professor; PhD, University of Kansas (PF)
- von Kluge, Silvia** (1990) Assistant Professor; PhD, Michigan State University (F)
- Westman, Alida S.** (1972) Professor; PhD, Cornell University (F)
- Youssef, Zakhour I.** (1965) Professor; PhD, Wayne State University (A)

SOCIAL WORK

- Brown, Kaaren S.** (1978) Professor; MSW, University of Michigan (F)
- Ifill, Don A.** (1985) Professor; EdD, University of Southern California (F)
- Kaufman, Elizabeth W.** (1989) Assistant Professor; PhD, University of Michigan (A)
- Krajewski-Jaime, Elvia R.** (1985) Associate Professor; MSW, Temple University (F)

- Kurtz, Linda F.** (1989) Professor; DPA., University of Georgia (F)
Loppnow, Donald M. (1976) Professor, Department Head; PhD, University of Michigan (F)
Massie, Enos R. (1989) Assistant Professor; MSW, MA, University of Michigan (A)
McFadden, Emily Jean (1981) Professor; MSW, University of Michigan (F)
Mink, George (1981) Associate Professor; MA, University of Michigan (F)
Schuster, Elizabeth O. (1986) MA, University of Michigan (A)
Smith, Marguerite D. (1971) Associate Professor; MSW, University of Michigan (F)
Ziefert, Marjorie (1981), Professor; MSW, Columbia University (F)

SOCIOLOGY, ANTHROPOLOGY, AND CRIMINOLOGY

- Adams, Anthony T.** (1988) Assistant Professor; MA, University of Michigan (A)
Barak, Gregg (1991) Professor, Department Head; PhD, University of California-Berkeley (F)
Cerroni-Long, E. L. (1987) Associate Professor; PhD, University of California (F)
Easto, Patrick C. (1970) Professor; PhD, Syracuse University (A)
Ehrlich, Allen S. (1968) Professor; PhD, University of Michigan (F)
Henry, Stuart D. (1987) Associate Professor; PhD, University of Kent, England (F)
Johns, Christina J. (1992) Associate Professor; PhD, University of Edinburgh, Scotland (PF)
Kersten, Lawrence K. (1966) Professor; PhD, Wayne State University (F)
Moaddel, Mansoor (1987) Associate Professor; PhD, University of Wisconsin (F)
Moss, Gordon E. (1971) Professor; PhD, State University of New York, Buffalo (F)
Rankin, Joseph H. (1984) Professor; PhD, University of Arizona (F)
Richmond-Abbott, Marie L. (1973) Professor; PhD, Florida State University (F)
Ryan-Warren, Patricia (1966) Professor; PhD, University of Michigan (F)
Sinclair, Karen P. (1974) Professor; PhD, Brown University (F)
Thalhofer, Nancy N. (1969) Assistant Professor; PhD, University of Michigan (A)
Truzzi, Marcello (1974) Professor; PhD, Cornell University (F)
Warren, Bruce L. (1969) Professor; PhD, University of Michigan (F)
Wasserman, Ira M. (1969) Professor; PhD, University of Michigan (F)
Weinstein, Jay (1985) Professor; PhD, University of Illinois, Urbana (F)
Westrum, Ronald M. (1972) Professor; PhD, University of Chicago (F)

SPECIAL EDUCATION

- Anderson, Roberta E.** (1976) Assistant Professor; MA, Eastern Michigan University (A)
Beebe, Michael C. (1976) Associate Professor; PhD, University of Michigan (F)
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