

UM-Flint Course Catalog • 2007-2009

TO DIST

THE MISSION OF THE UNIVERSITY OF MICHIGAN-FLINT

The Flint campus of the University of Michigan is a community of diverse learners and scholars, where students from this region and beyond prepare for leadership, achievement, and service through interactive instruction in the arts, sciences, humanities, and professions. Our mission rests on three pillars: excellence in teaching, learning, and scholarship; student-centeredness; and engaged citizenship. Our students become leaders in their fields, in their professions, and in their communities.

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The Catalog constitutes the official document of the University, although the information therein is subject to change at any time by official action of the University of Michigan-Flint. A printed version of this Catalog is published biannually and an updated version is made available on the web at http://www.umflint.edu/Departments/catalog. Corrections not affecting graduation requirements will appear on the web at any time following approval. Program and degree requirements take effect at the beginning of the Fall semester following approval unless altered through official action of the University of Michigan-Flint; these requirements will appear on the Catalog web page in years that a printed version of the Catalog is not produced.

Regents of the University



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*Includes discrimination based on gender identity and gender expression.

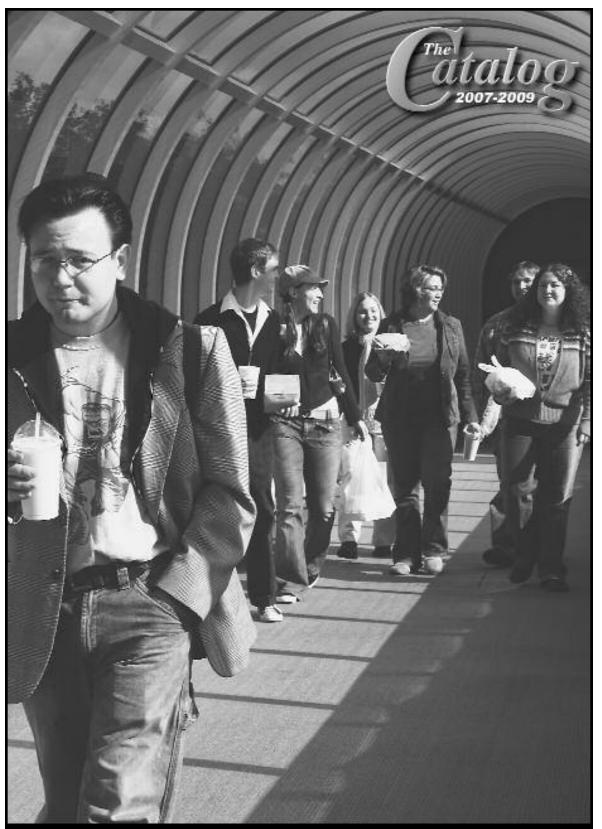
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General Information

GENERAL INFORMATION

How to Use the Catalog

Where to Find Information

This Catalog is divided into twelve sections:

General Information

Material on how to use the Catalog; the academic calendar; an introduction to the University including objectives, programs, and a history; admission and orientation procedures, tuition and fees, residence regulations, financial aid, and extended hours.

Academic Policies of the University

Academic Regulations; Student Rights and Responsibilities.

Resources for the University Community

Information about the Library, Advising, Adult Resource, Women's and Writing Centers, Information Technology Services, Experiential Education, and WFUM; descriptions of social, recreational, and support services offered through the Student Development Center and the Office of Student Life.

Programs of Study

A guide to programs and degrees listing all concentration majors and minors, and information on undergraduate study, and Extension and Continuing Education.

General Education Program

General education program requirements and a planning worksheet.

College of Arts and Sciences Undergraduate Programs and Courses

School of Education and Human Services Undergraduate Programs and Courses

School of Health Professions and Studies Undergraduate Programs and Courses

School of Management Undergraduate Programs and Courses

Graduate Programs and Courses

Specific information on regulations, procedures, programs, degrees and courses.

University Honors Program and Courses

Directory

Personnel listings; the index; maps of the campus; offices to contact for further information.

How to Read a Course Description

Course Offerings

The Catalog includes information for each academic department or program, followed by a list of course offerings. Brackets [] enclosing a course entry, with the description omitted, indicate a low probability that this course will be offered. A schedule of

courses to be offered in each semester or term is published prior to the registration period for that semester or term.

Courses are offered during an academic year composed of 14-week fall and winter semesters and 7-week spring and summer terms. Some courses meet for more than seven weeks during the spring and summer.

Course Numbers and Titles

Course numbers and titles are printed in the *Catalog* in **boldface** type. A number in parentheses following the course number indicates that the course had previously been listed by this number.

Courses numbered 100 to 299 are introductory and intermediate courses; those numbered 300 to 499 are usually advanced undergraduate courses.

Courses numbered **500** and above are for graduate students and may not be elected by undergraduates except with approval from the school or college.

Prerequisites and Requirements

Some courses carry specific prerequisites printed in *italics* immediately following the course number and title.

Credits

Credit is indicated by an *italic* number in parentheses following the course title and prerequisites (if any). Credits are earned by semester hours. One credit is usually earned for each hour of lecture per week in courses offered during a fall or winter semester, or for each two hours of lecture per week during a spring or summer term. Courses with labs involve additional hours of meeting time each week.

Symbols Used in Course Descriptions

Many courses apply toward General Education Requirements. (See the section "General Education" for further explanation.)

The letter *f*, *h*, *n*, or *s* in *italics* immediately following the number of credits, indicates the General Education Requirement to which a course applies:

f fine arts
h humanities
n natural science
s social sciences

Special Information

Information in italics following the course description gives any special information. For example, if a course is listed in more than one department, this crosslisting is given. If the course can be elected more than once or must be taken concurrently with another course, this is designated here.

Grades

Most courses are graded on an ABCDE system. Unless another grading system appears, this is the grading system used. When an alternate grading system is used, the information appears in *italics* at the end of the course description. *Pass/Fail* indicates that a course is offered only on a pass/fail basis. In *ABC>N*, *ABCC->N*, *ABCD>N*, and *ABCDD->N* courses, the grade printed just before the > sign is the lowest grade for which credit is granted.

Sample Course Description

The example which follows may help in interpreting the information included in course descriptions.

156. Great Books II. HON 155 or consent of Honors Director. (5)h.

Continuation of HON 155, including two class periods a week

of written critical analysis. Works from the Enlightenment to the nineteenth and early twentieth centuries. Completion of HON 155 and 156 fulfills the general education requirement in English composition. Graded ABC>N.

EDT

EHS

EDU

THE

WGS

Theatre

Women's and Gender Studies

Technology Education

Education

School of Education and Human Services Courses

The number and name of the course are in **bold type**. The prerequisites follow in italics. The student must have taken Honors 155 or obtain the consent of the Director of the Honors Program in order to elect this class. The (5) indicates that this is a five-credit class. The h means that it counts for humanities credit in the General Education Requirements.

The course description is given, followed by special information, printed in italics. The grading system is given; the lowest grade for which credit is granted for this course is a *C*. (If no grading system is listed, the course is graded on an ABCDE system.)

Course Abbreviations

AFA Africana Studies **AMC** American Culture ANE Anesthesia ANT Anthropology ARB Arabic ARH Art History ART Art AST Astronomy BIO Biology BUS Business CAS College of Arts and Sciences CHM Chemistry CIS Computer Information Systems COM Communication Comparative Literature CPL CRJ Criminal Justice **CSC** Computer Science DAN Dance ECE Early Childhood Education **ECN Economics EDE** Elementary Education Education Leadership **EDL**

Mathematics Education

Secondary Education

Reading & Language Arts

Education of Students with Special Needs

EDM

EDN EDR

EDS

EGR Engineering **ENG** English **Environmental Studies ENV** FOR Foreign Languages French FRN **GEO** Physical Geography GER German **HCR** Health Care **HED** Health Education HIS History HON Honors International and Global Studies INT ITL Italian JPN Japanese LAT Latin LIN Linguistics "Middle Eastern" Studies MES Management MGT MTH Mathematics MTP Medical Technology MUS Music NUR Nursing Nursing Support Course NSC PHL Philosophy PHY Physics POL Political Science Psychology PSY PTP Physical Therapy PUB **Public Administration** Resource Planning RPL Radiation Therapy RTT RUS Russian SAT Substance Abuse Treatment SCI Science SOC Sociology SPN Spanish **SWK** Social Work

ACADEMIC CALENDAR*

		SUMMER TERM	1 2007
March	21	Wednesday	Registration for continuing students opens
April	5	Thursday	Registration for new students opens
July	2	Monday	Classes begin
	3 (10:30 p.m.)	Tuesday	Holiday recess begins
	4	Wednesday	Holiday- Independence Day
	5	Thursday	Classes resume
August	18	Saturday	Classes end
	19	Sunday	Study Day
	20-22	Mon-Wed	Examinations
		FALL TERM 2	007
March	21	Wednesday	Registration for continuing students opens
April	5	Thursday	Registration for new students opens
August	29	Wednesday	Classes begin
September	3	Monday	Holiday- Labor Day
November	20 (10:30 p.m.)	Tuesday	Thanksgiving recess begins
	26	Monday	Classes resume
December	10	Monday	Classes end
	11	Tuesday	Study day
	12-15, 17-19	Wed-Sat, Mon-Wed	Examinations
	16	Sunday	Commencement
		WINTER TERM	2008
November	14	Wednesday	Registration for continuing students opens
December	31	Monday	Registration for new students opens
January	7	Monday	Classes begin
J	21	Monday	Martin Luther King, Jr. Day
		(classes cancelled, universi	
February	23 (10:30 p.m.)	Saturday	Spring recess begins
March	3	Monday	Classes resume
April	21	Monday	Classes end
r	22	Tuesday	Study day
	23-26, 28-30	Wed-Sat, Mon-Wed	Examinations
	27	Sunday	Commencement
		SPRING TERM	2008
March	19	Wednesday	Registration for continuing students opens
April	3	Thursday	Registration for new students opens
May	5	Monday	Classes begin
·	24 (10:30 p.m.)	Saturday	Holiday recess begins
	26	Monday	Holiday- Memorial Day
	27	Tuesday	Classes resume
June	23	Monday	Classes end
	24	Tuesday	Study Day
	25-27	Wed-Fri	Examinations
		SUMMER TERM	1 2008
March	19	Wednesday	Registration for continuing students opens
April	3	Thursday	Registration for new students opens
June	30	Monday	Classes begin
July	3 (10:30 p.m.)	Thursday	Holiday recess begins
- ··· - <i>J</i>	4	Friday	Holiday-Independence Day
	7	Monday	Classes resume
August	16	Saturday	Classes end
8	17	Sunday	Study Day
	18-20	Mon-Wed	Examinations

ACADEMIC CALENDAR*

		FALL TERM 2	008
March	19	Wednesday	Registration for continuing students opens
April	3	Thursday	Registration for new students opens
August	27	Wednesday	Classes begin
September	1	Monday	Holiday- Labor Day
November	25 (10:30 p.m.)	Tuesday	Thanksgiving recess begins
December	1	Monday	Classes resume
	8	Monday	Classes end
	9	Tuesday	Study day
	10-13, 15-17	Wed-Sat, Mon-Wed	Examinations
	14	Sunday	Commencement
		WINTER TERM	2009
November	12	Wednesday	Registration for continuing students opens
December	1	Monday	Registration for new students opens
January	5	Monday	Classes begin
Januar y	19	Monday	Martin Luther King, Jr. Day
	17	(classes cancelled, universi	<i>2</i> , ,
February	21 (10:30 p.m.)	Saturday	Spring recess begins
March	21 (10.30 p.m.) 2	Monday	Classes resume
April	20	Monday	Classes end
Артп	21	•	
	=-	Tuesday	Study day
May	22-25, 27-29 3	Wed-Sat, Mon-Wed Sunday	Examinations Commencement
iviay	3		
		SPRING TERM	
March	18	Wednesday	Registration for continuing students opens
April	2	Thursday	Registration for new students opens
May	4	Monday	Classes begin
	23 (10:30 p.m.)	Saturday	Holiday recess begins
	25	Monday	Holiday -Memorial Day
	26	Tuesday	Classes resume
June	22	Monday	Classes end
	23	Tuesday	Study Day
	24-26	Wed-Fri	Examinations
		SUMMER TERM	I 2009
March	18	Wednesday	Registration for continuing students opens
April	2	Thursday	Registration for new students opens
June	29	Monday	Classes begin
	2 (10:30 p.m.)	Thursday	Holiday recess begins
	3	Friday	Holiday- Independence Day
	6	Monday	Classes resume
August	15	Saturday	Classes end
	16	Sunday	Study Day
	17-19	Mon-Wed	Examinations
	17-19	1V1011- VVCU	Lammanons

^{*}This calendar is subject to revision.

Introduction to the University

Educational Objectives

"Engaging Minds, Preparing Leaders" is the vision statement of the University of Michigan-Flint. The University subscribes to the following mission: The Flint campus of the University of Michigan is a community of diverse learners and scholars, where students from this region and beyond prepare for leadership, achievement, and service through interactive instruction in the arts, sciences, humanities, and professions. Our mission rests on three pillars: excellence in teaching, learning, and scholarship; student-centeredness; and engaged citizenship. Our students become leaders in their fields, in their professions, and in their communities

The University of Michigan-Flint, organized originally as the Flint College of the University of Michigan, is one of three campuses of the University of Michigan. From its founding in 1956, the University of Michigan-Flint has represented the combined efforts of the University, the State of Michigan, and the Flint community to develop and maintain a distinguished educational program for young people and adults of outstanding ambition, ability, and potential for leadership.

Students at the Flint campus benefit from association with the entire University of Michigan system while also enjoying the many advantages of a smaller institution. At the University of Michigan-Flint, the student is the center of attention. Individual growth and intellectual development are encouraged through close and often informal association between faculty and students.

All students at the University of Michigan-Flint, including those entering specific career and professional programs, are offered a well-rounded education in the traditional disciplines of the liberal arts and sciences. The urban setting of the campus and the need for competently trained professionals in education, government, business, and the health and human services fields have led to the creation of a variety of programs. These programs have been designed to provide professional training in relationship to study in the liberal arts and sciences, so that students can develop the knowledge, intellectual skills, values and attitudes which will help them make thoughtful and informed judgments about their experiences.

Programs

The College of Arts and Sciences offers over 50 majors in the liberal arts and sciences, together with programs preparing for Michigan certification in elementary or secondary teaching. These programs lead to the degrees Bachelor of Arts, Bachelor of Science, Bachelor of Interdisciplinary Studies, Bachelor of Applied Science, Bachelor of Music Education, Bachelor of Fine Arts, Master of Science in Biology, Master of Science in Computer and Information Systems, Master of Arts in English, and Master of Arts in Social Sciences from the University of Michigan-Flint.

The School of Education and Human Services offers programs leading to the Bachelor of Arts degree in Education and Social Work, the Bachelor of Science in Education, and the Master of Arts in Education.

The School of Health Professions and Studies offers programs leading to the Bachelor of Science degree in Health Care Administration, Health Education, Health Science, Medical Technology, Radiation Therapy, the Bachelor of Science in Nursing, the Master of Science in Anesthesia, the Master of

Science in Health Education, the Master of Science in Nursing, and the Doctor of Physical Therapy.

The School of Management offers programs leading to the Bachelor of Business Administration degree in General Business, Accounting, Finance, Operations Management, Organizational Behavior/Human Resources Management, or Marketing and the Master of Business Administration degree.

In addition to these programs, the University of Michigan-Flint offers the Master of Liberal Studies in American Culture and the Master of Public Administration with a general track and four concentrations through the Horace H. Rackham School of Graduate Studies of the University of Michigan, as well as graduate courses in other selected areas.

The University of Michigan-Flint makes its academic programs available throughout the year by operating on a calendar that includes fall and winter semesters and shorter spring and summer terms. Courses are offered throughout the year in the late afternoon and evening as well as during daytime hours. Additional course offerings are available on Saturdays during the fall, winter, and spring terms.

Accreditation and Assessment

The University of Michigan-Flint is accredited by the North Central Association of Colleges and Schools, 30 North LaSalle Street, Suite 2400, Chicago, Illinois 60602-2504. Accreditation has also been awarded to various University of Michigan-Flint programs by the American Chemical Society, the Association to Advance Collegiate Schools of Business – International, the Commission on Collegiate Nursing Education, the Commission on Accreditation in Physical Therapy Education, the Council on Accreditation for Nurse Anesthesia Educational Programs, the Council on Social Work Education, the Joint Review Committee on Education in Radiologic Technology, and the National Association of Schools of Music.

Grounded in the principles of student-centered learning, our Assessment Program provides evidence of the knowledge, skills, and perspectives that students achieve as a result of their education at the Univeristy of Michigan-Flint. In gathering and analyzing the evidence of our effectiveness, we are able to improve the institution through reflective, sound decision-making, enabling the University of Michigan-Flint to further its mission to prepare students as leaders in their fields, in their professions, and in their communities. The primary purpose of assessment is to help understand and improve the University of Michigan-Flint as a whole. Secondarily, assessment is used to support accreditation, research, grant funding, and other external purposes.

Assessment of student learning and achievement is a campuswide endeavor that presents a variety of opportunities for students, faculty, staff, and alumni to provide valuable feedback to all units. The University encourages everyone to accept the responsibility and opportunity to participate in this important process. Additional information on assessment is available at http://assessment.umflint.edu.

UM-Flint History

The history of the University of Michigan-Flint began in 1944, when the Flint Board of Education requested that a University of Michigan Extension Office open in Flint. Key area citizens, already planning the cultural center, were interested in the idea of higher education in the community. Three years later, the Regents of the University funded a study exploring the possibilities for higher education in Flint.

Cooperation between the community and U-M brought about the opening of a two-year senior college in 1956. The Board of Regents adopted a proposal in 1964 to expand the senior college to a four-year institution. The first freshman class was admitted the next year making the Flint College the first four-year University of Michigan program offered outside of Ann Arbor. In 1971, the Regents officially changed the name of the institution to the University of Michigan-Flint.

Through the combined efforts of Flint citizens and city government, the University acquired 42 acres along the southern edge of the Flint River in 1971. The campus occupied its first building in 1976. The general classroom-office building (later named David M. French Hall in 2000) housed classrooms, faculty offices, a theatre and library. The Harding Mott University Center opened in 1979 and the Recreation Center followed in fall 1981. With the opening of the Murchie Science Building in 1988, students no longer had to take science classes on the Mott Community College campus. The Frances Willson Thompson Library opened its doors to students in late fall 1994.

In 1997, the campus acquired an additional 25 acres immediately north of the Flint River, where the William S. White Building was completed in 2002. A grant from the Mott Foundation provided the University with funds to assist with the construction and programming of new facilities on the north riverfront site. This mixed-use building houses the School of Health Professions and Studies, School of Management, Early Childhood Development and the Urban Health and Wellness Centers, Department of Communication and Visual Arts, Information Technology Services, and WFUM television.

The mission of the University rests on three pillars: academic excellence, student centeredness and engaged citizenship. The urban location affords an opportunity to provide a University of Michigan education to students with varied life experiences.

UM-Flint's 6,500+ students choose from over 100 undergraduate and nearly 30 graduate programs in the liberal arts and in a number of pre-professional and professional fields.

In 2006, the University of Michigan – Flint celebrated 50 Years of Excellence and still the expansion of the University remains a work in progress to meet the needs of the community and to foster a collegiate atmosphere for students in pursuit of a quality education.

In October 2006, the Board of Regents of the University of Michigan approved a housing-facility project for the Flint campus. The 300+ bed residential hall will be located on 5.25 acres on the southern edge of the campus and open Fall 2008. UM-Flint recently adopted a strategic plan to grow enrollment to 8,000 students by 2010. A key element of this plan is the creation of a residential option for students. This new component is expected to stimulate campus life as well as contribute to the redevelopment of downtown Flint.

Admissions

245 University Pavilion (810) 762-3300 FAX (810)762-3272 admissions@umflint.edu

Website: http://www.umflint.edu/admissions

Director: Kimberly Buster-Williams, M.S.Ed.

Admissions Counseling

The University of Michigan-Flint provides information and admissions counseling for prospective students. Interviews are a desirable part of the admission procedure. Appointments may be made throughout the week, Monday through Thursday, from 8

a.m. to 6:30 p.m., and Friday, from 8 a.m. to 5 p.m. by telephoning (810) 762-3300.

Freshmen

Admission Policy

Students entering college for the first time following high school graduation should list themselves as freshmen even if they have some college credit. The GED may be presented in place of a high school diploma.

Students who enter the University of Michigan-Flint should have the capacity, maturity, and preparation to pursue a four-year degree. To apply, students must submit the following to the Office of Admissions:

- · Completed application form
- Official high school transcript
- \$30 nonrefundable application fee
- ACT or SAT scores (Applicants should request that scores be sent to the University of Michigan-Flint, ACT code 2063 or SAT code 1853.)

The admission decision takes into account all available academic data, including grades, test scores, and caliber of high school program. The University may consider nonacademic factors in the admission decision including information it receives regarding the applicant's leadership qualities, exceptional talents, conduct, and citizenship record. The University of Michigan - Flint seeks to admit students likely to succeed in our rigorous academic programs and who are ready to be responsible members of the University community.

Application forms are available through the Office of Admissions and in local high school guidance offices. Applications are available online at www.umflint.edu/admissions. Students may submit applications after completing their junior year in high school. Early application is encouraged. Inquiries should be addressed to:

Office of Admissions University of Michigan-Flint 245 University Pavilion

Flint, Michigan 48502-1950

or prospective students may telephone (810) 762-3300, or e-mail Admissions@umflint.edu

Subject Requirements

A strong high school preparatory program of basic academic subjects is important for college study. The following subjects, known as the State Universities of Michigan Presidents Council core, are recommended for regular admission:

English. Four years.

Mathematics. Three years, including intermediate algebra. This requirement is particularly important for students considering study in physical or biological sciences, computer science, the behavioral sciences, or business administration. Four years highly recommended.

Biological/Physical Science. Two years of laboratory science. Three to four years highly recommended.

Social Studies. Three years.

Courses in the fine arts, foreign language, and computer science are highly recommended. Business and vocational courses are not counted as academic courses. Exceptions to these recommendations will be viewed in relation to the other credentials presented. Individual consideration is given to candidates whose schools or independent-study programs do not offer all the required courses.

Transfer Students

Students who have taken courses in college after high school graduation are considered transfer students and should file an application as early as possible. To apply, transfer students must submit the following:

- Completed application form
- Official high school transcript
- Official transcripts from all colleges and universities attended
- \$30 nonrefundable application fee

Admission is based on all available academic data, including grades earned at previously attended post-secondary institutions, the strength of academic achievements in 24 or more semester hours of transferable college credit, and for students with fewer than 24 transferable credit hours, high school records and other credentials. The University may consider nonacademic factors in the admission decision including information it receives regarding the applicant's leadership qualities, exceptional talents, conduct, and citizenship record.

Transfer of Credits

All acceptable courses completed with a grade of C or better at a regionally accredited two-year or four-year institution are entered on the student's permanent record and may be applied toward graduation requirements. A transfer student from a non-University of Michigan college must earn a minimum of 45 semester hours at University of Michigan-Flint, including the last 30 hours. Students from the University of Michigan Ann Arbor and Dearborn must earn a minimum of 30 semester hours on the University of Michigan-Flint campus. Given upper level requirements in the major, generally a maximum of 62 credit hours from two-year institutions and a maximum of 75 credit hours from four-year institutions can be applied to degree requirements. Credit requirements for programs vary; it is critical that students consult with advisors to determine exactly how many credits beyond transfer will be required to complete any particular program of study.

Teacher Certification

Applicants who already have a bachelor's degree from a school approved for teacher education and wish to obtain teacher certification must apply as transfer students and submit the following:

- Completed application form
- Proof of bachelor's degree One copy of all official transcripts must be sent to the Office of Admissions. In addition, the University of Michigan-Flint Education Department requires that two official copies of all transcripts be sent directly to them.
- \$30 nonrefundable application fee

The deadlines for application to the Education Department are January 15 and September 15.

Guest Students

Students enrolled at another accredited college or university may attend the University of Michigan-Flint as guest students if they receive permission for each term from both the Office of Admissions of the University of Michigan-Flint and their home institution.

Guest students must be in good standing at their home institution and have at least a 2.0 grade point average. The student should consult the home institution to verify that the classes taken at the University of Michigan-Flint are acceptable. Students must earn C grades or better in all courses taken at the University of Michigan-Flint to be considered for future admission as guests.

A one-time nonrefundable \$15.00 application fee is charged for processing the guest application.

A guest student who intends to become a degree candidate at the University of Michigan-Flint must submit an application for admission with advanced standing, accompanied by all official credentials.

Life-Long Learning Students

Students wishing to pursue studies not leading to a degree may apply for Lifelong Learning status. Students entering under the Lifelong Learning status will follow the catalog year the semester they matriculate. Credits under Lifelong Learning status may count towards a degree seeking program with academic departmental approval. Students that have attended previous colleges and universities are required to submit official transcripts from every school attended before an application for a degree seeking program may be granted. High school graduates without any prior college work may qualify for admission to a degree program by completing 24 credits with grades of C (2.0) or better in courses from each of the following areas: (1) science or mathematics; (2) social sciences; (3) humanities/English composition/basic foreign language. Financial aid is extremely limited for Lifelong Learning students.

To apply, Lifelong Learning students must submit the following:

- Completed application form
- \$30 nonrefundable application fee
- Proof of high school graduation

International Students

Students from other countries may apply for admission to the University of Michigan-Flint.

The following documents must be received before a decision on admission can be made:

- A. A completed application with a \$30.00 (U.S. currency) check or money order. No application shall be processed without the required nonrefundable \$30.00 fee.
- B. Students with credit from countries other than the U.S. must apply for a course-by-course credit evaluation through an approved credentialing service. The course-by-course evaluation is not required when the transcript is in English and credit hours are expressed in semester units. Contact the Office of Admissions for a listing of approved agencies. There is a fee for this service from the evaluation agency.
- C. For any student whose native language is not English, evidence of proficiency in English is required. Several English proficiency tests are accepted; see UM-Flint international student web site (http://www.umflint.edu/international) for details.

D. Upon admission, a notarized statement from the financial sponsor verifying that the student has at least \$20,000 per academic year (excluding transportation to and from abroad) to cover living and educational expenses while attending the University of Michigan-Flint. Students from the Ontario province must provide a notarized statement from the financial sponsor verifying that the student has at least \$13,940 per academic year. No needs-based financial aid is available to international students. International students are never considered "Residents of Michigan" for tuition classification.

Admission Procedures

Application Deadlines

Fall (September classes): Priority Deadlines:

Freshmen November 1 Transfer Students July 1

Final Deadline: Ten business days prior to the first

day of classes. (Labor Day not

included.)

Winter (January classes):

Priority Deadlines: October 1

Final Deadline: Ten business days prior to the first

day of classes. (Holiday break not

included.)

Application Fee

A nonrefundable fee of \$30 must accompany each formal freshman, transfer, and non-candidate for degree application. No application fee is required of applicants for readmission.

This fee does not apply to any other University fee, although it also serves as the application fee for those applying to the University of Michigan in Ann Arbor or Dearborn. If an accepted applicant does not register, the fee is good for three consecutive semesters, beginning with the semester for which admission was initially requested.

A check or money order payable to the University of Michigan-Flint should accompany the application. For purposes of identification, the applicant's name and Social Security number are to be written on the front of the payment. For reasons of security, cash should not be sent through the mail.

Additional Information

Advanced Placement Program (AP)

The University of Michigan-Flint participates in the Advanced Placement Program of the College Board. Advanced Placement credits can be earned in the following subjects: art, biology, chemistry, computer science, economics, English, French, German, American and comparative government, American and European history, Latin, mathematics, music, physics, psychology, and Spanish. For further information, contact the Office of Admissions.

College Level Examination Program (CLEP)

Credit is awarded for several subject area tests. For information on the subjects available, passing scores, eligibility, etc., contact the Office of Admissions.

Admission to the University Honors Scholar Program

Admission to the Honors Program is competitive and by invitation only. A student must satisfy the below requirements to apply for the Honors Program:

- A. Composite ACT score of 26 or higher or a combined SAT score of at least 1200.
- B. A minimum recomputed academic grade point average of 3.5, based on no less than eight academic units of credit during the ninth, tenth, and eleventh years and the first semester of the senior year.

Selection is made on the basis of high school records, test scores, recommendations from high school counselors or college advisors, and personal interviews. If not selected initially, students may be admitted to the program after establishing a record of superior University performance. The first deadline for consideration is February 8; the second deadline is March 1, and the last consideration date is April 1. For details contact:

Director of the Honors Program 517 David M. French Hall The University of Michigan-Flint Flint, Michigan 48502-1950 (810) 762-3234

Admission to the Challenge Program

The University of Michigan-Flint is committed to providing educational opportunity for all qualified students. The Challenge Program is an alternative admission procedure for students who have academic potential but who would be unable to realize that potential without special support services due to their economic, cultural, or educational background. Services available to students admitted through the Challenge Program help those students maximize their potential for success.

Challenge Program participants are selected based on the recomputed academic grade point average, high school record, and recommendations from high school counselors. It is a selective program and not all applicants are offered admission. Challenge Program participants must sign contractual admission forms with the University.

Interested students should consult their high school counselors or write to:

Office of Admissions 245 University Pavilion The University of Michigan-Flint Flint, Michigan 48502-1950 (810) 762-3300

Dual Enrollment for Part-Time Study by High School Students

Outstanding high school students may enroll for part-time study as non-candidates for degree while finishing their high school graduation requirements. High school seniors are required to have a 3.2 recomputed grade point average in high school academic subjects in the 9, 10th and/or 11th grades.

Official enrollment through the high school may require additional standards including a high school proficiency test. Tuition reimbursement may be available. Students should check with the high school guidance and counseling office for additional information.

A maximum of two classes per semester is allowed for dual enrollees. Dual enrollees file the usual application as noncandidates for degree, but are not required to pay the application fee. Dual enrolled students that intend to enroll as freshmen at the University of Michigan-Flint should submit a free one-page application for freshmen admission after dual enrollment at the University of Michigan-Flint.

Readmission

Students planning to return after an absence of one year must apply for readmission to the University of Michigan-Flint Office of Admissions. If a student has been away from the University of Michigan-Flint for one year or more, the student must satisfy degree requirements in effect at the time of readmission. If a student has attended another college or university since leaving the University of Michigan-Flint, an official transcript from that institution must be submitted and students must complete a new admissions application.

No fee is charged for processing the application for readmission. Students interested in readmission to the School of Management should refer to the readmission policy in the School of Management section of this *Catalog*.

Any student who has been officially asked to withdraw from the University of Michigan-Flint and who seeks readmission must file an application for readmission at the Office of Admissions and/or an explanatory petition, either to the Academic Standards Committee of the College of Arts and Sciences or to the Academic Review Committee of the School of Management. Students in the School of Health Professions and Studies should consult the Dean of the School of Health Professions and Studies.

No student is readmitted until all past fees and charges due to the University of Michigan-Flint have been paid.

Admission to Graduate Programs at the Flint Campus

Admission applications for University of Michigan-Flint graduate programs are available in the Office for Graduate Programs (251 Thompson Library) or through the directors of the respective master's degree programs. For further information about admission requirements, see "Graduate Study" section of this *Catalog*.

Orientation and Placement

Orientation

375 Harding Mott University Center (810) 762-3431 Fax: (810) 762-3023

Director of New Student Programs: Becky Armour

New students are invited to attend an orientation session prior to registering for classes. Sessions are designed to increase the newly admitted student's understanding of some important aspects of life at the University. During orientation, students are provided with information on academic programs and requirements, University policies and procedures, and student life. New students have an opportunity to interact with faculty, staff, and continuing students during the orientation process.

Orientation sessions for incoming freshmen are required and are held throughout the summer. Orientation sessions for transfer students are held during the summer and winter months.

Placement Testing

As a current, newly admitted or readmitted student, you may need to take one or more placement tests. Placement tests are critical to you and your advisor since the results will be used to plan your program of study. Placement tests should be taken before you meet with an advisor. Placement tests in chemistry, English, and mathematics are offered online or in the Academic Advising and Career Center ((810) 762-3085). Placement tests in foreign language are offered through the foreign language department.

Placement tests are never used as a basis for awarding credit. The Credit by Examination procedure is described elsewhere in this *Catalog*. The College of Arts and Sciences, the School of Management, and the Program in Nursing have procedures for awarding Credit by Examination (refer to those sections of this *Catalog*).

Tuition and Fees*

Please refer to the following website for tuition and fee rates; http://vca.umflint.edu/fs/tuition.htm

Tuition must be received by the due dates or monthly interest charges will be assessed. Allow a minimum of 5 days handling by the U.S. Postal Service if payment is mailed. Failure to receive an official University tuition and fee statement does not relieve any student of responsibility for payment. All billing is now done through the student's UM-Flint email account.

Fees are the student's contribution toward the cost of instruction, library services, student activities, plant operations, and mandatory payments for debt retirement for parking facilities and the Library. There are certain laboratory charges to cover unusual breakage.

A student may not register for any classes at the University nor are transcripts of credits or diplomas issued until all outstanding fees and charges due the University are paid. A student who has been referred to the University's collection agency for non-payment, but later has the fee reduced based upon procedural grounds, is charged the reduced fee or \$100.00 plus late charges, whichever is greater.

*The University of Michigan – Flint reserves the right to adjust tuition rates and the credit hour range that is assessed the full-time rate.

Fees for Senior Citizens

Persons 62 years of age or older at time of registration have the privilege of enrolling in any University course or program for which they are properly qualified, on payment of a fee equal to 50 percent of the announced fee for such course or program, exclusive of laboratory fees and other special charges. It is the responsibility of the senior citizen to notify Student Accounts when they qualify for the discount. The University reserves the right to determine in each case the appropriateness of the election.

Late Registration Fee

A student who registers after the announced period of registration is charged a late registration fee.

Adjustment of Fees

Deadline dates are calculated from the first day of the Academic Calendar for each term.

Drop/Add

Once classes officially begin a Drop/Add form must be completed when a student changes the classes registered for (an increase, decrease, or no change in credit hours) but retains at least one credit hour. If **all** classes are dropped, see "Disenrollment" below. A student must submit the authorized Drop/Add form to the

Registrar's Office; the date it is received by the Registrar is the effective date. Even though there is no total credit hour effect of a Drop/Add (add 3 credit hours and drop 3 credit hours), **each** transaction is recorded independently and may result in an additional financial obligation.

- A. When a student adds a course, the previous fee assessment is canceled and a new fee is assessed applicable to the new load.
- B. A student who drops a course during the first two weeks of classes in any term has the original fee assessment canceled and a fee assessed applicable to the reduced load. After the second week, no fee adjustment is made for "drops." If a refund is due, it will be net of all outstanding financial obligations to the Regents of the University of Michigan.

Cancellation

Students who register and THEN DECIDE NOT TO ATTEND must notify the Registrar's Office in writing BEFORE the first day of the semester or they will be charged a portion of their tuition plus fees. The Registrar's Office is located in Room 266, University Pavilion.

Disenrollment (Withdrawal)

Students may withdraw from the University (i.e., drop all courses) up to and including the last day of classes without petitioning the Academic Standards Committee. A notation to that effect is made on the transcript.

A disenrollment form must be completed when a student drops *all* classes during a particular semester. If a student has registered early for future semesters, a form must be completed for *each* semester from which the student wishes to disenroll. The disenrollment form is available in the Registrar's Office; the effective date of the withdrawal is the date the form is received by the Registrar's Office.

- A. During the Fall or Winter Semester a student who withdraws
 - during the first or second week of classes is assessed a \$50.00 withdrawal fee plus the Registration Fee.
 - during the third through sixth week of classes is assessed one-half the tuition plus fees.
 - after the sixth week of classes is assessed full tuition plus fees.
- B. During the Spring or Summer, a student who withdraws
 - during the first or second week of classes is assessed a \$50.00 withdrawal fee plus the Registration Fee.
 - during the third week of classes is assessed one-half the tuition plus fees.
 - after the third week of classes is assessed full tuition plus fees
 - 4. from a class that extends over both the Spring and Summer Term, is assessed under the guidelines of (A).

Fee Appeal

Fee appeals are used to request exceptions to the existing refund policy under extenuating circumstances. The deadline for submitting a fee appeal is 60 days after the end of the semester being appealed. Information and fee appeal forms may be obtained from Cashiers/Student Accounts, 261 Pavilion.

University of Michigan Residency Classification Guidelines

Purpose of the Residency Classification Guidelines

The University of Michigan enrolls students from 50 states and more than 120 countries. Residency Classification Guidelines have been developed to ensure that decisions about whether a student pays in-state or out-of-state tuition are fair and equitable and that applicants for admission or enrolled students who believe they are Michigan residents understand they may be required to complete an Application for Resident Classification and provide additional information to document their residency status.

Circumstances Under Which You Must File a Residency Application

- If you claim Michigan resident status and any of the following circumstances apply, you must file an Application for Resident Classification and be approved to qualify for instate tuition:
- you currently live outside the state of Michigan for any purpose, including, but not limited to, education, volunteer activities, military service, travel, employment.
- you have attended or graduated from a college outside the state of Michigan.
- you have been employed or domiciled outside the state of Michigan within the last three years.
- you are not a U.S. citizen or Permanent Resident Alien (if you are a Permanent Resident Alien, you must have a Permanent Resident Alien card).
- your spouse, partner, or parent is in Michigan as a nonresident student, medical resident, fellow, or for military assignment or other temporary employment.
- you are 24 years of age or younger and a parent lives outside the state of Michigan.
- you are 24 years of age or younger and have attended or graduated from a high school outside the state of Michigan.
- you have attended or graduated from an out-of-state high school and have been involved in educational pursuits for the majority of time since high school graduation.
- you previously attended any U-M campus (Ann Arbor, Dearborn, or Flint) as a nonresident.

Other circumstances may also require you to file a residency application. The University reserves the right to audit prospective or enrolled students at any time regarding eligibility for resident classification and to reclassify students who are classified incorrectly.

How to File a Residency Application

Residency applications and in-person assistance are available at the Residency Classification Office, University of Michigan Office of the Registrar, LSA Building, 500 S. State St., Ann Arbor, MI, 48109-1382, phone (734) 764-1400. Business hours are 8 a.m.-5 p.m. weekdays. Applications can also be downloaded at ro.umich.edu/residency-application.pdf. Completed applications should be submitted to the Residency Classification Office.

FILING DEADLINES
September 30 for Fall Term
January 31 for Winter Term
July 31 for Spring, Spring/Summer, and Summer Terms

Applications must be received in the Residency Classification Office by 5 p.m. on the deadline date.

The deadline date is always after the first day of classes of the term in which you are enrolling and seeking residency.

If the deadline falls on a weekend, it will be extended to the next business day.

These deadlines apply to all U-M schools, colleges, and campuses. For the On-Job/On-Campus program only, filing deadlines are 30 calendar days after the first scheduled day of classes of the term applied for.

You may apply for resident classification for any term in which you are enrolled or intend to enroll.

Late applications will be assessed a nonrefundable \$300 late fee and will be accepted up to the last published day of classes of the term for which you are applying. Late applications received after the last day of classes will be processed for the following term. In all cases, decisions will be based only on those facts that are in place by the original filing deadline for the term under consideration.

Required Documents

Along with the completed Application for Resident Classification form, you must submit the following:

- **for all applicants:** copies of your driver's license and the license(s) of the person or persons upon whom you are basing your claim to resident eligibility.
- **for all applicants:** copies of the front and signature pages of the most recent year's federal and state income tax returns and W2 forms for you and the person or persons upon whom you are basing your claim to resident eligibility.
- for applicants born outside the U.S.: verification of U.S. citizenship or visa status.
- for applicants who are dependents (see Residency Classification Guideline B-1 below): copies of the front and signature pages of your parents' most recent year's federal and state income tax returns with accompanying W2 forms.
- for applicants whose claim to eligibility for resident classification is based on permanent, full-time employment for themselves, a spouse, partner, or parent: a letter from the employer, written on letterhead (including phone number), stating the position, status, and dates of employment. In addition to the letter, provide a copy of the most recent pay stub showing Michigan taxes being withheld.
- for all applicants: any other documentation that supports your claim to resident eligibility.

The Residency Classification Office may also request additional documentation after the initial review of your application. Applications and accompanying documentation will be retained by the University of Michigan in accordance with its policies and procedures. All information will be kept confidential to the extent permitted by law.

In making residency determinations, the University considers all information provided in or with an application, as well as any other available information relevant to the application. Decisions to approve a residency application are made when the applicant has presented clear and convincing evidence that a permanent domicile in the state of Michigan has been established.

The University of Michigan's Authority to Establish Residency Guidelines for Its Students

Because each of Michigan's public universities has autonomous authority to establish residency guidelines for admission and tuition purposes, guidelines vary by school and are independent of regulations used by other state authorities to determine residency for such purposes as income and property tax liability, driving, and voting. The University of Michigan's current Residency Classification Guidelines were approved by its Board of Regents to take effect Spring Term 2005 and to apply to students at all campuses.

The Board of Regents has authorized the Residency Classification Office in the Office of the Registrar on the Ann Arbor campus to administer the University's residency guidelines. If your activities and circumstances as documented to the Residency Classification Office demonstrate establishment of a permanent domicile in Michigan, you will be classified as a resident once your eligibility has been confirmed. If your presence in the state is based on activities or circumstances that are determined to be temporary or indeterminate, you will be classified as a nonresident.

Our Residency Classification Guidelines explain how you can document establishment of a permanent domicile in Michigan. To overcome a presumption of nonresident status, you must file a residency application and document that a Michigan domicile has been established. Eligibility criteria are explained in more detail in the sections that follow. Meeting the criteria to be placed in an "eligible" category does not mean that you will automatically be classified a resident. If you have had any out-of-state activities or ties, or if the University otherwise questions your residency status, you will need to confirm your eligibility to be classification in a timely manner and by providing clear and convincing evidence that you are eligible for resident classification under the following Guidelines.

A. General Residency Guidelines

1. Circumstances that may demonstrate permanent domicile

The following circumstances and activities, though not conclusive or exhaustive, may lend support to a claim to eligibility for resident classification if all other applicable Guidelines are met:

- both parents/parents-in-law (in the case of divorce, one parent/parent-in-law) permanently domiciled in Michigan as demonstrated by permanent employment in the state, establishment of a primary household in Michigan, and severance of out-of-state ties. Applicant must also show severance of out-of-state ties.
- applicant employed in Michigan in a full-time, permanent position, provided that the applicant's employment is the primary purpose for his or her presence in the state and that out-of-state ties have been severed. If the applicant is married or has a partner, the employment must be the primary purpose for the family's presence in Michigan.
- spouse or partner employed in Michigan in a full-time, permanent position, provided that the employment of the spouse or partner is the primary purpose for the family's presence in the state and that out-of-state ties have been severed.

2. Circumstances that do not demonstrate permanent domicile

The circumstances and activities listed below are temporary or indeterminate and do not demonstrate permanent domicile. Individuals whose presence in Michigan and claim to Michigan resident status are based solely on one or more of the following are not eligible for resident classification:

- enrollment in high school, community college, or university.
- participation in a medical residency program, fellowship, or internship.
- employment that is temporary or short-term or of the type usually considered an internship or apprenticeship.
- employment of the spouse or partner of an individual who is in Michigan for temporary pursuits.
- employment in a position normally held by a student.
- military assignment in Michigan for the applicant or the applicant's spouse, partner, or parent (see section D for special military provision).
- payment of Michigan income tax and/or filing of Michigan resident income tax returns.
- presence of relatives (other than parents).
- ownership of property or payment of Michigan property
- possession of a Michigan driver's license or voter's registration.
- possession of a Permanent Resident Alien visa.
- continuous physical presence for one year or more.
- statement of intent to be domiciled in Michigan.

B. Additional Requirements, Definitions, and Special Circumstances

Even if one or more of the following circumstances applies to you, you may still need to file an application for resident classification. If you have had any out-of-state activity or have any out-of-state ties, you must submit an Application for Resident Classification by the filing deadline to request resident classification and confirm your eligibility. You must document that you meet all of the following applicable criteria to be eligible for resident classification and payment of in-state tuition.

1. Immigrants and Aliens

You must be entitled to reside permanently in the United States to be eligible for resident classification at the University. However, like U.S. citizens, you must also show you have established a Michigan domicile as defined in these Guidelines. The Residency Classification Office will review Applications for Resident Classification if you are in one of the following immigrant categories. You must provide official documentation showing your status.

- Permanent Resident Aliens (Must be fully processed and approved and possess Permanent Resident Alien card or stamp in a passport verifying final approval by filing deadline for applicable term.)
- Refugees (I-94 card or passport must designate "Refugee".)
- Asylees (I-94 card or passport must designate "Asylee".)
- A, E, G and I visa holders (Exception: Dependent children who hold an E visa are not eligible to be considered for resident classification.)

*Please note that individuals holding temporary visas, such as, but not limited to, F, H, J, K, Parolee, TN, TD, etc., are not

eligible for resident classification at the University of Michigan regardless of their other circumstances.

2. Dependent Students

For University of Michigan residency classification purposes, you are presumed to be a dependent of your parents if you are 24 years of age or younger and (1) have been primarily involved in educational pursuits, or (2) have not been financially self-supporting through employment.

a. Residents

- i. Dependent Student Parents in Michigan. If your parents are domiciled in Michigan as defined by University Residency Classification Guidelines, you are presumed to be eligible for resident classification as long as you have not taken steps to establish a domicile outside of Michigan or any other action inconsistent with maintaining a domicile in Michigan.
- ii. Dependent Student of Divorced Parents One Parent in Michigan. If your parents are divorced, you are presumed to be eligible for resident classification if one parent is domiciled in Michigan as defined by University Residency Classification Guidelines, and if you have not taken steps to establish an independent domicile outside of Michigan or any other action inconsistent with maintaining a domicile in Michigan.
- iii. Dependent Resident Student Whose Parents Leave Michigan. If you are a student living in Michigan and permanently domiciled in the state as defined by University Residency Classification Guidelines, you are presumed to retain resident status eligibility if your parents leave the state provided: (1) you have completed at least your junior year of high school prior to your parents' departure, (2) you remain in Michigan, enrolled full-time in high school or an institution of higher education, and (3) you have not taken steps to establish a domicile outside Michigan or any other action inconsistent with maintaining a domicile in Michigan.

b. Nonresidents

The University presumes you are a nonresident if you are a dependent student and your parents are domiciled outside the state of Michigan (See exception under a-i and a-ii for married dependent students whose parents-in-law are domiciled in Michigan.

3. Michigan Residents and Absences From the State

You may be able to retain your eligibility for resident classification under the conditions listed below if you are domiciled in Michigan as defined by University Residency Classification Guidelines and leave the state for certain types of activities. However, if you have been absent from the state, you must file an Application for Resident Classification by the appropriate filing deadline to request resident classification and demonstrate your eligibility.

 a. Absence for Active Duty Military Service (U.S. Army, Navy, Air Force, Marines, Coast Guard, Officers in the Public Health Service), Non-Administrative Missionary Work, Peace Corps, AmeriCorps, or Similar Philanthropic Work If you are domiciled in Michigan at the time of entry into active military duty, missionary work, Peace Corps, or similar service, you are presumed to retain your eligibility for resident classification as long as you are on continuous active duty or in continuous service and continuously claim Michigan as the state of legal residence for income tax purposes. If you are a dependent child of such an individual, you are presumed to be eligible for resident classification provided: (1) you are coming to the University of Michigan directly from high school or have been continuously enrolled in college since graduating from high school, and (2) you have not claimed residency for tuition purposes elsewhere.

b. Absence Due to Temporary Foreign Assignment

If you are a dependent student domiciled in Michigan with your parents immediately preceding an absence for a temporary foreign assignment with a parent's Michigan employer, you may retain your eligibility for resident classification provided (1) your family members hold temporary visas in the foreign country, and (2) you return directly to Michigan and remain in the state for educational purposes after leaving the foreign country.

c. Temporary Absence of Less Than One Year

If you are independently domiciled in Michigan immediately preceding a temporary absence of less than one year, you are presumed to retain eligibility for resident classification provided that out-of-state ties are severed upon your return to Michigan.

C. The Appeal Process

If you filed an Application for Resident Classification and were denied by the Residency Classification Office, you have recourse to an appeal process by filing a written appeal within 30 calendar days of the denial.

The Board of Regents established the Residency Appeal Committee to review decisions made by the Residency Classification Office. The Appeal Committee is chaired by the Vice President and Secretary of the University and includes two other University administrators, a faculty member, and a student. The Residency Coordinator and other staff members in the Residency Classification Office are not members of the Appeal Committee.

Appeals, which must be in writing, should be submitted to the Residency Classification Office. Please note that the written appeal must be received by the Residency Classification Office within 30 calendar days of the date on the denial letter. If the deadline falls on a weekend or University holiday, it will be extended to the next business day. If there is additional information you would like the Residency Appeal Committee to consider beyond the materials you have already submitted, you should submit that additional information, in writing, with appropriate supporting documentation, when you submit your

written appeal. Your request and any additional information and documentation you provide will be forwarded to the Residency Appeal Committee with your original file.

All communications to the Residency Appeal Committee must be in writing. Personal contact with a member of the Committee could disqualify the member from participating in the decision regarding your residency. The Residency Appeal Committee does not meet in person with students, and appearances on behalf of students are not permitted at appeal meetings.

After the Appeal Committee has completed its deliberations, you will receive the Committee's final decision in writing. This will conclude the appeal process for the term covered by the application. The University will not conduct any further review of the decision.

D. Special Provision for Active Duty Military Personnel Assigned to Michigan

Regular active duty military personnel who are on assignment in Michigan, as well as their accompanying spouses and dependent children, will be allowed to pay in-state tuition while they attend the University of Michigan, even though they will not be eligible to be classified as residents under the Residency Classification Guidelines. This provision applies to persons in the U.S. Army, Navy, Air Force, Marines and Coast Guard, and to officers in the Public Health Service. In order to request this special consideration, the student must submit a residency application by the applicable filing deadline and provide documentation demonstrating eligibility.

Warning: Misrepresentation or Falsification of Information Can be Costly

Individuals who provide false or misleading information or omit relevant information in an application for admission or for resident classification, or any other document related to residency eligibility, may be subject to legal or disciplinary measures. Students who are improperly classified as residents based on such information will have their residency classification changed and may be retroactively charged nonresident tuition for the period of time they were improperly classified.

QUESTIONS?

For questions on Residency Regulations, please contact:

Residency Classification Office Office of the Registrar 1210 LSA Building 500 South State Street Ann Arbor, MI 48109-1382 Phone: (734) 764-1400

Office of the Registrar 266 University Pavilion Flint MI 48502 Phone: (810) 762-3344

Financial Aid

277 University Pavilion (810) 762-3444

Web address: www.umflint.edu/finaid

Director: Lori Vedder

Financial Aid Officers: Sue Byrnes, Susan DeGalan, Shawn Griffin, Linda Grimshaw, Kelli Hoppe, Mary Horgan, Louanne Snyder, D. Eric Walker

The Office of Financial Aid administers federal, state, private and institutional financial aid programs that allow all interested students to afford the quality education offered by the University of Michigan-Flint. The Office of Financial Aid is committed to meeting the financial needs of all students, and to recognizing and supporting merit and achievement.

Eligibility for Financial Aid

Applicants must establish their eligibility to apply for financial aid by meeting several general requirements.

- A. The applicant must be admitted to a degree-granting program. Guest Students and Non-Candidate for Degree (NCFD) students are generally not eligible to receive financial aid.
- B. The applicant must be a U.S. citizen or hold a Permanent Resident Visa.
- The applicant must be registered with Selective Service (if required).
- D. The applicant must be making Satisfactory Academic Progress.
- E. An applicant in default on any Federal Perkins Loan, Federal Stafford Loan, Federal Direct Stafford Loan, or Federal PLUS Loan or who owes a refund on a Federal Pell Grant or a Federal Supplemental Educational Opportunity Grant at any institution is not considered eligible for aid. The applicant must provide proof that the indebtedness and/or default status has been removed before the applicant can be considered for additional assistance. If an applicant owes any type of past debt to the University, then the applicant must resolve the financial obligation to the University before being considered for any type of financial aid or loan through the Office of Financial Aid.

Application Procedures and Materials

All applicants must complete a Free Application for Federal Student Aid (FAFSA). The FAFSA collects information on the parents' and/or student's income, assets and benefits. These factors are all considered in determining the applicant's need for aid. No processing fee is required. Students must list the University of Michigan-Flint as a college choice with the Title IV code of 002327. Allow at least three weeks for the FAFSA to be processed. An Expected Family Contribution (EFC) is calculated by the federal processor and is used to determine the applicant's eligibility for the Federal Pell Grant and for all other types of aid. Financial aid offers are not automatically renewed. Students who wish to apply for aid must do so each year as soon after January 1 as possible. All students should

apply electronically at www.fafsa.ed.gov. Both students and a parent if applicable need to apply for a federal PIN prior to filing the FASFA. The assigned PIN acts an electronic signature for both the student and parent on the FASFA form. Separate PINs must be obtained in order for the FAFSA to be processed. Due to the nature and funding levels of some federal, state and university funds, students are encouraged to apply by posted deadlines to avoid chances of funds being exhausted.

Notification of Award

Students are notified of their financial aid award within two weeks of the time the school receives the results of the FAFSA. Students selected for verification by the federal processor will receive an estimated award letter along with a list of documents needed to complete their file. The Office of Financial Aid will perform verification when all required documents have been received. If the amount of the award changes from what was originally estimated, a revised award letter will be sent. Continuing students will receive all award letter notification through their UM-Flint email account. New UM-Flint students will receive their first award notice through the regular mail system.

Satisfactory Academic Progress

To remain eligible for financial aid, all students must make Satisfactory Academic Progress (SAP) toward their degree. Federal law establishes three standards for SAP requirements. To meet these requirements, students at the University of Michigan-Flint must meet the following standards:

- Students may receive financial aid for the first one hundred eighty hours attempted as an undergraduate. Transfer students will be evaluated by adding their transfer hours together; they can then receive aid up to the remainder of one hundred eighty hours. Graduate students may receive financial aid for the first 59 hours attempted as a graduate.
- 2. Students must receive a passing grade in at least 67% of the attempted credit hours in which they enroll on a cumulative basis (See "Attempted hours include" below).
- 3. Students must achieve a cumulative grade point average of 2.0 by the end of semester four and maintain the 2.0 for the duration of their eligibility. This standard will be monitored and enforced as described in this Catalog regarding academic policies on academic standing.

Any student who fails to meet standard number two will be put on probation. The student's eligibility will be terminated if the deficiency is not corrected by the end of the probationary period.

Students put on probation will be told specifically what will be required to keep their eligibility. Students who are terminated have the right to file an appeal based on such circumstances as illness, injury, or the death of a family member that have prevented the student from meeting standards, and will be informed of the appeal process.

Attempted hours include the following credit hours:

- Successfully completed (with passing grades)
- Non-passing grades (i.e., N, F, E, I, *)
- Retakes
- Dropped classes after the add/drop period
- Disenrollment from a semester (W)

Return of Title IV Funds

When students receiving Federal Title IV financial aid disenroll from all classes, the Office of Financial Aid must calculate how much aid they are entitled to keep. Students who disenroll before 60% of a semester is completed are entitled to keep a percentage of their award equal to the percentage of the semester they have completed. Students who disenroll after 60% of the semester has been completed are eligible to keep their entire award.

In some cases, students must repay a portion of the aid they have received. Repayment arrangements must be made to remain eligible for aid, and to re-enroll in subsequent semesters. In other cases, a refund may be due the student. If there is a refund of tuition due at the time of disenrollment, this will affect the amount of the repayment or refund. When possible, the Office of Financial Aid will return refunds to Federal Title IV loan programs, reducing the student's loan indebtedness.

Private, state of Michigan, and University of Michigan funds are not subject to the same pro-ration formula. These funds will be adjusted based on the amount of charges the student owes after the Federal Title IV calculation has been completed.

Students granted a fee appeal are subject to the same rules listed above. Students completing a fee appeal based on non-attendance of all their courses for a given semester will not be entitled to any of their financial aid received. All funds previously received will be removed from a student's account if a fee appeal is granted for non-attendance.

Students who fail to disenroll from a semester and whose record shows all unsuccessful grades (i.e., N, F, E, I, *) will be subject to a Title IV refund after the semester ends. The calculation will be based on the last date of documented attendance by the University or the 50% point of the semester. Students in this situation will be notified in writing and will have 14 business days to respond.

Student Budgets

The standard budgets used to determine a student's financial need are constructed in accordance with federal guidelines, including costs for tuition and books, standard room and board allowance, personal and miscellaneous expenses, transportation costs, and a dependent care allowance for those applicants with children who require child care. The budget for an independent student with dependents, including a spouse, reflects the educational costs related only to the student. Exceptionally high, required expenses may be included in your budget; submit documentation of the expenses and an explanation to the Office of Financial Aid.

A student should notify the Office of Financial Aid if there is a change in financial circumstances for the academic year. Such circumstances could be a death, separation or divorce, loss of a full-time job, or loss of non-taxable income or benefits.

Available Aid

Most student financial aid authorized by the Office of Financial Aid is based upon need. The amount of financial aid is determined by comparing the budget to the applicant's resources. If the combined resources are less than the student budget, every effort is made to help meet the deficit through some combination of the three forms of aid available: gift aid, long-term loans, and employment.

Sources of Financial Aid

Federal Pell Grant: All undergraduate students applying for aid are required to apply for this federal grant. The amount of Federal

Pell Grant funds that a student receives is based on the number of credit hours the student enrolls for and his or her Expected Family Contribution as determined by the Federal Methodology needs analysis formula.

Federal Loan Programs: The following is a brief description of each type of loan, and the eligibility requirements. For all of the loan programs, a student must be enrolled at least half-time to receive any loan funds. Half-time for undergraduate students is a minimum of 6 credit hours and a minimum of 5 credit hours for graduate students. Detailed information concerning the loan maximums, completing the promissory note, deferment provisions, and the current interest rate on the loan programs is available from the Office of Financial Aid.

Federal Direct Subsidized Loan: A need based, low interest loan for students. The amount that a student may borrow is based on his or her grade level and amount of financial need. The annual loan maximums based on the student's grade level are as follows: Grade level 1 - \$3500; Grade level 2 - \$4500; Grade level 3-5 - \$5500; Graduate students - \$8500. The interest rate is variable with a cap of 8.25% and is paid by the federal government as long as the student is enrolled at least half time. Repayment of the loan begins six months after the borrower ceases to be a half-time student. A 2.5% (percent subject to change) origination fee is deducted from the approved loan amount prior to disbursement.

Federal Direct Unsubsidized Loan: A non-need based loan for students. A student must apply for a subsidized Federal Direct Stafford/Ford Loan before requesting an unsubsidized loan. The combination of subsidized and unsubsidized loans borrowed may not exceed the student costs and the annual limits of the William D. Ford Federal Direct Loan Program. In addition to the subsidized loan maximums listed above, students considered to be Independent can apply for additional amounts through the unsubsidized program as follows: Grade level 1 - \$4,000; Grade level 2 - \$4,000; Grade level 3-5 - \$5,000; Graduate students - \$12,000. The interest rate is variable with a cap of 8.25% and is the borrower's responsibility. A 2.5% (percent subject to change) origination fee is deducted from the approved loan amount prior to disbursement.

Federal Direct PLUS Loan: A non-need based loan that is available to the parents of dependent students. The parent borrower must have a favorable credit history. The amount that a parent may borrow is based on the student's educational costs, minus any other financial aid received. The student does not need to apply for other types of need based financial aid, but is encouraged to do so. The interest rate is variable with a cap of 9% and must be paid by the parent. Repayment of the loan begins on the date of disbursement. A 4% (percent subject to change) origination fee is deducted from the approved loan prior to disbursement. Note: If a parent is denied a PLUS Loan due to an unfavorable credit decision from the Direct Loan Servicer, the Dependent student can access the higher amounts available to Independent students through the Unsubsidized Federal Direct Stafford Loan Program listed above.

Federal Perkins Loans: Long-term, low interest loans available to students who are enrolled at least half-time. These loans are repayable over an extended period of time after graduation and carry no interest charge while the borrower is enrolled at least half-time. The current interest rate is 5%.

Work-Study Program: Financial assistance through employment on campus or with certain nonprofit off-campus agencies. Student wages are met by a combination of Federal, State and University funds.

Michigan Competitive Scholarships: Awarded by the Michigan Department of Education. The scholarships are based on academic requirements and financial need. Students must initially qualify for the scholarship before enrolling as college freshmen. The scholarship is renewable for a maximum of ten semesters, with renewal based on continued need and satisfactory academic progress. Recipients must file the Free Application for Federal Student Aid (FAFSA) each year prior to the State of Michigan deadline of March 1. High school students should consult their counselors for details, preferably early in the junior year. High school graduates wishing additional information should visit: MI-StudentAid.org or call 1-888-4-GRANTS.

Michigan Educational Opportunity Grant Program (MEOG):

A state program that provides grants to undergraduate students with financial need. Awards up to a maximum of \$1000 per year are made to Michigan residents who are at least half-time students.

Michigan Adult Part-Time Grant Program (APTG): A state funded grant program for self-supporting undergraduate part-time students who are Michigan residents and have been out of high school for at least two years. Maximum awards of \$600 per year are based on financial need. Students may receive this grant for a maximum of two years. Very limited annual funding is available.

Bureau of Indian Affairs (BIA): Higher education scholarships based on need. Applicants must be accepted for enrollment in an accredited degree-granting institution of higher education and be either members of or eligible for membership in a recognized tribe. Applicants should contact the appropriate tribe, or for additional information contact the Michigan Agency, B.I.A. at 1-202-208-6123.

Public Act 505 of 1978: North American Indians who can prove one-quarter quantum Indian blood and who attend a state supported post-secondary institution in Michigan shall have their tuition waived. A student must have been a legal resident of Michigan for at least 12 consecutive months. Students must notify the Office of Financial Aid each semester of the number of credit hours they plan to take. Additional information and service is available from:

Inter-Tribal Council of Michigan MITWP 405 East Easterday Avenue Sault Ste. Marie, Michigan 49783

Police Officer's and Fire Fighter's Survivor Tuition Act, Public Act 295 of 1996: Provides for the waiver of tuition at public community and junior colleges and state universities for the surviving spouse and children of Michigan police officers and fire fighters killed in the line of duty.

Emergency Loans: Available for enrolled students having temporary short-term financial problems. These loans are interest free. With documentation of the emergency situation, the loan can usually be granted the day following application; however, in some cases a weekly committee review is required. Repayment is expected in the semester in which the loan is received.

Further Information

Since legislative and other decisions affecting the regulations, procedures and funding of an assistance program often occur on short notice; *Catalog* information about financial aid must be kept general. The most up-to-date information is available in the

Office of Financial Aid, Room 277 University Pavilion or online at www.umflint.edu/finaid. Please feel free to call or make an appointment if you are seeking specific information.

Documentation regarding the accreditation status of the University of Michigan-Flint is available in the Office of the Provost, Room 229, University Pavilion.

Scholarships and Awards

Financial Aid Office 277 University Pavilion (810) 762-3444 www.umflint.edu/finaid

Several scholarships are available to recognize and support academic excellence, activities, service to the university or community, and student research. Some scholarships are open to a wide spectrum of students, while others have specialized criteria. Questions regarding eligibility, scholarship guidelines, and the application process and deadlines should be directed to the Financial Aid Office. A full listing and general descriptions may be accessed online at www.umflint.edu/finaid.

Music Scholarships

All scholarship recipients must meet standards set by the faculty of the Music Department.

Bonnie Blum Memorial Scholarship: Awarded to junior or senior students with a cumulative GPA of at least 3.5. The applicant must show merit and evidence of a strong commitment to music education.

Chandler B. Brownell Piano Scholarship: Awarded to full-time students majoring in piano with at least a 3.0 GPA. Preference given to residents of Genesee County. Financial need may be considered.

Department of Music/Art Instrumental Jazz Scholarship: A \$350.00 scholarship will be awarded to one incoming freshman for the Fall semester of each academic year. Upon fulfillment of the applicable guidelines, this scholarship will be renewable for an additional three consecutive semesters. Application is open to all incoming freshmen, regardless of intended major. Applicants must have a minimum recomputed 2.7 high school GPA. Auditions are required.

Garrett E. Ebmeyer Trumpet Scholarship: Open to any music education trumpet student, based on performance and musical ability.

Janet Kay Evans Memorial Scholarship Fund: For full-time music students who demonstrate academic accomplishment and musical ability. A minimum 3.0 GPA and participation in a performance group are required. Financial need is considered.

Founding Faculty/Friends of Music Scholarship: For full-time students pursuing a major in music or music education. A minimum cumulative 3.0 GPA or 3.0 GPA for the previous semester is required. Applicants must submit a cover letter indicating music specialty, participation in performance groups, and academic and career goals. Two letters of reference are required. Applicants are evaluated on performance in classes and rehearsals and overall contribution to the Music Department.

The Douglas E. Larmor Memorial Scholarship: Established by friends in conjunction with the Flint Federation of Musicians - Local 542 for full-time students who are instrumental music majors. A minimum 3.0 GPA is required. Selection is based on auditions and financial need.

Music Department Scholarships: For students with a minimum 3.0 GPA who have received no grade in applied music lower than a "B" and who participate in a large performance group appropriate to their major instrument. Students must demonstrate continued commitment to their studies and the University.

Music Department Stipends: May be offered to students who are active and supportive members of ensembles in the department. Students must prepare their individual parts to the best of their ability and must attend all rehearsals and concerts outlined by the conductor.

Multicultural Music Initiative Scholarship: For full-time students with a declared major or minor in music or music education who are members of a UM-Flint Music Department performance ensemble. Auditions are required. Preference is given to African-American and Hispanic students with demonstrated aptitude and skills in music.

Joyce R. Piper Endowed Memorial Piano Scholarship: Applicants must maintain a minimum 3.0 GPA, and participate in a UM-Flint Music Department audition. One scholarship will be awarded each academic year. Scholarships may be renewed; however, scholarship recipients must reapply.

Guy L. Stoppert Memorial Scholarship Fund: Established in 1989 by the trustees of the Guy L. Stoppert Memorial Fund and the Michigan Male Chorus Association. For currently enrolled male vocal students with a minimum 2.75 GPA.

Physical Therapy Student Assistance

Financial assistance to students admitted to the professional preparation program may be provided by prospective employers of physical therapy graduates in exchange for commitments for employment for specific periods after graduation. All awards and other arrangements are made directly between the grantor and the student. Some require faculty recommendations. Other awards are available without employment conditions. A list and description of all opportunities available can be obtained from the Physical Therapy Department.

Ralph M. and Emmalyn E. Freeman Physical Therapy Scholarship: For physical therapy majors with minimum 3.5 GPA.

Virginia Wilson Memorial Scholarship: Applicant must be a member of the American Physical Therapy Association and meet the minimum academic standards as defined by the Physical Therapy Department. Demonstrated history of service to the profession, MPT, or community.

Coleman J. Ross Jr. and Lois R. Ross Scholarship: For students in the final year of the professional preparation program in physical therapy. Students must have at least a 3.0 GPA. Financial need is considered. For additional information, contact the Physical Therapy Department.

Theatre Department Scholarships

The theatre scholarship program is designed to attract and retain students of exceptional talent and promise and to enable these students to pursue a theatre degree without financial hardship. Students should contact the Theatre Department for additional information and to set up appointments for auditions and interviews.

Theatre Department Scholarship: Offered to new and continuing theatre majors based on satisfactory progress in both theatre activities and general university studies.

Ralph M. and Emmalyn E. Freeman Theatre Scholarship: For full-time theatre majors with a minimum 3.2 GPA. Recipients must participate in at least one UM-Flint main stage performance per term.

Honor Grant: For theatre majors with a GPA of 3.35 or better based on previous semester academic record. Amount based on available funds.

Brian McDonald Scholarship Fund: For Theatre majors with a minimum 3.25 GPA for freshmen and a 3.0 GPA for currently enrolled students. Financial need is a consideration.

Carl and Sarah Morgan Theatre Scholarship: Provides scholarship assistance to talented students majoring in theatre. Awarded yearly to full-time students who have maintained a minimum 2.75 GPA and who make significant contributions to the Theatre Department's programs. Fulfillment of a community service project is also a requirement. Contact the Theatre Department for additional information.

Wendy Frost-LaFontaine Memorial Scholarship in Physical Therapy: Applicant must be enrolled in their final year of the professional DPT degree program. Applicant must be a resident of the state of Michigan, and must show a desire to practice in the state of Michigan. Applicant must be assigned to any Genesys Health System during Clinical Education II. Must have a minimum GPA of 3.0 in the DPT degree program. Refer to Physical Therapy Department to apply.

Ernestine R. Smith, Ph.D. MPH Physical Therapy Scholarship: Available to second and third year UM-Flint Physical Therapy students who have a B+ GPA. Scholarship applicants must submit a minimum one page cover letter in which they state their career goals, identify their involvement and specific interest in patience care and demonstrated commitment to the physical therapy program. Refer to Physical Therapy Department to apply.

University Honors Scholar Program Scholarships

Students of superior academic ability compete for acceptance into these two- or four-year programs. All Honors Program students receive scholarships not based on financial need provided they continue to satisfy the program's rigorous standards. Interested entering and currently enrolled freshmen or students transferring to the University of Michigan-Flint should obtain details from:

Director of the Honors Program Room 517, David M. French Hall University of Michigan-Flint Flint, Michigan 48502-2186 (810) 424-5463

Extended Hours Program

Normal business hours for the University of Michigan-Flint are from 8:00 a.m. to 5:00 p.m. throughout the year.

The following departments have extended business hours, Monday through Thursday, with normal business hours from 8:00 a.m. to 5:00 p.m. on Friday, throughout the year. Please check with the units for their hours of operation.

Academic Advising and Career Center, Room 285 University Pavilion Admissions, Room 245 University Pavilion Bookstore, Room 106 University Pavilion Financial Aid and Scholarships, Room 277 University Pavilion Graduate Programs, Room 251 Thompson Library Information Technology Services, Room 207 MSB

Library, Thompson Library* Mediated Classroom Services, Room 457 FH* Microcomputer Labs: 206 MSB & 223 FH* Recreation Center Registrar, Room 266 University Pavilion School of Health Professions and Studies, Room 402 MSB Student Development Center, Room 264 University Center Student Life, Room 375 University Center Tutorial Services, Room 264 University Center Writing Center, Room 559 FH*

FH=French Hall (formerly Classroom Office Building) MSB=Murchie Science Building WSW=William S. White Building

*These units have hours that exceed the extended hours program.



Academic Policies of the University

ACADEMIC POLICIES OF THE UNIVERSITY

Campus-Wide Academic Regulations

Some variations exist in the academic regulations for the College of Arts and Sciences, the School of Education and Human Services, the School of Health Professions and Studies, and the School of Management in the following areas: grading systems, academic and scholastic requirements, credit requirements for graduation, honors, academic grievance procedures, pass/fail options, and credit by examination. Students should acquaint themselves with the pertinent regulations, which can be found in the appropriate sections of this *Catalog*.

All graduate students are advised to consult the Graduate portion of this *Catalog* for specific information on each of the Graduate programs.

The following regulations represent University-wide rules of which all students should be aware in order to fulfill their academic responsibilities. The ultimate responsibility for fulfilling the requirements for a degree rests with the student.

Undergraduate Honors

Campus-Wide Honors

University of Michigan-Flint undergraduate students are eligible for the following campus-wide awards. Notation of each award is made on the student's official transcript.

Maize and Blue. The University of Michigan-Flint's highest award for undergraduate students is presented at the May and December commencement ceremonies. Students graduating in August are recognized in December. Students receiving the award are given plaques and the award is noted on the official transcript.

Eligibility for the award is determined the last semester before graduation. The semesters including the student's last 58 credit hours are determined and a GPA is calculated on the basis of **all** courses at UM-Flint included in these semesters, excepting courses in progress. Students whose calculated GPA is at least 3.75 are considered for the award.

Once the list of eligible students has been determined, academic departments are asked for nominations from this list. Their nominations are sent to the Scholarships, Awards and Special Events Committee, which makes the final decision. At most, thirteen students receive the award at each commencement ceremony. An attempt is made to allocate the awards proportionately among the various academic units.

Commencement Honor Cords. University of Michigan-Flint undergraduate students may walk in commencement ceremonies with honor cords if they meet guidelines for tentative honors. (Eligible students completing their degrees in August are recognized at the December ceremony.) Students in the College of Arts and Sciences and the School of Education and Human Services must have a cumulative GPA of 3.5 or higher two months prior to the ceremony. Students in the School of Health Professions and Studies and the School of Management must meet the degree honors requirements of the school using the current

semester hours. (Courses in progress are excluded from GPA calculations but are included in credit requirements.) Students who wish an exception to these rules must submit a petition to the academics standards committee of their school or college.

Dean's List. A full-time student who earns a 3.5 grade point average for a Fall or Winter semester with 12 or more graded hours is placed on the Dean's List in his or her school or college for that semester. In computing averages, only courses taken at the University of Michigan-Flint are included, and only complete terms or semesters are counted. Notation of the award is made on the student's official transcript.

System-Wide Honors

University of Michigan-Flint undergraduate students are eligible for the following system-wide awards of the University of Michigan. The term "graded" refers to courses graded "ABC."

Branstrom Prize. This prize is presented in March to those first-time freshmen who were enrolled for at least 14 graded credit hours the previous Fall semester and finished in the top five percent of their class. The prize is a book with an inscribed nameplate on the inside cover, chosen by the student from an impressive list.

James B. Angell Scholar. This award is presented in March to those undergraduate students who completed consecutive semesters in the last year each of which included at least 14 credits of graded work for which the student earned no grade lower than "A-".

University Honors (formerly Class Honors). This award is presented in March to those undergraduate students who completed a single semester in the previous year including at least 14 credit hours, at least 12 of which were graded, with a semester GPA of 3.5 or higher.

Academic Standing

An undergraduate student who maintains a grade point average of at least 2.0 for courses elected while enrolled at the University is considered to be in good academic standing in the University. Those students who fail to maintain a C (2.0) average are considered academically deficient. This general description of standards must be augmented by the regulations of each individual unit. All students must be familiar with the academic requirements and rules of their own school or college.

At the end of each term, the Office of the Registrar reviews the transcripts of all students showing evidence of academic difficulty according to the policies set by the committees on academic standards. The University uses three major types of actions: Warning, Up-or-Out, and Dismissal.

Warning. Warning is issued to all students at the University whose cumulative grade point average falls below 2.0 for the first time, but does not drop severely enough to warrant dismissal. There is no automatic term of warning. A significant honor-point deficiency can result in dismissal from the University without a previous warning.

Up-or-Out. When a student on previous warning fails to obtain a 2.0 grade point average in the next term of enrollment or drops severely in one semester, an *up-or-out warning* is issued. The student is informed in writing that unless substantial improvement occurs, academic dismissal will follow at the end of that term. If the grade point average for that term is 2.0 or higher

but is not sufficient to raise the cumulative grade point average to 2.0 or higher, the student is continued on up-or-out status. If the term grade point average is below 2.0, the student may be dismissed. Grades of I (incomplete), N (no credit, no grade), or F (in pass/fail) will be considered grades below C.

Students readmitted to the University after dismissal are immediately placed on up-or-out status.

Dismissal. Academic dismissal does not carry any condition for readmission. If a student wishes at a later date to seek reentry to the University, academic readiness must be demonstrated. This is usually done by submitting transcripts from other institutions of higher learning indicating academic success. Normally, however, the only courses considered as proof of readiness will be such courses which are usually transferable to the University. These courses may or may not be entered as transfer courses on the student's record, but will in no case alter the grade point average already on the student's University of Michigan-Flint permanent record.

Students receiving benefits from the Veterans Administration (VA) will be governed by the same academic standards as other students with the following exception: After two consecutive semesters of a grade point average lower than 2.0, the VA student will no longer be eligible for veterans' benefits. The Veterans Administration will be informed if a student fails to come off probation at the end of two terms or semesters.

Classification of Undergraduate Students

The class standing of undergraduate students is determined by the number of credit hours they have accumulated:

Freshman: Fewer than 25 credits.

Sophomore: At least 25 but fewer than 55 credits. Junior: At least 55 but fewer than 85 credits.

Senior: 85 credits or more.

Students who seek a second bachelor's degree are granted credits as explained in the section "Second Bachelor's Degree" and are placed in the appropriate undergraduate class.

NCFD (non-candidate for degree) students may or may not hold a degree; some may be seeking professional certification or fulfilling undergraduate requirements for a master's degree.

Guest students are enrolled in another college with which they have made arrangements for transfer of credits being earned at the University of Michigan-Flint.

Dual enrollee students are high school students that have been approved to take college courses.

Senior Year Enrollment

To be recommended for the bachelor's degree, a student must have registered as a degree candidate at the University of Michigan-Flint for the last 30 credits.

A transfer student from a non-University of Michigan college must earn a minimum of 45 semester hours at the University of Michigan-Flint, including the last 30 credits.

Changes in Individual Course Elections

Changes in course elections include dropping and adding a course. To make a course change before the first official day of the semester the student must add/drop on the SIS website. To make a course change after the first official day of the semester, the student must obtain an add/drop from the academic advisor and have it signed by the instructor or instructors concerned. The student continues to be registered in the class of original

choice until the student has returned the add/drop form, properly signed, to the Office of the Registrar. See the current course schedule booklet for more information.

Individual courses may not be dropped without a final grade after the Friday of the eighth week of classes. Undergraduate students who seek exceptions to these deadlines must petition the Committee on Academic Standards in the College of Arts and Sciences, the Academic Standards Committee in the School of Education and Human Services, the Academic Standards Committee in the School of Health Professions and Studies, or the Academic Review Committee in the School of Management. A request to drop a course without a final grade after this time will be considered only on medical grounds or for other compelling reasons.

Permission to drop a course after the deadline will not be granted merely because the student is doing unsatisfactory work. If a student stops attending a course without official approval, the grade of E, F or N will be recorded.

The procedure to add courses varies among the different units of the University. For further information, students should consult their advisors and the *Catalog* sections of the different University units. Graduate students should consult the Office of Graduate Programs for information. (See also the add/drop information in the "Adjustment of Fees" section of this *Catalog*.)

Auditing

All students are expected to elect courses for credit. Occasionally an undergraduate student may wish to attend courses which have not been elected for credit. The instructor may grant official auditing at the time of registration or during the scheduled period to add courses. A course that is audited is billed at the usual tuition.

The course will appear on the student's transcript as "audit." The student must attend classes regularly and complete all the work of the course. If the student enrolled as an auditor does not complete the course to the instructor's satisfaction, the grade "W" will be recorded on the permanent record.

Reelection of Courses

Any course may be reelected. Only the credits earned the last time the course is taken will count. The record of all attempts and grades received will appear on the transcript. When a course is reelected, the grade received for the last attempt will be used to calculate the grade point average. Courses taken at institutions other than the University of Michigan-Flint do not affect the grade point average.

Graduate students should consult with the Office of Graduate Programs for information about the reelection of courses.

Policy Concerning N Grades

The grade N, which signifies neither credit nor grade point value, is used in numerous courses. For these courses, the lowest grade for which credit is earned will be one of the following: C, C-, D, D-. The use of this grading system in a course is indicated in course listings and is announced at the beginning of the courses. Students should be aware that although N grades do not affect the grade point average, the accumulation of an excessive number of Ns is considered insufficient progress toward a degree. Therefore, after the first nine (9) credits for which a grade of N is received, any subsequent grade of N will be recorded as an E, regardless of whether a course in the original nine credits is retaken. Students who plan to apply to graduate schools should note that some transcript reporting agencies and graduate schools compute N grades as failing.

Class Attendance

Regular attendance at class, laboratory, and other appointments for which credit is given is expected of all students. Irregularities in attendance should be promptly explained by the student to the appropriate instructors. If an instructor considers the number of absences excessive, a written report may be sent by the instructor to the student's faculty advisor.

Final Examinations

Final examinations are given in accordance with the official schedule issued each term. Students must take the final examination according to that schedule. Students who wish to change the scheduled time due to hardship, conflict, or other unusual circumstances must have their requests approved by the instructor or the dean, director, or coordinator of the appropriate administrative unit.

Disenrollment from the University

If, for health or other valid personal reasons, the student finds it necessary to disenroll from the University, requests for official withdrawal must be obtained from the Office of the Registrar. Students who withdraw or reduce their enrollment should see the section entitled "Adjustment of Fees" to learn whether they are eligible for a refund. Students may disenroll from the University without petition until the last day of classes; courses affected by a disenrollment after the add period will receive "W" grades. Graduate students should consult with the Office of Graduate Programs for disenrollment information.

Students who are absent from the University for more than one calendar year are urged to see the Office of Admissions or the Graduate Programs Office.

Change in Major

An undergraduate student contemplating a change in major should seek advice from the current advisor, the prospective advisor, or the Academic Advising and Career Center, and notify the Office of the Registrar of any change.

A student who seeks a major in programs outside their current school should contact the prospective program for information on appropriate admission requirements and applications. Graduate students should consult with the Office of Graduate Programs for information about change in concentration.

Deficiency in English

Any instructor who finds a student's work seriously deficient in standard written English may refer the case to the Director of the Writing Center. The student may be given additional work in composition with or without credit. Instructors may refuse credit or give a reduced grade for written work which does not demonstrate accurate, effective use of standard English.

Waiver of Degree Requirements

If, because of previous academic work, a student feels compelling reasons to waive University-wide requirements exist, a petition for waiver must be submitted to the academic standards committee of the appropriate unit. If waiver of degree or program requirements is sought, a petition for waiver must be submitted to the appropriate dean, director, or department chair.

The Student as a Guest at Another Institution

A student at the University of Michigan-Flint will be permitted to elect a course for credit at another academic institution provided either (1) completion of the course is necessary to satisfy requirements of the University of Michigan-Flint, or (2) the course is not equivalent to any course of the University of Michigan-Flint but would be normally transferable.

If the course at the other institution is equivalent to one at the University of Michigan-Flint, the student must demonstrate to the advisor and to the chair of the department or program which supervises the course that scheduling of the course at the University of Michigan-Flint cannot be done at a reasonable point in the student's program. The student must obtain written consent to elect the course from the advisor, the appropriate chair, the appropriate dean, and the Registrar of the University of Michigan-Flint.

After the final grade is recorded, the student must arrange to have the visited institution send an official copy of the transcript to the Office of Admissions of the University of Michigan-Flint. Ordinarily students will not be permitted to register for more than one course at a time at the visited institution. Students must complete the final 30 credits at UM-Flint. Therefore, UM-Flint students with 90 or more credits must petition the appropriate academic standards committee for a possible exception to this policy. Students should always consult with advisors to discuss the application of transfer credits toward any particular program of study.

Guest application forms are available in the Office of Admissions. Any student of the University of Michigan-Flint who enrolls in another academic institution, except as outlined above, must not expect to transfer the credit to the University of Michigan-Flint.

Diploma Application

Upon reaching senior status, an undergraduate student must file an Application for Diploma with the Registrar's Office as part of the registration procedure for that term. This will initiate a review of the student's transcript to verify the student's qualifications for graduation.

If the student does not graduate, the application will be inactive until the student informs the Registrar's Office of the new expected date of graduation. Graduate students should request an Application for Diploma from the Office of Graduate Programs as part of the registration procedure for their final term.

Second Bachelor's Degree

A student who has earned a bachelor's degree at any campus of the University of Michigan may earn a second bachelor's degree. This requires a minimum of 30 credits beyond those required for the previous degree. The 90 credits counted from the previous degree will form the basis for the new degree, and will carry its grade point average. When the first bachelor's degree was earned at an institution other than the University of Michigan, students are usually granted 75 credits toward the new degree program. A new degree program must be completed and should be planned in consultation with a concentration advisor.

Simultaneous Bachelor's Degrees

A student may elect to earn and be awarded two different bachelor's degrees simultaneously. Minimal requirements for two degrees earned simultaneously include 30 additional credits beyond the credits required for one of the degrees and fulfillment of all requirements for both degrees, including the foreign language requirement for any BA degree. The student must choose a primary and secondary degree. A student may elect to earn two bachelor's degrees in any combination (e.g., two BA degrees, or a BS and a BBA degree). A student may elect to earn bachelor's degrees in one academic unit or two different units.

Bachelor's degrees offered are listed under "Degrees Offered" in the Planning a Program of Study section of this *Catalog*, and are detailed on a chart in that section.

Multiple Concentrations

A student may elect to earn and be awarded a single bachelor's degree with multiple concentrations. Requirements for multiple concentrations earned simultaneously include fulfillment of all requirements for each concentration and all degree requirements, including the foreign language requirement for a BA degree. The student must choose a primary and secondary concentration. A student may elect to earn different concentrations in one academic unit or different units.

Note: The completion of requirements for multiple concentrations does not constitute the fulfillment of the requirements for simultaneous bachelor's degrees (see above).

Student Rights and Responsibilities

Academic Integrity

Intellectual integrity is the most fundamental value of an academic community. Students and faculty alike are expected to uphold the highest standards of honesty and integrity in their scholarship. No departure from the highest standards of intellectual integrity, whether by cheating, plagiarism, fabrication, falsification, or aiding and abetting dishonesty by another person, can be tolerated in a community of scholars. Such transgressions may result in action ranging from reduced grade or failure of a course, to expulsion from the University or revocation of degree.

It is the responsibility of all students and faculty to know the policies on academic integrity in the instructional units at the University of Michigan-Flint. Information about these policies and the appeals process is available from the appropriate administrative office of the instructional units: in the College of Arts and Sciences, the Office of the Dean of the College of Arts and Sciences; in the School of Education and Human Services, the Office of the Dean of the School of Management, the Office of the Dean of the School of Management; in the School of Health Professions and Studies, the Office of the Dean of the School of Health Professions and Studies and for graduate students, the Office of the Dean of Graduate Programs.

Departments and programs within these instructional units may have specific policies and procedures which further delineate academic integrity. In such cases students are bound by the University policy on academic integrity as well as these department or program policies.

Procedural Rights of the Accused Student. A student who is charged with academic dishonesty by an instructor, administrator, or another student may be assured that he/she has the right to a fair hearing of the charges and the evidence, the right to question witnesses, to invite witnesses on his/her behalf, and to introduce whatever other evidence may be relevant to the charge.

Code of Academic Conduct. The University, like all communities, functions best when its members treat one another

with honesty, fairness, respect, and trust. Therefore, an individual should realize that deception for the purpose of individual gain is an offense against the members of the community. Such dishonesty includes:

Plagiarism: taking credit for someone else's work or ideas, submitting a piece of work (for example, an essay, research paper, assignment, laboratory report) which in part or in whole is not entirely the student's own work without fully and accurately attributing those same portions to their correct source.

Cheating: using unauthorized notes, or study aids, or information from another student or student's paper on an examination; altering a graded work after it has been returned, then submitting the work for regrading; allowing another person to do one's work, then submitting the work under one's own name.

Fabrication: fabricating data; selectively reporting or omitting conflicting data for deceptive purposes; presenting data in a piece of work when the data were not gathered in accordance with guidelines defining the appropriate methods of collecting or generating data; failing to include a substantially accurate account of the method by which the data were gathered or collected.

Aiding and Abetting Dishonesty: providing material or information to another person when it should reasonably be expected that such action could result in these materials or information being used in a manner that would violate this code of academic integrity.

Falsification of Records and Official Documents: altering documents affecting academic records; forging a signature of authorization or falsifying or omitting necessary information on an official academic document, election form, grade report, letter of permission, petition, or any document designed to meet or exempt a student from an established College or University academic regulation; falsification or unauthorized altering of information in any official academic computer file.

Identity Theft: Assuming another person's identity or role through deception or without proper authorization. Communicating or acting under the guise, name, identification, email address, signature, or indicia of another person without proper authorization, or communicating under the rubric of an organization, entity, or unit that you do not have the authority to represent.

Misrepresentation and Other Acts of Academic Dishonesty: fraudulently obtaining and/or using academic materials that would give oneself an unfair advantage over other students or would deceive the person evaluating one's academic performance.

Attempts. An attempt to commit an act prohibited by this code may be punished to the same extent as a completed violation.

The Proper Use of Information Technology

Found online at: http://ww2.umflint.edu/its/policies.htm

Policy

It is the policy of the University to attempt to provide appropriate access to local, national, and international sources of information.

It is the policy of the University that information resources will be used by members of its community with respect for privacy and the public trust.

In accordance with the policies above, the University works to ensure that intellectual property and University records are protected from unauthorized use or distribution.

Authorized Use

As conditions of use for Information Technology Services (ITS) facilities and communication systems accessed through their use, all users agree to respect (1) the privacy of University records, (2) the legal protection provided by copyright and license agreements for programs and data, (3) the intended use for which access to the resources was granted, and (4) the integrity of the computing systems.

Appropriate Use

All users of computing resources should be mindful of the impact of their participation on the campus community, should engage only in authorized use, and should abide by standards of good citizenship in general.

Responsible Use

Users of ITS resources are expected to use those resources in a responsible and efficient manner. Users are expected to refrain from engaging in illegal, unauthorized, inappropriate, for-profit, or deliberately wasteful practices as outlined in the Standard Practice Guide.

Student Academic Grievance Procedure

If any student has a grievance regarding academic practices and policies, there are established procedures within each college and school of the University of Michigan-Flint for resolving such problems. For conflicts involving a faculty member, all such procedures require initial consultation with the individual instructor. If the conflict is of a discriminatory or sexually harassing nature, the student should consult with the Office of Human Resources and Affirmative Action or the Dean. Formal complaints must be filed with the Office of Human Resources and Affirmative Action.

See the appropriate school or college section of this *Catalog* for a statement of the academic grievance procedure to be followed. Graduate students should consult the Office of the Dean of Graduate Programs at the University of Michigan-Flint.

Student Rights Policy

Introduction

The primary purpose of the Student Rights Policy is to assist the University of Michigan-Flint in providing an environment which supports the educational process and the well-being of the campus community. Free inquiry and free expression are essential attributes of the University community. As members of the community, students are encouraged to develop the capacity for critical judgment and to engage in a substantial independent search for

truth. The freedom to learn depends upon the opportunities and conditions in the classroom, the campus, and in the larger community. The responsibility to secure and respect general conditions conducive to the freedom to learn should be shared by all members of the academic community. Students are obligated to exercise their freedom with maturity and responsibility.

Student rights and responsibilities are defined in the Student Rights Policy in order to give general notice of conduct expectations, to identify sanctions which shall be imposed when misconduct occurs, and to ensure that students are treated with fundamental fairness and personal dignity. The Student Rights Policy is an articulation of the University's commitment to recognize and support the rights of its students and to provide a guide for defining behaviors the University considers inappropriate. It is not, however, meant to be an exhaustive list of all rights supported by the University or of all actions which may be considered misconduct.

Members of the University community are accountable to both civil authorities and to the University for acts which violate the law and this Policy. Disciplinary action at the University will, normally, proceed during the pendency of external civil or criminal proceedings and will not be subject to challenge on the grounds that external civil or criminal charges involving the same incident are pending or have been invoked, dismissed, or reduced.

Academic Rights

- 1. Protection of Freedom of Expression. Students are responsible for learning thoroughly the content of any course of study, but are free to take exception to the data or views presented and to reserve judgment about matters of opinion.
- Protection Against Improper Disclosure. Protection against improper disclosure of information regarding student views, beliefs, and political associations which instructors acquire in the course of their work as instructors, advisors, and counselors is considered a professional obligation.
- 3. Protection Against Improper Academic Evaluation. Students can expect protection, through orderly procedures, against prejudice or capricious evaluation.

If any student has a grievance regarding academic practices and policies, there are established procedures within each college and school of the University of Michigan-Flint for resolving such problems.

For conflicts involving a faculty member, all such procedures require initial consultation with the individual instructor. If the conflict is of a discriminatory or sexual harassing nature, the student should consult with the Affirmative Action Officer or the Assistant Vice Chancellor for Student Services and Enrollment Management. Formal complaints must be filed with the Affirmative Action Office.

See the appropriate school or college section of this Catalog for a statement of the academic grievance procedure to be followed. Graduate students should consult the Office of Graduate Programs at the University of Michigan-Flint.

Non-Academic Rights

1. Students are free to express views on and to participate in determining matters of concern to the academic community. Students may exercise rights of free speech and press, lawful assembly, religion, petition, organization, and the freedom to invite and hear speakers who they feel have a contribution to make to the learning experience of the students. In exercising these and all other rights, students have the responsibility to follow the prescribed policies and procedures of the University of Michigan-Flint, including the "Statement on Freedom of Speech and Artistic Expression" adopted by the Board of Regents of the University of Michigan (July 1988).

- a. Students and student organizations are free to discuss responsible questions of interest to them and to express lawful opinions publicly and privately without penalty. In conveying the ideas and opinions of students, the student press is free from censorship and the need of advance approval.
 - b. Editors, managers, and writers must subscribe to the standards of responsible journalism. At the same time, they are protected from arbitrary suspension and removal because of student, faculty, administrative, or public disapproval of editorial policy or content.
- 3. Students are free to organize and join associations, and conduct business in their own interest. Student organizations have the right to establish membership requirements, qualifications for office, and rules of procedures for operation within the guidelines established by Student Government. University facilities are reasonably available so far as their primary use for educational purposes permit, on a non-discriminatory basis, to registered student organizations.
- 4. Students have the right to privacy of personal possessions. Searches and seizures may be conducted by appropriate University officials, but only for specific reasons of probable cause and not freely at will. The student(s) being searched must be notified of the object of the search, unless there is probable immediate danger to person or property.
- Students who have allegedly violated University policy have the right to use applicable University proceedings. The proceedings of such cases will be conducted according to procedures established for that purpose by the appropriate University unit.

Students' Responsibilities

Students are expected to be responsible for their actions and to respect the rights of others. These expectations are not meant to limit students' constitutional rights to freedom of expression.

The following personal actions on University property or at official University functions shall be considered non-academic misconduct and be subject to disciplinary action:

- 1. Sexual assault or sexual harassment.
- 2. Harassment or stalking.
- Causing or threatening to cause harm to any person on University premises or at University-sponsored activities and events. This includes, but is not limited to acts such as killing, assault, or battery.
- Use, possession, or storage of any weapon on University premises or at University-sponsored activities and events (unless approved by the Department of Public Safety; such approval will be given only in extraordinary circumstances).

- 5. Hazing practices as requirements of membership, advancement, or continued good standing in organizations, defined as including, but not limited to the following willful acts, with or without the consent of the individual involved:
 - · physical injury, assault, or battery
 - kidnapping or imprisonment
 - intentionally placing at risk of severe mental or emotional harm
 - degradation, humiliation, or compromising of moral or religious values
 - forced consumption of any liquid or solid
 - · mandatory personal servitude
 - placing an individual in physical danger (at risk) which includes abandonment
 - impairment of physical liberties which include curfews or other interference with academic endeavors.
- Unlawful possession, use, manufacture, sale, or distribution
 of any controlled substance, alcoholic beverage, or illegal
 drug on University premises or at University-sponsored
 activities and events.
- Initiating or causing to be initiated any false report, warning, or threat of fire, explosion, or other emergency on University premises or at University-sponsored activities and events.
- Fraud against the University, forgery, misuse, or alteration of any University document or record including identification card, or misuse of the University's computer system to gain access to restricted information.
- 9. Furnishing false information to the University.
- Theft of University property or funds or misuse of services on University premises; possession of stolen University property; possession of stolen property on University premises.
- 11. Intentionally and significantly interfering with teaching.
- Damage, destruction or vandalism of University property or property belonging to another.
- 13. Illegal entry into University facilities.
- Unauthorized use or possession of fireworks or explosives on University premises or at University-sponsored activities and events.
- 15. Interfering with University or University-sponsored activities. This includes but is not limited to studying, teaching, research, University administration, or campus safety, fire, police, or emergency services.
- Failing to comply with directions of University officials, including campus safety, acting in performance of their duties.
- 17. Commission of any state or federal crime on University premises or at University-sponsored activities and events.
- Tampering with fire or other safety equipment, or setting unauthorized fires.
- Misusing, failing to comply with or jeopardizing these procedures, sanctions, or mediated agreements, or interfering with participants involved in the resolution process.

Discrimination or Harassment

Students who feel their rights have been abridged for reasons of race, ethnicity, religion, sex, sexual orientation, creed, color, national origin, ancestry, age, marital status, handicap, or Vietnamera veteran status should consult with the Affirmative Action Officer. Formal complaints must be filed with the Affirmative Action Office. The role of the Affirmative Action Officer is to help the student to identify the source of the problem and to inform the student of University policies and procedures as well as protective laws and regulations as they may apply, and to assist the student in the resolution of the identified problem.

Harassment is defined as physical force, violence, or behavior that has the purpose or effect of interfering with an individual's personal safety, academic efforts, employment, or participation in university sponsored activities and causes the person to have a reasonable apprehension that such harm is about to occur. This includes harassment by the use of technology such as the telephone, voice mail, answering machine, fax machine, computer e-mail, or other electronic communication media.

Stalking, a form of harassment, means a willful course of conduct involving repeated or continuing harassment of another individual that would cause a reasonable person to feel terrorized, frightened, intimidated, threatened, harassed, or molested, and that actually causes the victim to feel terrorized, frightened, intimidated, threatened, harassed, or molested.

No member of the University community may sexually harass another. Sexual harassment consists of sexual advances, requests for sexual favors, and verbal, visual or physical conduct that stigmatizes or victimizes an individual on the basis of sex or sexual orientation where such behavior:

- 1. Involves an express or implied threat to an individual's academic efforts, employment, participation in Universitysponsored extracurricular activities, or personal safety; or
- 2. Has the purpose or reasonably foreseeable effect of interfering with an individual's academic efforts, employment, participation in University-sponsored extracurricular activities, or personal safety; or
- 3. Creates an intimidating, hostile or demeaning environment for educational pursuits, employment, or participation in University-sponsored extracurricular activities.

The University will make a good faith effort to seek resolution of all complaints in an expedient and confidential manner through discussion and communication with the person, witnesses, and department or unit involved. If such consultation does not resolve the problem, the findings of the Affirmative Action Officer will be referred to the Assistant Vice Chancellor for Student Services and Enrollment Management for further consideration.

Non-Academic Procedural Rights

The goal of the University of Michigan-Flint is to provide an environment which supports the educational process, and protects the safety and well-being of the campus community. This responsibility lies with the entire campus community: the administration, the faculty, the staff, and the students. The purpose of these procedures is to establish a uniform, unbiased process which will serve to protect the rights of persons within the University community.

1. Nothing in this document shall operate in derogation of any

- Regents' Bylaw, any collective bargaining or other contractual relationship of the University, nor shall it be construed to limit the authority of the Chancellor to maintain health, diligence, and order among the students under Regents' Bylaw 2.02.
- Complaints of harassment should be made to the Affirmative Action Officer, Assistant Vice Chancellor for Student Services and Enrollment Management, or other University representatives as described above.
- Attempts will be made to resolve disputes informally through interviews and counseling.
- Complaints which cannot be resolved informally, or upon the written request of either party, will be referred for hearing.
- Complaints involving discrimination or sexual harassment will be heard by the Grievance Hearing Board. Other complaints involving non-academic misconduct by students will be heard by the Conduct Board.
 - a. The Conduct Board consists of the members of the Student Judicial Board selected by procedures of the Student Government Council, and two members of the faculty selected annually by the Faculty Assembly. A minimum of five members of the Conduct Board must be present at the hearing; a majority of the members present must find clear and convincing evidence that a violation has occurred in order to impose sanctions. The Conduct Board is chaired by the student chair of the Student Judicial Board. University counsel may advise the Board.
 - The Grievance Hearing Board is designed to provide the opportunity to include hearing members representing the protected statuses of the complainant and the student charged. The chair of the Grievance Hearing Board is the student chair of the Student Judicial Board. The other members are the two faculty members serving on the Conduct Board, plus four members of the University community: two selected by the complainant and two by the student charged. The four selected members must be at least one-half time employees or students enrolled either at the time of the hearing or the alleged act. The selected members can not have been witnesses to or participants in the alleged act. A minimum of five members of the Grievance Hearing Board must be present at the hearing; a majority of the members present must find clear and convincing evidence that a violation has occurred in order to impose sanctions. University counsel may advise the Board.
- 6. Procedural requirements must be observed for hearings:
 - a. The student charged must be informed in writing of the complaint at least seven days in advance of a hearing.
 - b. Hearings are closed to the public, unless both parties request that the hearing be open, and will include the hearing body, the student charged and advisor, the Assistant Vice Chancellor for Student Services and Enrollment Management, and witnesses while giving testimony.
 - The following protocol for witnesses will be observed during hearings:

Witness:

- The witness (complainant or other) has the opportunity to make a statement.
- The Hearing Board questions the witness.
- The charged student questions the witness.
- The Hearing Board asks any follow up questions.

Charged Student:

- The charged student has the opportunity to make a
- The Hearing Board questions the charged student.

- d. The charged student and any witness may be accompanied at the hearing by a personal advisor, who may be an attorney; however, the advisor may not participate directly in the proceedings.
- The Assistant Vice Chancellor for Student Services and Enrollment Management will present the evidence and appropriate witnesses.
- f. The hearing body will deliberate in closed session and its decision will be communicated to the student charged, in writing, by the Assistant Vice Chancellor for Student Services and Enrollment Management within five days.
- 7. Appeals of the Board's decision must be submitted to the Vice Chancellor for Student Services and Enrollment Management in writing within seven days of receipt of the decision. Appeals will be directed to the Committee for Student Concerns and Enrollment Management of the University. The following are considered appropriate grounds for appeal: (1) Proper procedures were not followed; (2) the evidence clearly does not support the findings; (3) sanctions are insufficient or excessive relative to the violation; or (4) there is new evidence not reasonably available at the time of the hearing.
- The decision of the Committee for Student Concerns and Enrollment Management shall be communicated in writing by the Vice Chancellor for Student Services and Enrollment Management to the student within fourteen days of receipt of the appeal.
- Any person who knowingly and intentionally files a false complaint under these procedures is subject to disciplinary action.
- 10. Threats or other forms of intimidation or retaliation against a complainant, witness, or member of a hearing board shall constitute a violation subject to disciplinary action.
- Records of non-academic misconduct will be maintained by the Assistant Vice Chancellor for Student Services and Enrollment Management and destroyed after expiration of the sanction.
- 12. For good cause, any time limit in these procedures may be extended by the Vice Chancellor for Student Services and Enrollment Management.
- 13. The Chancellor of the University shall have the power of executive clemency.
- 14. The Hearing Board is not bound by the legal rules of evidence.
- 15. The Hearing Board shall exercise control over the hearing to avoid needless consumption of time and to prevent the harassment or intimidation of witnesses. The Hearing Board may limit testimony based on redundancy or lack of relevancy.

Sanctions

The sanctions to be imposed should be commensurate with the offending conduct. Although it is inappropriate for the University to try to change a student's convictions, it is appropriate for the University to ask a student to change inappropriate behavior. Sanctions should, therefore, be designed which may deter behaviors that harm, intimidate, harass, or threaten others.

Factors that may be considered in determining the nature of sanctions to be imposed for violations include the effect of the conduct on the victim and the University community, the presence or absence of past violations on the part of the student, and the appropriateness of sanctions such as community service.

Regrettably, some conduct is so harmful to members of the University community or deleterious to the educational process that more severe sanctions may be required. Severe sanctions such as suspension or expulsion, should be imposed only when the offending behavior involves violent or dangerous acts, acts which disrupt the educational process and/or when there has been willful failure to comply with a lesser sanction.

The range of potential sanctions is as follows:

- Suspension from Specific Course or Activity. The student is removed from a specific course or activity, or is moved to a different section of the course.
- Class/Workshop Attendance. The student enrolls in and completes a class or workshop that may help improve his/her understanding of why the conduct engaged in is inappropriate.
- Community Service. The student performs an appropriate amount of service that is both beneficial to the community and likely to assist the student in understanding the harm caused by his or her conduct.
- 4. Disciplinary Reprimand. The student receives a formal reprimand for violating the standards of behavior and a warning that future violations may result in more severe disciplinary action. The student does not lose his/her University privileges.
- 5. Disciplinary Probation. During the probation period, the student may not represent the University in any way. This includes, but is not limited to, engaging in any extracurricular activity, running for or holding office in any student group or organization, and serving on any University committees. The appropriate University units shall be notified of the student's probationary status.
- Suspension in Abeyance. The student remains enrolled. However, any violation of the conduct regulations during the period of Suspension in Abeyance will, after a determination of guilt, result in automatic suspension.
- 7. Suspension. The student is temporarily separated from the University for a specified period of time. Conditions may be stipulated for the readmission of a student. When a student is suspended during a term, he/she is not exempted from the payment of tuition for that term.
- 8. Expulsion. The student is permanently separated from the University. Penalty shall consist of the student being barred from the premises of the University. When a student is expelled during a term, he/she is not exempted from the payment of tuition for that term.
- 9. Restitution. The student makes payment for damages incurred as a result of his/her violation.
- 10. Other Disciplinary Actions. In addition to or in place of any of the above sanctions, the student may be subject to other penalties commensurate with the offending conduct. This may include but is not limited to degree and/or transcript actions, such as recision of a degree, withholding of course credit, loss of credit for an assignment/exam, assignment of additional work, loss of special privileges, behavioral counseling, or a behavioral contract.
- Combined Sanctions. A combination of the sanctions described above may be imposed.
- No Contact. Restriction from entering specific University areas and/or all forms of contact with certain person(s).

The sanctions imposed under these standards do not diminish or replace the penalties which may be invoked under generally applicable civil or criminal laws. Students are reminded that many violations of the standards, including harassment and other discriminatory behavior, may violate local, state and federal laws and students may be accountable to both the legal system and the University.

Failure to heed a warning, abide by terms of probation, complete special duties as required, or otherwise fail to comply with sanctions imposed through these procedures, may be grounds for other disciplinary action.

Student Rights and Records

In carrying out their assigned responsibilities, several offices at the University of Michigan-Flint collect and maintain information about students. Although these records belong to the University, both University policy and federal law accord you a number of rights concerning these records. The following is designed to inform you concerning where records about you may be kept and maintained, what kinds of information are in those records, the conditions under which you or anyone else may have access to information in those records, and what action to take if you believe that the information in your record is inaccurate or that your rights have been compromised.

Because the University does not maintain all student records in one location, this document contains general information related to student records. Copies of the University's "Policies on Student Records" and the pertinent federal law, the Family Educational Rights and Privacy Act of 1974 (FERPA), are posted on the bulletin board outside the Registrar's Office, 266 University Pavilion.

Types of Records and Where They Are Located

Only two offices have records on all students. The Office of the Registrar maintains information pertaining to enrollment (registration) and official academic records (transcripts). The Student Accounts Office maintains information about charges assessed and payments made. Students have the following rights concerning their records:

Student Rights

Once you attend, you have the following rights concerning your student records:

1. The right to inspect and review all material in your file(s)

- Professional mental health treatment records to the extent necessary, in the judgment of the attending physician or professional counselor, to avoid detrimental effects to the mental health of the student or of others. These records may, however, be reviewed by a physician or other appropriate professional of your choice.
- Financial information furnished by your parents in support of an application for financial aid.
- Confidential letters of recommendation that were placed in your file prior to January 1, 1975.
- Confidential letters of recommendation concerning admission, employment, or honorary recognition, for which you have waived access. (The University may not require you to sign a waiver in order to obtain services, but a person writing a recommendation may insist on a waiver as a condition for his or her writing it.)
- Personal notes made by a faculty member or counselor that are accessible only to that person and are not shared
- Materials in any admissions files, until you have been admitted to, and have enrolled in the University of-Michigan-Flint.

Students must file a written request if they wish to review their records. Sometimes the response will be immediate, but in most instances you should expect to wait several days; in no case, however, should the response be delayed more than 45 days from the date of your request. Also, once you have submitted such a

request, no non-exempt material may be removed from the file in question until the matter is resolved.

NOTE: Federal law requires that an institution make copies of materials available to a student only if the failure to do so effectively prevents the student from reviewing his or her file (for example, if you were some distance from Flint and could not readily come to the campus). Most offices at the University, however, will provide copies if you need them. You will probably have to wait several days for the copies and you will be charged not more than fifteen cents per page plus any postage involved. In certain instances, you may be directed to obtain copies from the office responsible for maintaining a particular record. For example, we will not copy transcripts that are in our files from another institution you have attended; rather, you will be advised to obtain them directly from your former school.

- The right to a hearing: Students have the right to request a hearing if they feel that:
 - you have been improperly denied access to their records
 - your records contain information that is inaccurate or misleading
 - information from your records has been improperly released to third parties
- 3. The right in most instances to control access to information in your records by persons or agencies outside the University. Within the University, information from your records will be made available to those staff members who demonstrate a legitimate educational interest consistent with their official functions for the University and consistent with normal professional and legal practices.
 - a) Except for directory information, however, persons outside the University - including your parents and/or spouse will be given information from your records only:
 - when you authorize it in writing, or
 - in connection with your application for or receipt of financial aid, or
 - in connection with studies conducted for the purpose of accreditation, development and validation of predictive tests, administration of student aid programs, or improvement of instruction, or
 - when disclosure is required in a health or safety emergency or by federal or state law or by subpoena. If information from your record is subpoenaed, you will be notified as quickly as possible. In addition, the results of a disciplinary hearing conducted by the institution against the alleged perpetrator of a crime of violence will be made available to the alleged victim of that crime
 - b) The Office of the Registrar is required to keep a record of all requests for non-directory information from your records made by persons outside the University, and to make that record available for you to examine.
 - c) Federal law requires that the University designate what it regards as directory information (public information) and which may, therefore, be released to those outside the University without specific authorization. The law also requires that each currently enrolled student be given the opportunity to direct that items designated as directory information not be released without his or her consent.
 - The University of Michigan-Flint has designated the following items as directory information:
 - name
 - address and telephone

- · department, class level, major field
- dates of attendance at the University of Michigan-Flint
- · degree received and date awarded
- · honors and awards received
- previous school(s) attended

Although this information is designated as public, the University of Michigan-Flint restricts its dissemination. For example, it has been University policy for some years not to furnish address lists to insurance companies, magazine subscription agencies and other organizations that request them.

- e) Generally, requests come from prospective employers who want to verify dates of attendance and degrees received. While students have the right to direct that public information about themselves not be released, they should carefully consider all of the consequences of that action before making the decision to do so. Information is not withheld selectively. If you choose to have directory information withheld, it is withheld from everyone who inquires.
- f) If students do not want the University of Michigan-Flint to release public information, they should complete a "Request to Prevent Disclosure of Directory Information" form at the Office of the Registrar.
- 4. The right to file a complaint of federal officials if you feel there has been a violation of the rights afforded you under the Family Educational Rights and Privacy Act of 1974. The complaint must be submitted in writing within 180 days of the alleged violation to:

U.S. Department of Education The Family Policy Compliance Office 600 Independent Avenue SW Washington, D.C. 20202-4605 Phone: (202) 260-3887 Questions about policies and procedures regarding student records within the University of Michigan-Flint should be directed to:

Karen A Arnould Office of the Registrar University of Michigan-Flint 266 University Pavilion Flint, Michigan 48502

Offices That May Maintain Student Records at the University of Michigan-Flint

Academic Advising and Career Center, 285 University Pavilion
Office of Undergraduate Admissions, 245 University Pavilion
College of Arts and Sciences Academic Offices
Office of Extended Learning, 240 David M. French Hall
Financial Aid Office, 277 University Pavilion
Office of Graduate Program, 251 Frances Wilson Thompson
Library

Frances Willson Thompson Library
Office of the Registrar, 266 University Pavilion
Department of Public Safety, Hubbard Building
School of Education and Human Services, 410 French Hall
School of Health Professions and Studies, 2205 WSW Building
School of Management, 3139 WSW Building
Student Accounts Office, 264 University Pavilion
Student Development Center, 264 UCEN
Student Life, 375 UCEN
Vice-Chancellor of Student Services & Enrollment Management

Vice-Chancellor of Student Services & Enrollment Management, 237 University Pavilion

IF IT HAPPENS TO YOU,

The University of Michigan-Flint provides several offices where you can go for help, information or advice about discrimination, harassment or misconduct.

Equity & Diversity Services

217 Harding Mott University Center, (810) 762-3169

Department of Public Safety

Hubbard Building, (810) 762-3335

College of Arts and Sciences

517 David M. French Hall, (810) 762-3234

Educational Opportunity Initiatives

280 Harding Mott University Center, (810) 762-3365

Human Resources

213 University Pavilion, (810) 762-3150

Personal Counseling

264 Harding Mott University Center, (810) 762-3456

School of Health Professions and Studies

2205 William S. White Building, (810) 237-6503

School of Management

3139 William S. White Building, (810) 762-3160

Student Development Center

264 Harding Mott University Center, (810) 762-3456

Student Life

375 Harding Mott University Center, (810) 762-3431

Vice Chancellor for Student Services and Enrollment Management 237 University Pavilion, (810) 762-3434

... TELL SOMEONE



Resources for the University Community

RESOURCES FOR THE UNIVERSITY COMMUNITY

Academic Resources

Library

Frances Willson Thompson Library (810) 762-3400

Director: Bob Houbeck (762-3410)

Head of Circulation: Vera Anderson (762-3401)

Head of Public Services: Vacant

Head of Technical Services: David Hart (762-3158)

The Thompson Library, opened in the fall of 1994, owes its existence to the generosity of area citizens, most notably Frances Willson Thompson. The library is a spacious and comfortable facility for study and research. Its collection includes approximately 217,000 books and 35,000 bound magazines and journals. The library also contains over a half-million microforms ranging from the *Times* of London to documents on education. The library subscribes to some 1,100 hardcopy periodicals, and provides electronic access to approximately 13,000 more.

Mirlyn, the Thompson Library's online catalog, lists library holdings and also allows users to search the catalogs of the Ann Arbor campus library system, as well as those of Michigan State University and other Big Ten libraries.

A wide range of research aids, including indexes, abstracts, and directories, is at the student's disposal, as are photocopiers, microform reader-printers, and Internet workstations. Online databases available through the library enable students to do effective searching of journal literature in almost all disciplines. The media collection includes music CDs, audio tapes, and other media, including CD-ROMs, DVDs, and videotapes. Playback equipment is available in the library, students may also borrow for out-of-library use most of the items in the media collection.

The Thompson Library has a regular program of research instruction to aid students in using its resources. Instruction is available to classes at all levels. The Information Technology Services department maintains a computer lab on the second floor of the library open to all UM-Flint students.

UM-Flint students, faculty, and staff may borrow from the Ann Arbor and UM-Dearborn campus libraries. The library's participation in a national bibliographic system allows it to borrow materials from around the country for its patrons.

Students may borrow most books for three weeks (eight weeks for graduate students, one semester for faculty and staff), and may renew them once. Reference librarians are available to help both experienced scholars and newcomers with academic research, including use of the library's Web pages, which furnish links to a wide range of effective research sites.

The library contains the Henry H. Crapo Room, a recreation of an office similar to one used by the former Michigan governor (1865-1869). Governor Crapo was the great-grandfather of Frances Willson Thompson.

Genesee Historical Collections

The Genesee Historical Collections Center (GHCC), a division of

the Thompson Library, contains both published and unpublished material on the history of Flint and Genesee County, Michigan, as well as the archives of the University of Michigan-Flint. Among the significant manuscript collections in the GHCC are those of Flint realtor Gerald Healy, African-American activist Edgar Holt, records of the Flint Woolen Mills, Flint Junior League, and Rotary Club. The papers of U.S. Sen. Donald Riegle and U.S. Rep. Dale Kildee are amongst its political collections. The GHCC holds a microfilm copy of the papers of former Michigan Governor Henry H. Crapo, Flint lumbermen and railroad executive, as well as papers of members of his family. Finding aids are available at the archives and online.

For further information on library collections, services, or policies, please inquire at the Reference Desk, or call 762-3408-or visit the library's Website: http://lib.umflint.edu.

Academic Advising and Career Center

Academic Advising Services

285 University Pavilion (810) 762-3085 FAX (810) 762-3043

E-mail: advisors@list.flint.umich.edu

Instant Messaging: umfadvising@ either yahoo/ or msn/ or aol.com

Director: Aimi Moss

Academic Advisors: Jeffery Dobbs, Margaret Golembiewski,

Kelly Miller, Jo Ann Shabazz Office Manager: Wendy Carpenter Support Staff: Barbara Griffin

The Academic Advising and Career Center (AACC) was established to support students in a nurturing and collaborative environment that places an emphasis on the total development of students as a means of assisting them in accomplishing academic, personal, and professional goals. The AACC is comprised of a diverse staff committed to student's transition to the University of Michigan – Flint, their success, and participation in the university experience both academically and socially. Academic advising is a continuous process with an accumulation of personal contacts between advisor and student that have purpose and direction.

Promoting student retention is central to the mission of the AACC. Programs designed to promote and sustain the retention of students include the Academic Advantage Plan, Early Assessment Program and College Student Inventory.

Students are encouraged to seek assistance from the AACC concerning general education requirements, program requirements, petitioning procedures, dropping and adding classes, changing majors, changing advisors, questions regarding University processes, and any general information requests.

The AACC is responsible for coordinating academic advising for all newly admitted students. The following groups of students are specifically assigned to the AACC:

- New freshmen (except Honors Scholar students and School of Management students)
- Certain majors awaiting admission into their programs i.e. Education, Nursing, Engineering and Computer Science
- · Bachelor of Applied Science majors
- Challenge Program students
- Undeclared majors
- Non-Candidate for Degree students (NCFD)

- Dual enrollees (students concurrently enrolled in high school and the University of Michigan-Flint)
- Guest students

The Academic Advising and Career Center assists students in selecting courses to meet their general education requirements and certain program requirements and makes referrals to appropriate support services. The AACC also maintains students' advising files until they are ready to be transferred to the academic department of their major field of study. Faculty members in the newly assigned departments assist students through the remainder of their degree programs. Certain exceptions to this general policy exist.

The academic advising process is a collaborative effort between the student and the academic advisors. All students are expected to read their *Catalog*, course schedule, and all other pertinent college materials and be prepared to participate in the advising process.

Walk-ins are welcome. However, to assure the best service, students should call and arrange for an appointment with an academic advisor. Daytime and evening appointments are available.

Placement testing for English, mathematics and chemistry are administered in the AACC.

Career Services

The AACC provides leadership and service to students and alumni in the areas of career development, experiential education and professional employment strategies. The AACC staff assists constituents in identifying career goals and/or in making successful career transitions.

The role of the AACC is to assist students with a continuum of services from freshmen to senior status that range from the selection or confirmation of a major, through experiential learning with co-op and internship opportunities (see "Experiential Education" for further information), to assistance with the job search or graduate school application process.

Services include:

- Individual career exploration and planning
 - · career assessment tests
 - career resource library
 - · workshops for career planning
- Job search advising
 - · workshops for career planning and job searching
 - · resume and cover letter critiquing
 - UM-Flint Resume Connection, electronic resume referral service
 - · mock interviews
 - recruiting trends information
- Experiential education via co-op/internship opportunities
- Employment connections
 - · spring career fair
 - on-campus recruiting
 - · meetings with accounting and business firms
- · Graduate and professional school connections
 - · timelines, testing information application assistance
 - · college recruiting
 - · graduate school fair

Office of the Ombuds

237 University Pavilion (810) 762-3434

Ombuds: Rob Montry

Executive Secretary: Judith Dinsmore

The Office of the Ombuds is a safe environment where student questions, concerns, and complaints about the functioning of the University may be discussed in a confidential manner. It offers informal dispute resolution services, provides resources and referrals, and helps students consider available options. The office operates independently as a supplement to existing administrative and formal dispute resolution processes. It has no formal decision-making authority. The office is neutral and not an advocate for either side in a dispute. Rather, the University Ombuds is an impartial advocate for fair and consistent treatment. The Office of the Ombuds reports administratively to the Vice Chancellor for Student Services and Enrollment Management, and adheres to the International Ombudsman Association (IOA) Code of Ethics and Standards of Practice where confidentiality, independence, neutrality, and informality are core principles.

The Office of the Ombuds will diligently field student questions and complaints, promote development of critical thinking and problem solving skills to help students act on their own behalf to resolve conflicts, help students evaluate options for addressing concerns, make appropriate referrals, advise students about informal and formal resolution possibilities, and engage in *shuttle diplomacy* between parties when needed. The Office of the Ombuds does *not* serve as a student advocate, replace traditional complaint and grievance procedures, participate in formal grievance processes, make administrative decisions for other offices, assign sanctions, act as an "office of notice" for those wishing to file a formal complaint, or relieve the student from acting on their own behalf.

Students unsure of how to proceed with a problem at the University of Michigan-Flint, entangled in red tape, caught in an irresolvable dispute, or in need of appropriate information and answers may contact the Office of the Ombuds. Those seeking assistance are requested to complete a *Confidential Information Sheet* and an *Authorization Form*. These documents allow the office to understand the situation and provide permission to make needed inquiries and collect relevant information. Both forms are available in Room 237 of the University Pavilion during business hours from 8:00 A.M. to 5:00 P.M., Monday through Friday. The Office of the Ombuds may also be contacted at (810) 762-3434.

Women's Educational Center

359 University Center (810) 237-6648

Website: http://www.umflint.edu/wec

Director: Dr. Michelle O. Rosynsky Project Coordinator: Vicky Dawson

The Women's Educational Center (WEC) is a department at the University of Michigan-Flint that works to:

- provide services and programs that empower women students, faculty and staff to pursue their educational and career goals, engage in personal and professional development; and, promote an understanding of women's lives;
- monitor and raise awareness about the status of women on campus and broader women's issues as they relate to education, employment and policies;
- advocate for equality by challenging imbalances of power based on gender and other social factors, such as race, class, sexual orientation, and age, inside and beyond the University, particularly as it relates to education and employment; and,
- · encourage and support women's participation in the life of

the University, as well as regional, national and global communities.

The WEC is open to all students, faculty and staff on campus, as well as to member of the surrounding community.

Advocacy and Referral

The Women's Educational Center (WEC) maintains updated information about services available at the University and in the community, including referrals for domestic violence and sexual assault support, personal counseling, financial assistance, childcare, legal services, etc. The staff advocates on behalf of students, faculty, and staff, and works to raise awareness about women's issues on campus and in the community.

Critical Difference Grant

A one-time grant of up to 300 dollars is available to men and women who have returned to school after having at least a 24 month interruption in their college education and find themselves in an emergency situation that jeopardizes their ability to stay in school.

Programming and Special Events

- Lectures, panel presentations, and discussions about topics/issues that relate to women and their lives.
- Personal/professional development and educational workshops--topics may include eating disorders, nutrition and wellness; resume writing and career planning, developing leadership skills, time management, self-defense, personal statement writing, work/life issues, etc.
- Violence against women awareness-raising programs--under a grant from the US Department of Justice, the Women's Educational Center is implementing an awareness-raising campaign about violence against women. The project includes a series of programs for students, faculty and staff that highlight issues relating to domestic violence, sexual assault and stalking, as well as the resources that are available for survivors.
- Women's History Month programming--the WEC also offers programs in March to celebrate and highlight the lives of women. Programs may include an art exhibition, Vagina Monologues production, panel presentations and lectures. We also co-sponsor Women's Night Out in March with the Recreation Center and University Outreach. resource fair that attracts to campus a fair amount of women in Flint.

Scholarship Information

The Women's Educational Center offers workshops co-sponsored by the Office of Finncial Aid that inform students of various academic scholarships and how to prepare a winning application. The application process for Ann Arbor's Center for Education of Women scholarship for women returning to school is also highlighted. The WEC also maintains a collection of updated scholarship opportunities/applications for undergraduate and graduate students.

Support for Students, Faculty, and Staff with Children

Programs that support individuals on campus who have children and provide opportunities for parents to bring their children to campus include Spring Family Fun Night, Movie Nights, Take Your Child to Work Day, as well as the Adopt and Student Family program that is co-sponsored by the Staff Council.

Support for Non-traditional Students and Women Returning to School

The WEC offers support, advisement, and resource information through individual interaction and group workshops. Information includes strategies for being successful at UM-Flint.

Library

The WEC houses a collection of books dedicated to women's issues in the areas of education, health, parenting, public policy, law, psychology, literature, and feminism.

International Student Center

515 Stevens St. Flint, Michigan 48502 (810) 767-6449 FAX: (810) 767-6477 http://www.umflint.edu/isc/

Director: Peter Hendricks

Student Activities Coordinator: Patriece N. Campbell

The International Student Center provides a range of support services and guidance for new and current international students from the time of admission through graduation. Individual attention is given to each international student with I-20 preparation, SEVIS monitoring and United States Citizenship and Immigration Services information. Arrival assistance, help securing housing, assistance with adjustment issues and community resource information and referrals are provided. The International Student Center conducts workshops on a variety of topics, coordinates and arranges fieldtrips and social activities and directs students to campus-based academic and student support services.

International students are required to present their I-20s at the ISC upon arriving for their first semester. The ISC verifies international students' visa status as non-immigrants throughout their studies at the University. International students also go to the ISC to consult about and request applications for Curricular Practical Training (CPT) and Optional Practical Training (OPT), and for re-entry purposes have their I-20s signed before leaving the country.

Marian E. Wright Writing Center

559 David M. French Hall (810) 766-6602 FAX (810) 237-6666

Website: http://www.flint.umich.edu/Departments/writingcenter

Director: Dr. Jacob S. Blumner Coordinator: Scott Russell

Materials and individualized instruction in writing are provided for all students. Tutoring is by appointment and a drop-in basis. Students can get help with writing assignments for any course throughout the university or work on specific writing problems.

Instruction for one, two or three academic credits is offered in ENG 109: College Writing Workshop. Credit is earned by attending class and working with tutors in the Center. Computers are available for use by students working on their writing.

The Center is fully staffed with trained tutors and is open Monday through Thursday, 9:00 a.m. to 7:00 p.m.; Friday, 9:00 a.m. to 4:00 p.m.; and Saturday, 12:00 p.m. to 4:00 p.m.

Educational Opportunity Initiatives (EOI)

280, 290, 292 & 217 Harding Mott University Center (810) 762-3365 (Main Offices & College Level Programs), 810-766-6622 (Pre-College Programs), & 810-762-3169 (Diversity Education Services)

FAX (810) 762-3190 (Main Office); 810-237-6539 (Diversity Education Services)

Website: www.flint.umich.edu/eoi Executive Director: Tendaji W. Ganges Administrative Assistant Senior: Patricia S. Overton

The mission of the Office of Educational Opportunity Initiatives is to foster changes in institutional services and climate and enhance the ability of the University of Michigan-Flint to identify, recruit, serve and graduate students of diverse backgrounds with a particular emphasis on students from underrepresented groups such as non-traditional, educationally and economically disadvantaged, and those from urban and other areas where the college access and success rates are significantly below the national average. Ultimately, such efforts should contribute to the overall adaptability and success of UM-Flint and enhance the climate of the UM-Flint community such that it is markedly more responsive, adaptive, and effective in meeting the needs of all of its constituent community.

College Level Programs and Services

Transition and Support Services (TSS)

Program Manager: Clara W. Blakely

Transition and Support Services provides a web of services, programs, and information designed to assist students in their transition to the university and continues the provision of these services through graduation. Its services are provided to students upon request or referral with the primary foci being students from under-represented groups such as non-traditional, educationally and economically disadvantaged, and those from urban and other areas where the college access and success rates are significantly below the national average, and others identified as being at high risk of not persisting through to graduation. TSS develops and implements programming that contributes to student success, enhances the rate of persistence and thereby enables more students to attain their baccalaureate degree. TSS also utilizes a comprehensive referral network to connect students to campus and external programs and services.

Programs and services offered through TSS address the academic, personal, and social needs of students. Programs and services offered by TSS include Peer Assisted Learning (PAL), Peer Growth Teams (PGT), academic guidance, monitoring and follow-up. The Bridges to Success, Challenge Program and the Transitions Programs are all part of TSS.

Transitions Program

Program Manager: James Anthony Jones

Funded through the Office of King/Chavez/Parks Initiatives in the Michigan Department of Labor and Economic Growth, with added support from UM-Flint in partnership with Mott Community College, the Transitions Program is designed to facilitate and increase the diversity and numbers of academically and economically disadvantaged students who transfer from Mott

Community College to UM-Flint to pursue a baccalaureate degree.

The Transitions Program identifies and recruits a select group of students at Mott Community College and cultivates within them the desire to pursue higher education to the attainment of a baccalaureate degree. The Transitions Program provides a series of intervention and outreach services that encourages persistence at MCC, directs students through the transfer process and continues with follow-up services to support academic achievement and graduation from the University of Michigan-Flint. Program participants receive comprehensive academic and developmental advising, transfer credit evaluation, financial aid and scholarship workshops, transfer student orientation, and a variety of individualized personal services designed to address the unique concerns of each transfer student. The Transitions Program utilizes a holistic approach to working with the transfer student to promote their academic, personal and social integration into the university. Once admitted to UM-Flint, the Transitions students are merged directly into the Bridges to Success Program for continued support and follow up.

Bridges to Success Program (BTS)

Program Manager: Tonya C. Bailey

Funded through the Office of King/Chavez/Parks Initiatives in the Michigan Department of Labor and Economic Growth, with added support by the University of Michigan-Flint through EOI, the Bridges to Success Program delivers a comprehensive series of interventions and services designed to promote student success academically, personally, and socially. BTS is designed to introduce and engage students, (particularly academically and economically disadvantaged students and others identified as being at high risk of not persisting through to graduation) in strategies and processes that are central to success in college, while also assisting students in resolving issues that can inhibit success. The program is designed to introduce and actively engage students (primarily first and second year students) in strategies and techniques that are essential to student success in college.

The Bridges to Success Program features a unique concept entitled the Posse component. While the Posse concept has previously been used exclusively for residential schools, the Bridges to Success Program has adapted the concept to accommodate our commuter student body. Students are identified, recruited and selected to form teams called "Posses." Students are grouped into teams according to academic majors as one means to promote strong networking opportunities for Posse members as they pursue their educational goals. The Posse philosophy promotes academic achievement and leadership; it further empowers students to succeed and become active agents of change.

Introduced as a lower cost alternative to the Bridges to Success Summer Bridge Program, the Workshops on Wednesday (WOW) initiative also has been more successful in attracting participants who prefer to make the commitment to attend two workshops on consecutive Wednesdays as opposed to the full four-week requirement of the Bridge program as it was originally designed. It is directed to incoming first-year college students and rising high school seniors as an introduction and initial/brief immersion in a simulated college classroom. The workshops are led by UM-Flint professors in key academic areas with an emphasis on English, mathematics and the sciences.

The Challenge Program

Program Manager: Tonya C. Bailey

Students who have demonstrated academic achievement and success yet do not meet one or more of the traditional freshman admissions criteria, are offered contractual admission to the University of Michigan-Flint through the Office of Admissions. Participation in the EOI Challenge Program is intended as a means of providing students with a good high school to college transition experience and a foundation for success at the University. Introduced to a variety of support services through the program, students have the opportunity to improve their academic skills as well as develop useful tools that will enhance their collegiate experience. The goal of the program is to offer students the best support and intervention services that will enable them to succeed academically, personally and socially. Students are encouraged to develop a Personalized Education Plan (PEP), and to participate in program services such as Peer Assisted Learning (PAL), Peer Growth Teams (PGT), and general academic guidance and monitoring. Challenge Program services are concentrated in the first and second semester of enrollment, but some services are extended beyond the contractual year.

Pre-College Programs and Services

Wade H. McCree, Jr. Incentive Scholarship Program (ISP)

Program Manager: Tawana L. Day

The Wade H. McCree, Jr. Incentive Scholarship Program (ISP) is funded through the Office of King/Chavez/Parks Initiatives in the Michigan Department of Labor and Economic Growth. High achieving, first generation college students are recruited from Flint, Beecher, and Westwood Heights Community Schools where low numbers of students ultimately attend and succeed in college and earn baccalaureate degrees. The students are identified and selected as second semester 8th graders and are then formally inducted into the program as 9th graders. The objective is to enhance their preparation for college (through workshops and seminars such as study skills, note taking, career planning and ACT/SAT test preparation) and to encourage their enrollment at UM-Flint. Full scholarships to UM-Flint are awarded to ISP students who successfully complete all program requirements and are regularly admitted to the University.

Countdown to College Program (CCP)

Program Manager: Tawana L. Day

Funded by the University of Michigan-Flint through EOI, the Countdown to College Program (CCP) was initiated in 2006-07 to enhance the institutional outreach to middle school and early high school students with a particular emphasis on students from under-represented groups such as those from educationally and economically disadvantaged backgrounds and those from urban and other areas where the college access and success rates are significantly below the national average. The goal is to increase the number of students who will attend and be successful in post secondary education. This is achieved through day-long campus visits, programs, and workshops that are designed to inform, encourage and prepare students for the challenges of higher education. Throughout the academic school year entire classes of students (groups ranging up to 75 students) from Flint, Beecher, Westwood Heights and other area schools are invited to participate in the day-long activities on the UM-Flint campus.

GEAR UP (Gaining Early Awareness & Readiness for Undergraduate Programs)/Martin Luther King Jr., Caesar Chavez, Rosa Parks College Day Program (GU/CD)

Program Manager: Henry E. Bazemore

The KCP College Day Program was originally created by the Michigan State legislature in 1986 as part of the larger King/Chavez/Parks Initiative to increase the enrollment of minority and other students traditionally underrepresented in post-secondary education. In 2006-07 the state program was merged with the federally funded (U.S. Department of Education) Gaining Early Awareness & Readiness for Undergraduate Programs (GEAR UP). The program was initiated with the recruitment of the entire 7th grade class at Beecher Community Schools and the college readiness services are provided to the class as a cohort. The merged GEAR UP/College Day Program will continue to follow that class as a cohort through its graduation from high school. Throughout the summer and academic year the program provides a comprehensive series of workshops and enrichment activities working with the students and their parents. Upon graduation, a select percentage of the graduating program participants will be eligible for limited scholarships provided by the federal grant fund established for that purpose.

Choosing to Succeed Enrichment Program (CTS)

Program Manager: Henry E. Bazemore

Funded by the University of Michigan-Flint, the Choosing to Succeed Program (CTS) is designed to increase the number and preparation of students with a particular emphasis on students from under-represented groups such as those from educationally and economically disadvantaged backgrounds and those from urban and other areas where the college access and success rates are significantly below the national average. Students are selected from the Flint, Beecher, Westwood Heights and area school districts and provided with academic and support services to enhance their graduation from high school and to challenge them to pursue post-secondary education. The CTS program is divided into two components: middle school grades 6-8, and high school grades 9-12. CTS administers a commuter summer program and a comprehensive series of academic year workshops and enrichment activities. An incentive scholarship component is available for a selected group of high achieving CTS participants who become eligible for a full scholarship to UM-Flint upon successful completion of the program and regular admission to UM-Flint.

Diversity Education Services; Special Projects

Diversity Trainer: Crystal A. Flynn

Administrative Assistant Intermediate: Barbara L. Bassett

Throughout the year, EOI sponsors a variety of programs, services and activities designed to enhance, educate and celebrate the diverse and multicultural environment of the campus and the Flint area community. Typical events sponsored and supported by EOI, often in collaboration with other offices and departments, include Hispanic Heritage Month, Native American Heritage Month, and African American Heritage Month. In addition, special projects and programs are frequently offered to address campus-wide concerns and social issues pertaining to diversity, cultural competency issues, fairness and equity. Previous programs offered have included anti-racism and interracial communications programs, facilitated diversity education and anti-racism workshops and discussion groups.

Collaborations with external organizations with similar aims and goals have included FACTER (Flint Area Citizens To End Racism), Leadership Development in Interethnic Relations (LDIR), The Opportunity Network, Volunteers for Affirmative Action, Genesee Valley Indian Association, the Hispanic/Latino Collaborative, the Spanish Speaking Information Center, the Flint Library Anti-Racism Speaker Series, the Color Line Project, the Urban Bush Women Project, the People's Institute for Survival and Beyond's Undoing Racism workshops, Story Circles, Racial and Ethnic Approaches to Community Health-Phase II (REACH 2010) and Community Cultural Planning Task Force to name several initiatives.

Information Technology Services Academic Computing Laboratories

207 William R. Murchie Science Building

Main Office: (810) 762-3123 ITS HelpDesk: (810) 766-6804

Fax: (810) 766-6805

http://www.umflint.edu/its/

Director of ITS: Scott Arnst Administrative Assistant: Tracy Smith

The Information Technology Services department (ITS), at the University of Michigan - Flint, is the primary provider of information technology services for the entire campus community. The department develops and maintains all centralized campus computing systems, including data, software, hardware, and infrastructure. ITS strives to be a user-oriented provider of high quality computing services. In doing this, ITS provides state-of-the art technology and technical support that will ensure all users easy access to programs and data.

ITS encourages the use of computers to support instruction and research for students, faculty, and staff. ITS supports and maintains three staffed, open computer labs available for student, faculty, and staff use located in the William R. Murchie Science Building, the David M. French Hall Building, and the William S. White Building, and one un-staffed open computer lab located on the second floor of the Frances Willson Thompson Library. Campus users can also take advantage of computer stations, known as M-formation kiosks, located around campus, as well as use their personal laptop or tablet to connect to the campus wireless network. In addition, ITS maintains six instructional computer labs, located in the William R. Murchie Science Building, David M. French Hall Building, and the William S. White Building that are used for hands-on instruction. These instructional labs are equipped with modern data projection equipment and other instructional aids. ITS, through its Mediated Classroom Services unit, has equipped over fifty general classrooms with presentation-delivery systems, also known as Smart Carts, which include a projector, a document camera (for overheads), a computer that is connected to the campus wireless network, and a DVD/VCR combination unit.

Campus computing facilities (both open and instructional) are equipped with a variety of computers from the Windows, Macintosh, and Linux platforms. All computers connect to networked servers that interact with each other through a LAN (Local Area Network) which includes a wireless network called UM-Flint Unplugged. ITS strives to provide a modern network infrastructure that ensures high reliability, greater efficiency, and faster transmission of data across the campus. A variety of application software, including electronic mail, internet browsers,

word processors, database and spreadsheet programs, statistical packages, and many others are also provided to all students, faculty, and staff via the LAN. Upgrades to hardware and software in the student computing facilities are supplemented by student funds collected through a technology fee, paid each semester with tuition.

In addition to the campus resources that ITS provides via the LAN, all registered students, faculty and staff residing in South-East Michigan can also connect to off-campus distributed resources from home via the MichNet Computer Network. This electronic communications system exists to interconnect computers from many educational and governmental facilities (hosts) throughout the world. The MichNet connection provides access through the Internet to other computing systems, which offer services not available on the local host system.

ITS provides user support and consultation for a wide variety of technical questions and problems through the ITS Helpdesk, ITS staff, and technical documentation that is available on the web and in the open computer labs. If additional assistance is needed from the staff of ITS, please contact the department for more information.

Experiential Education

The University of Michigan-Flint offers a number of opportunities for students to be placed in work settings outside the university and to relate these experiences to their courses of study. Such opportunities are available through the Public Agency Internship Program and the Academic Advising and Career Center, described below. Units within the University, such as WFUM-TV/Channel 28, also offer such opportunities.

In addition to these, specific concentrations may offer or require off-campus experiential education. In particular, these include Clinical/Community Psychology, Social Work, and Teacher Certificate programs. See individual concentration programs for further information.

Research internships, offered through the Project for Urban and Regional Affairs (see that section of the Catalog), and research assistantships in various academic departments are other aspects of experiential education and are open to selected upper division and graduate students.

Academic Internship in Public and Community Affairs

310 David M. French Hall (810) 762-3470

Coordinator: Tony Morolla (Political Science)

The Public Agency and Community Organization Internship Program is sponsored by the Department of Political Science and the Public Administration program. The internship is designed to serve the interests of students in political science, public administration, economics, education, history, sociology, and resource and community science. Participation is open to upper-division and graduate students. Political science and public administration majors are generally required to do three credit hours of the internship.

Field assignments provide valuable experiences in public agencies and community organizations. Such experience is helpful in preparing for work in government, community agencies, legal settings, educational institutions, women's and labor organizations, and the media. Internships provide opportunity to investigate the relationship between a variety of academic concepts (for example, organization theory, understanding of social movements) and actual practice.

Placements are available in local communities throughout the region, including Detroit and Lansing. They are also available (in cooperation with other institutions) in Washington, D.C., Canada, Africa, and Europe. Interested students should schedule interviews with the coordinator at least two months before the beginning of a semester for which the internship is desired. Internships are offered every semester under the course labels POL 390 and ECN 395, and for graduate students, PUB 590. Enrollment may be for three to six credit hours, and grading is on a pass/fail basis.

Cooperative Education and Internship Program

Academic Advising and Career Center (AACC) 285 University Pavilion (810) 762-3250 http://www.umflint.edu/careers/

The AACC's Cooperative Education and Internship Program is for students who wish to gain work experience that compliments their academic studies. Students are employed on either a part-time or full-time basis in supervised, paid and unpaid work experiences in business, industry, social or government agencies. The program offers:

- Pertinent job experience to blend with classroom theory
- Awareness of employment and career opportunities
- Networking with professionals in the field
- Increased marketability and the development of interpersonal skills
- Maturity and confidence gained from increased responsibilities
- Opportunity to earn academic credit as determined by academic units.

There are several differences between cooperative education and internships that are important to note: Co-ops are always paid, while internships can be paid or unpaid; co-ops last for a minimum of two semesters, while internships typically last one semester; students offered a co-op or internship position have the option to enroll in BUS 290 and 392. Students must have fifty-five (55) credit hours to be eligible for the program, have a minimum grade point average of 2.5, and register for UM-Flint Resume Connection, a resume database used to store and refer student resumes to potential employers. Any exceptions must be approved in writing by the Director of the Academic Advising and Career Center.

Students who have participated in co-op and internship experiences find them to be valuable and rewarding. Students are exposed to the realities of the workplace and learn to manage time and work demands for both classroom studies and employment. Co-op and internship experience ranks among the top three qualities recruiters look for when hiring for full-time positions. Students from all academic disciplines are encouraged to apply. The program is open to both undergraduate and graduate students.

Student Life and Services

The faculty and staff of the University of Michigan-Flint seek to assist students meet their educational goals and to provide opportunities for social and intellectual growth. Many services are offered and a wide variety of cultural events, guest speakers, art and other exhibits, entertainment and activities are sponsored on campus each year to enhance the quality of campus life.

Students are encouraged to take advantage of free membership

at the Recreation Center and to utilize facilities of the Harding Mott University Center. The Recreation Center features court sports, intramural sports, Cybex weight machines, free weights, cardio theater, fitness classes, wellness programming, and an indoor track as well as an indoor pool.

The Harding Mott University Center is also available to students for leisure use. Student clubs further enhance student life by uniting students with common interests to share club goals and social events. (See "Recreation Center," "Harding Mott University Center," and "Student Life" in this Catalog section.)

As outlined in the Mission Statement, "Student Services and Enrollment Management will promote the University of Michigan-Flint; support students, staff, and members of the community; and strive to provide exceptional service by:

- Exhibiting accuracy, efficiency, and patience in our work.
- Maintaining integrity, professionalism, and respect.
- Valuing differences, diversity, open communication, and creativity."

Services and programs range from advising, counseling, and career planning to audio-visual and computing laboratories, peer tutoring, and child care. Many of these services are described here; others are found earlier in this *Catalog* under the heading "Academic Resources."

Student Services and Enrollment Management

237 University Pavilion (810) 762-3434

Vice Chancellor for Student Services and Enrollment Management: Dr. Mary Jo Sekelsky Assistant Vice Chancellor: Dr. Johnny Young Executive Secretary to the Vice Chancellor: Judith Dinsmore Senior Systems Analyst: Jayshri Gandhi Executive Assistant to the Vice Chancellor: Rob Montry

The Office of the Vice Chancellor for Student Services and Enrollment Management provides leadership and coordinates activities within division areas to assist students in their academic and nonacademic lives at the University. These areas and activities support the academic mission of the University. Student Services and Enrollment Management includes the Academic Advising and Career Center, International Student Center, Office of Admissions, Office of Financial Aid, Office of the Registrar, Student Development Center, Office of Student Life, and Lesbian, Gay, Bisexual and Transgender Center.

Student Development Center

264 Harding Mott University Center

(810) 762-3456 FAX: (810) 762-3498 TDD: (810) 766-6727

Website: http://www.flint.umich.edu/departments/sdc

Assistant Vice Chancellor for Student Services and Enrollment Management: Dr. Johnny W. Young Office Manager: Virginia July Secretary: Nita Hawkins

An array of services are provided through the Student Development Center. These include coordinating personal counseling services, services for students with disabilities, health services, and tutorial services.

Academic Enrichment Center/Tutorial Services

Coordinator: Michael B. Kassel, Ph.D.

The Academic Enrichment Center (AEC) provides free tutorial services covering a wide variety of academic disciplines for all UM-Flint students. Tutors are available on an individual and walk-in basis. Walk-in tutors hold regular hours during which students are free to obtain tutorial assistance. Individual tutors for students requiring intensive one-on-one support are also available provided that a qualified tutor can be identified.

The AEC also provides Supplemental Instruction (SI) for specific courses during Fall and Winter semesters. Supplemental Instruction is an academic support program, developed at the University of Missouri-Kansas City, in which trained SI Leaders attend specific courses and hold weekly study sessions to help students master both course content and study skills. SI courses are identified in the Fall and Winter course schedules.

To help students maximize their academic potential, the AEC also offers a variety of special academic enrichment forums and workshops throughout the year. The Coordinator is also available to work individually with students who wish to improve their note-taking and study skills techniques.

For more information, contact the AEC Coordinator.

Counseling

Campus Counselor: Jessie Lopez, Ph.D.

Free, confidential, but limited counseling services are available to all currently enrolled students. This is done in an open, supportive setting for personal, social, academic, vocational and other problems. Confidentiality is strictly maintained. Referrals to outside agencies and programs are made when advisable.

Psychological testing is also offered to currently enrolled students. Diagnostic services include:

Learning Disability Assessment; Depression Screening; Substance Abuse Screening; and ADHD Assessment

Accessibility Services

Interim Coordinator: Zachary Tomlinson, B.A.

Accessibility Services provides students with disabilities the necessary tools for empowerment, self-advocacy and independence in the university environment by:

- Offering individualized accommodations
- Assisting in negotiating disability-related barriers
- Striving to improve access to university programs, activities and facilities
- Promoting increased awareness of disability issues on

To insure that the necessary supports are provided to new students, a pre-registration meeting is recommended. This oncampus visit gives the Accessibility Coordinator and the incoming student time to develop an individualized service plan to meet the student's needs. This visit is normally scheduled for the semester prior to enrollment.

Health Services

Campus Nurse Practitioner: Connie Creech, A.P.R.N., M.S.N., B.C.

The Health Services mission is to facilitate learning by

promoting student health; to assist students, faculty and staff to manage or eliminate health problems; and to improve the wellbeing and productivity of the university community by providing educational programming.

Health Services is staffed by a certified Adult Nurse Practitioner.

Services available include:

- Referral to other health care providers
- Referral to community resources
- Tuberculosis testing
- Vision testing
- Hearing testing
- Health insurance questions
- Monitoring of health requirements for S.H.P.S. students
- Wellness and health promotion programs
- Self-care station
- HIV testing/counseling

Health emergencies are handled by the Department of Safety, (810) 762-3335.

Veterans' Services

For information about services available to veterans and their dependents, inquire at the Office of the Registrar, 266 University Pavilion

Child Care

Please see the Early Childhood Development Center section located in this Catalog.

Student Life

Office of Student Life 375 Harding Mott University Center (810) 762-3431 FAX (810) 762-3023

Website: http://www.flint.umich.edu/departments/stlife

Assistant Vice Chancellor for Student Services and Enrollment Management: Dr. Johnny W. Young Assistant Director Student Life: Becky Armour, B.A., M.A. Student Activities Coordinator: Jessie L. Hurse II, B.S.

Ellen Bommarito Lesbian, Gay, Bisexual, and Transgender Center

Program Manager: Gregory Storms, B.A.

365 Harding Mott University Center (810) 766-6606

The Lesbian, Gay, Bisexual and Transgender Center provides services and programming to assist all members of the UM-Flint community in developing awareness of lesbian/gay/bisexual and transgender concerns. The Center offers a variety of resources including current periodicals, books, films, and general information. It also provides specialized services, such as trained facilitators for classes and groups, upon request.

Student Housing

Students desiring assistance in finding suitable housing should

visit the Office of Student Life website. The Office of Student Life maintains an online database with housing opportunities at stlife.umflint.edu/housing.

Clubs and Organizations

Student Activities Coordinator: Jessie L. Hurse II, B.S.

A variety of student organizations exist on campus, including the Student Government Council, special interest clubs, student publications, performance groups, intramural/club sports, and honor societies. The Office of Student Life assists students in identifying organizations that suit their interests. Organizations have mailboxes in the student loft. More information is available at the club website http://www.flint.umich.edu/departments/stlife/clubs. The following is a sample listing of the clubs and organizations active on campus:

Anthropological Sciences Club. Seeks to create an increased interest in anthropology related fields as well as offering career related services to all anthropology majors.

Association for Computing Machinery (ACM). Seeks to promote a better understanding of applications of modern computing machinery through seminars and social events. ACM participates in the fielding of the University's Programming Team, which competes on regional and national levels. The club also organizes the annual "Future in Computing" seminar. Weekly meetings.

Biological Sciences Club. Encourages information sharing and fellowship for students interested in the field of biology.

Boxing Club. Come join us in learning the sweet science of the boxing! UM-Flint Boxing Club is a great place for beginners and experienced fighters to sharpen their skills and knowledge of the sport.

Business Club. Provides activities for students pursuing a career in the field of business including the areas of: accounting, finance, general business, marketing, organizational behavior/human resources; and operations management. Activities include speakers, field trips, and social activities.

Campus Activities Board (CAB). Campus Activities Board (CAB) is a student run organization that plan and produce a variety of educational, social, cultural, and recreational activities for the university. We are dedicated to making campus life more interesting and fun for students, faculty, staff and the surrounding Flint community. CAB provides many experiences for its members. Specific skills ranging from contract negotiations to accounting are acquired through CAB, along with planning and executing every event. In addition, experience in leadership, group dynamics, and time & stress management are developed through involvement.

Campus Politics. Mission is to help the campus and Flint community better understand the fearful and sometimes dreaded political process and government in general.

Chamber Singers. The UM-Flint Chamber Singers are a select group of talented singers who love music. The club's mission is to create beauty with choral music and share that beauty with others.

Chemistry Club. Organizes field trips to labs, sponsors lectures

and seminars on topics in the field of chemistry provides for faculty/student interaction and organizes social events so that students with similar interests can interact.

Chess Club. Provides a safe, fun place for anyone to learn and play chess.

College Democrats. Promotes the Democratic Party, its philosophies, and its candidates by encouraging the participation of UM-Flint students in the Democratic Party.

College Libertarians. Promotes the belief that people are leaders of their own lives, free to pursue life, liberty and prosperity, insofar as they do not intrude on or restrict the ability of others to do the same.

College Republicans. Seeks to present a positive image of the Republican Party and to provide information to the university community about the philosophy and actions of the party, both locally and nationally.

Criminal Justice Club. Seeks to provide a forum for criminal justice students to network, provide workshops, seminars, and guest speakers on topics that are relevant to criminal justice students on campus.

Economics Club. Sparks interest and involvement in past, present and future economic issues. Speakers and symposia are sponsored during the year for both social and educational purposes.

Education Student Organization. Encourages information sharing and fellowship for students interested in the education field.

Environmental Sciences Club. Strives to heighten student consciousness on issues of environmental significance, remote resource conservation, and protection efforts and to facilitate student activism and outreach concerning pressing issues affecting our ecosystem.

Exposure. Provides UM-Flint students with resources needed to develop film and create photographic prints as well as promoting photographic knowledge.

Fanimania (Japanese Animation). Provides a forum to all who are interested in the presentation of Japanese animation for purposes of recreation and learning.

Organisation d'etudiants francophone (The French Club). Group of students who appreciate francophone culture, cuisine of the French speaking world, and conversing in the French language.

Hillel Student Organization. Seeks to provide programming on topics of cultural, religious, political, historical, and social Jewish interest.

Historical Society (History Club). Seeks to encourage an interest in history, to help other students who are having difficulty in the field, and sponsor history-oriented projects.

Honors Student Council. Provides an organization to unite, assist, govern, and represent students affiliated with the University's Honors Scholar Program.

Indian Student Association. Promotes Indian culture by providing an outlet for students to gain awareness and participate in Indian cultural events.

Inter-Varsity Christian Fellowship. Provides students the opportunity to share and witness the Holy Bible so that those interested can accept and experience a deeper, more personal relationship with Jesus Christ.

International Student Organization. Seeks to promote the diverse cultures represented on the UM-Flint campus, and establish unity among the international and non-international community.

Latino Student Organization. Enhances identity and preserves the heritage and culture of people of Latin American descent. Promotes self-esteem, self-respect and a positive image.

Michigan Poetry Society. Seeks to bring together an array of poetry inclined writers interested in sharing their art with the UM-Flint community.

Mixed Martial Arts Club. An outlet of providing a healthy lifestyle through physical activity while learning useful self defense tactics.

Muslim Student Association. Promotes Islamic awareness amongst Muslims and non-Muslims. The organization welcomes members of all faiths and participates in Community and University events.

Organization for University Tolerance (OUT). Dedicated to providing fun events to the student body which feature lesbian, gay, bisexual, and transgender themes and performers.

Pre-Dental Club. Aids students pursuing careers in the dental field by providing practice DAT exams, trips to dental schools, and hosting guest speakers for guidance.

Pre-Law Club. Provides information and support to students pursuing careers in law. Provides resources on related topics through lectures, faculty interaction and forums for discussion.

Pre-Med Club. Aids students pursuing careers in medicine by providing members with information concerning the best possible ways of getting into medical school, and the most advantageous curriculum to follow, and presenting opportunities for exposure to medical settings.

Pre-Physical Therapy Club. Sponsors field trips, lectures, seminars, and provides mentorship through student and faculty-student interaction for those interested in the field of physical therapy.

Pre-Vet Wildlife Club. Will educate and inform the camus community about the needs of animals, both wild and domestic.

Radiation Therapy Student Organization. Contributes to radiation therapy education by encouraging student involvement in community affairs and activities that strive to improve health care.

Shariki Group. Will explore issues in Africana Studies and examine conditions that affect African-Americans and other disadvantaged groups.

Social Work Club. Organized to bring together students, faculty, and members of the community whose common interests are social work and social welfare.

Society for Human Resources Management. Purpose of this organization is to acquaint students who are considering a future in

business, with the field of human resources management and/or labor relations.

Steppers Club. Teaches students how to ballroom dance and step with the best of them. All dance levels are welcomed to attend, no matter if you're a rookie at ballroom style dancing or a professional.

Students for Black Achievement (SBA). Works toward improving the educational, social, economic, political, and cultural conditions of Black students enrolled at the University of Michigan-Flint and the black community. These goals are reached through newsletters, meetings, speakers, exhibits, and community service.

Student Communication Association. Organizes activities, trips, lectures, and social activities for students interested in the field of communications. Provides its members with opportunities to investigate how people, businesses and organizations share information, beliefs, and values both in person and through the media.

Students Defending Christian Principles. Vehicle for Christian students to defend their worldview on equal footing in a secular university setting.

Student Nurses Association. Provides programs that are of interest to students in the field of nursing, and promotes unity amongst UM-Flint nursing students.

Student Organization for Molecular Biology. An outlet for students who are interested in approaching science from fun and interesting angles, while gaining important volunteer experience, are mor than welcome.

Students Organizing Fun Activities Sober (SOFAS). An outlet to promote activities that provides alternatives to social drinking. SOFAS is a haven for college students who want to have a social life on campus without alcohol, and have great, lasting relationships with countless others on campus like themselves who just want to get a "natural high" out of life.

Students Promoting Literacy (SPL). Seeks to raise awareness and continue efforts emphasizing literacy among American youth. SPL holds book clubs and participate in community service to achieve goals.

Student Union of Mathmatics (Mathematics Club). Provides students who have mathematical interests an opportunity to socialize and explore professional possibilities.

Table Top Gaming Society. Provides a friendly and supportive environment for students interested in various types of table top gaming.

Ultimate Club. Committed to the promotion of Ultimate Frisbee. Like football? Like frisbee? Then you'll love Ultimate frisbee!

University Debate Association. Aimed at promoting a broad and diverse understanding of the pressing social, cultural, and political issues of our time through calm and organized discussion among students.

Voices for Women on Campus. Committed to promoting social equality, justice, and women's issues. Principal goal is to give a voice to not only women, but to all students providing support, resources, and empowerment to students and the community.

Wind Symphony. Seeks to promote awareness of the performing arts and professional musicianship within the UM-Flint campus.

Wolverine Battalion. A student organization for ROTC cadets and students interested in the military.

Zeichners Animating Multi-Media (ZAMM). The UM-Flint Animation Club promotes and produces short animated films.

Honor Societies

Honor society memberships are based on scholastic achievement. For further information on honor societies, contact the appropriate department office.

Beta Alpha Psi, School of Management.

Eta Sigma Gamma, School of Education and Human Services.

Golden Key International Honour Society.

Phi Alpha, Social Work Department.

Phi Sigma lota, Foreign Language Department.

Pi Sigma Alpha, Political Science Department.

Psi Chi, Psychology Department.

Sigma Tau Delta, English Department.

Sports Clubs

For information about sports clubs and intramural activities, see the next Catalog section, which describes the Recreation Building.

Bowling, flag football, golf and softball are activities currently offered by the Department of Recreational Services under the club sport philosophy. Persons or groups who are interested in developing a particular activity within the club sport structure are encouraged to present a proposal to the Recreational Services Office.

Student Publications

Michigan Times. The student newspaper, The Michigan Times, is produced by students for students. It publishes campus, entertainment and local news biweekly and serves as a forum for student opinion. The centerfold of the paper is dedicated to Qua, the campus literary magazine which allows students to exhibit their talents in creative writing, graphics and photography. Location: 381 Harding Mott University Center; (810) 762-3475. e-mail: mtimes@hotmail.com. website: www.themichigantimes.com.

Greek Life

Advisor: Jessie L. Hurse II, B.S.

The Greek system provides many opportunities for friendship, personal growth, and involvement. These opportunities include leadership experience, social functions, and community service projects.

Greek organizations active on campus include Alpha Kappa Alpha Sorority, Alpha Phi Alpha Fraternity, Alpha Theta Chi Sorority, Delta Phi Epsilon Sorority, Delta Sigma Theta Sorority, Kappa Alpha Psi Fraternity, Kappa Delta Xi Fraternity, Phi Sigma Sigma Sorority, Theta Chi Fraternity, Iota Phi Theta Sorority, and Zeta Phi Beta Sorority.

Student Government Council

364 Harding Mott University Center

(810) 762-3078

Website: http://www.flint.umich.edu/clubs/umfsgc

Advisors: Dr. Johnny W. Young and Mr. Jessie L. Hurse

The council serves as the official representative of the student community in expressing opinions and interests to the appropriate faculty, administrative, and student agencies. The purpose of the Student Government Council is to listen to and act upon the needs and concerns of the students. The Student Government Council is responsible for appointing students to all University decision making committees. Anyone with a complaint or suggestion may visit the Student Government Council Office or voice his or her concern during the public opinion period at a Council meeting.

The Student Government Council assists student clubs and organizations through the recognition of club constitutions and the allocation of money to the clubs assisting them in operating and holding special events. The Student Government Council sponsors activities such as Cram-A-Rama and the annual Spring Finale dinner/dance.

Student Government Council officers are elected by the students for a one year term in a school-wide election. All vacancies and representative positions are filled by appointment.

Alumni Relations Office

432 N. Saginaw Street Northbank Center Suite 1001 (810) 767-2150 FAX (810) 767-2149

E-mail: alumni-relations@umflint.edu URL: http://www.umflint.edu/alumni/

Graduating from the University of Michigan-Flint is a major accomplishment. One reward is automatic FREE membership in the UM-Flint Alumni Society. The Society's programs offer you opportunities to come together with other alumni to learn what is happening at the University. The Society sponsors several recreational and educational events that support the needs of alumni along with the University and its students.

The Alumni Relations Office serves as a liaison between University of Michigan alumni groups; maintains a database of alumni; provides excellent benefits to UM-Flint graduates; and publishes Bridges, the alumni magazine.

The University of Michigan-Flint's graduates are part of the largest alumni body of any public university in the country. In addition to the Alumni Society, graduates of UM-Flint may also join the African American Affiliate, School of Education and Human Services Alumni Affiliate, School of Management Alumni Affiliate, U-M Alumni Association and M-Club of Greater Flint.

Recreational Services

Recreation Center

(810) 762-3441 www.flintrec.com

Director: Theresa Landis Associate Director: Gary Parr

Assistant Director of Intramural Sports: Chris Clolinger Assistant Director of Student Development: Ervin Leavy Jr. Assistant Director of Health Promotion: Sherri Berry Membership Services & Budget Manager: Becky Pettengill Business Information Manager: Amy Clolinger Customer Service Associate: Kay Fritzler

The Recreation Center is open to all currently enrolled students with MCards. Annual, monthly and daily memberships can also be purchased by alumni, community members, and student family members.

The 80,000 square foot facility includes a multi-purpose gym, weight training areas, Cybex weight equipment, cardio theater, indoor track, racquetball courts, men's and women's locker rooms (rental locker service available), combative practice area, and a multipurpose activity area. A swimming pool, whirlpool spa and saunas, physically located on the first and lower levels of the University Center, are also part of the Recreation Center operation.

The main focus of the Recreation Center is to provide a safe environment that enables diverse participants to improve their health and well-being. In addition, the Recreational Services Department offers the following activities and programs:

Academic Physical Education Courses. The Recreation Center under the Department of Health Sciences and Administration, offers many one-credit physical education classes each semester.

Employment. The Recreation Center is one of the largest employers on campus of UM-Flint students. Preference is given to students with work-study financial aid in order to ensure that they have ample opportunity to use their awards.

Intramural Sports. The intramural sports program consists of flag football, basketball, racquetball, volleyball, soccer, and a variety of special sports tournaments. This program provides students with the fun of competitive sports and the opportunity to develop qualities of leadership, cooperation, teamwork, and a sense of fair play.

Fitness Programs. A variety of fitness opportunities are available including personal training, fitness testing and exercise program consultation, exercise equipment orientation, yoga classes, water exercise classes, step aerobics, high/low aerobics, kickboxing, etc. All fitness opportunities are provided by professional staff with degrees in related fields and/or instructors certified by nationally recognized fitness organizations.

Other Features. To better meet the health promotion and wellness needs of students, other opportunities include massage therapy, back care workshops, strength training workshops, youth summer camps, self-defense for women programs, and special events such as Women's Night Out.

Building Management and Events

(810) 762-3436

Director, Auxiliary Services: Theresa Landis Associate Director, Auxiliary Services: Tammy Rees Special Events Administrative Manager: Peggy Graham

Special Events Manager: Anjan Reijnders

Reservationist: Gina Rose

Food Service Supervisor: Kay Boshaw

The Office of Building Management and Events (OBME) offers a wide range of programs, facilities and services for

students, faculty, staff, alumni, and community members. Individuals and groups come together to exchange ideas and information and to interact informally, adding another dimension to the educational experience. OBME reserves space in the Harding Mott University Center, University Pavilion, William S. White Building, and Northbank Center.

The 112,000 square foot Harding Mott University Center includes food service, a games room, lounges, meeting rooms, student organization areas, and a theatre. The University Center also houses a variety of administrative and student support offices. The 76,000 square foot University Pavilion includes the bookstore, food vendors, stage, administrative and executive offices. The William S. White Building houses four conference rooms along with various classrooms and administrative offices. The Northbank Center is composed of both commercial and University space that includes a 400 seat banquet hall.

Department of Public Safety

(810) 762-3335

Director: Chalmers F. Sanders Administrative Assistant: Gayle Bachman

The Department of Public Safety is responsible for maintaining a safe environment on the properties of the University of Michigan-Flint. The Department's primary goals are to prevent crime on campus and to protect and assist students, faculty, staff and visitors to the campus with security related problems.

The Department is open 24 hours a day, seven days a week. The Department can be contacted at 762-3335 or by dialing 311 (non-emergency) or 911 (emergency) on any campus phone. Emergency telephones are located throughout campus and are easily identified by a blue light on top of a pedestal or located inside a red emergency call box.

Title II of Public Legislation 102-26, called the "Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act," requires colleges and universities to distribute to all current students and employees and applicants for enrollment or employment, two types of information: (1) descriptions of policies related to campus security; and (2) statistics concerning specific types of crimes. A description of these policies, statistics, crime prevention tips, and general information are published on Public Safety World Wide Web www.umflint.edu/departments/safety. This information may also be found in printed version at the Frances Wilson Thompson Library, Human Resource Office, or any of the Public Safety Offices. For additional details on security-related issues, check our web site or contact the Department at (810) 762-3335.

Additional Resources of the University

Office of Research

530 David M. French Hall (810) 762-3383 or 762-3180 FAX (810) 766-6791

Website: http://research.umflint.edu/

Director: Dr. Sally A. Harris Accounts Manager: TBA

Research Process Manager: Andre Louis IRB-Flint Administrative Assistant: Sally Conley

Research Secretary: Martha Spaniola Research Receptionist: Lola Carter

The mission of the Office of Research is to encourage and promote research and creative activity within the University community. Research and creative activities are broadly defined. They include basic research which expands our knowledge to new frontiers; applied research which responds to regional or community concerns, or develops new or different uses for our present knowledge; and artistic expression which involves the creation of new work in the visual, literary and musical arts.

The Office of Research assists faculty and students by identifying funding sources for research projects, building research-related skills through trainings and workshops, disseminating important research-related information to the campus, sponsoring several Undergraduate Student Research opportunities and events, and with the assistance of the Research and Creative Activities Committee, acting as a steward for internal research funds.

The Office of Research works collaborately with other units in the University of Michigan system to ensure that all research and creative activity is conducted in a compliant manner. For example, the Office of Research works with the Center for Statistical Consultation and Research (CSCAR) on the main campus to provide statistical support for faculty and students engaged in methodologies which require use of statistical techniques to reach sound conclusions. In addition, the Office of Research works closely with the Financial Services Office on the UM-Flint campus and the Division of Reseach Development and Administration (DRDA) on the main campus to ensure that all sponsored programs conducted by our faculty are in compliance with Federal and University guidelines and requirements. Finally, the Office of Research provides the administrative support for the Institutional Review Board on the Flint campus (IRB-Flint) to ensure that any research conducted by UM-Flint faculty, staff and/or students is conducted in such a way as to protect the rights of human subjects involved in the project.

In addition, the Office of Research offers the campus a variety of research support services, including data collection, entry, cleaning, summarizing, statistical analysis, and interpretive analysis. These services are offered to both the internal (campus) and external communities on a per project fee

Our Survey Research Facility (SURF) uses a Computer-Assisted Telephone Interviewing (CATI) system, which provides the latest technology to collect and analyze data. Students obtain training in survey research methodology working as temporary employees or as part of a research project. Faculty members direct applied studies in topics such as health care, marketing, communications, and public policy analysis. At the same time, area community and government agencies and organizations benefit from the local focus of such studies.

University Outreach

1001 Northbank Center (810) 767-7030 Phone (810) 767-7183 Fax www.umf-outreach.edu

Director: Renee C. Zientek

The purpose of University Outreach is to deliver innovative results by turning ideas into positive action through its three centers and two program areas:

Center for Applied Environmental Research

1001 Northbank Center (810) 767-6491 Phone (810) 767-7183 Fax

Lead Project Coordinator: Brent Nickola Lead Administrative Coordinator: Mona Younis

The Center for Applied Environmental Research (CAER) combines technical consultation, education, facilitation and research with creative applications of geographic information systems (GIS). From its inception, the Center has earned a reputation for excellence in the water protection area. The Center has worked with a number of communities and organizations in east-central Michigan to help balance their groundwater and surface water concerns with development and economic growth

Center for Civic Engagement

1001 Northbank Center (810) 767-6447 Phone (810) 767-7183 Fax

Program Manager: Sharri Newman

Through the Center for Civic Engagement (CCE), UM-Flint students, faculty and staff have the opportunity of collaborate on projects with community organizations and area K-12 schools through community service programs and partnerships with the schools, teaching concepts to students by engaging them in service projects in the community and providing mutually beneficial programs that focus on after-school activities, civic leadership, career exploration, professional development for teachers, and community partnerships

Center for Entrepreneurship

207 Northbank Center (810) 767-7373 Phone (810) 767-7183 Fax

Program Manager: Joel Rash

The Center for Entrepreneurship (CE) coordinates technical and research assistance to small businesses, entrepreneurs and nonprofit organizations; assists with community development projects; offers business and nonprofit education workshops; and has reacted an online directory of businesses and services in the Genesee County

Amaizing U/Amaizing Youth programs offer noncredit, lifelong learning opportunities for individuals of all ages including personal enrichment and professional development through land and online

The American Democracy Project is a nation-wide affiliation of universities which are members of the American Association of State Colleges and Universities (AASCU) and are committed to advocating for and assisting faculty in their efforts to integrate pedagogies of civic engagement into their teaching, research and service; to advancing student's efforts to acquire the skills and knowledge needed to become engaged and informed citizens; and to promoting a campus culture of civic engagement, democracy and experiential learning.

Michigan Public Media

Michigan Television/ WFUM-PBS (TV28, HD 52) Michigan Radio/WUOM 91.7 FM Ann Arbor/Detroit WVGR 104.1 FM Grand Rapids WFUM 91.1 FM Flint

Michigan Public Media

535 West William Street Suite 110 Ann Arbor, MI 48103 Telephone (734) 764-9210 Fax (734) 647-3488

Interim Director: Steve Schram

Michigan Public Media is the broadcasting arm of the University of Michigan that manages and maintains the broadcast licenses of both Michigan Television and Michigan Radio. Michigan Public Media also programs the Michigan Channel and manages Michigan Productions.

- Acting as stewards of public culture, arts and humanitiesentertaining, informing, inspiring and enhancing the communities it serves.
- Supporting the University's education, service and research mission.
- Offering rich internship opportunities and helping enable education for students of all ages, facilitating life-long learning.

Michigan Television

4203 William S. White Building Telephone: (810) 762-3028 Fax: (810) 233-6017

Email: information@wfum.org Website: http://michigantelevision.com

Station Manager: Jennifer White

Michigan Television (WFUM-TV 28/HD 52), the public television station of the University of Michigan, can be seen on more than 70 cable systems throughout Mid- and Southeast Michigan, including northern Oakland County, metropolitan Detroit and Ann Arbor, and portions of Windsor, Ontario and northern Ohio.

Since 1980 Michigan Television has established a long

tradition of dedication and commitment to the communities it serves. This commitment is demonstrated through Michigan Televisions' quality programming--shows that challenge and fascinate as they entertain viewers.

Michigan Television airs the best shows public broadcasting has to offer:

- News and information
- Science
- Performing arts
- Outdoors
- How-to

Michigan Television obtains its programming from a variety of sources including: PBS national, local production, and non-PBS productions that are marketed to stations for local broadcast. Various partnerships are being developed that will allow Michigan Television to take a leadership position in the development and production of content materials in the digital age.

Michigan Television is also committed to serving and improving the quality of life in its communities through various partnerships and initiatives with various educational, cultural, and environmental organizations.

Michigan Radio

535 West William St.

Suite 110

Ann Arbor, MI 48103 Telephone: (734) 764-9210 Fax: (734) 647-3488

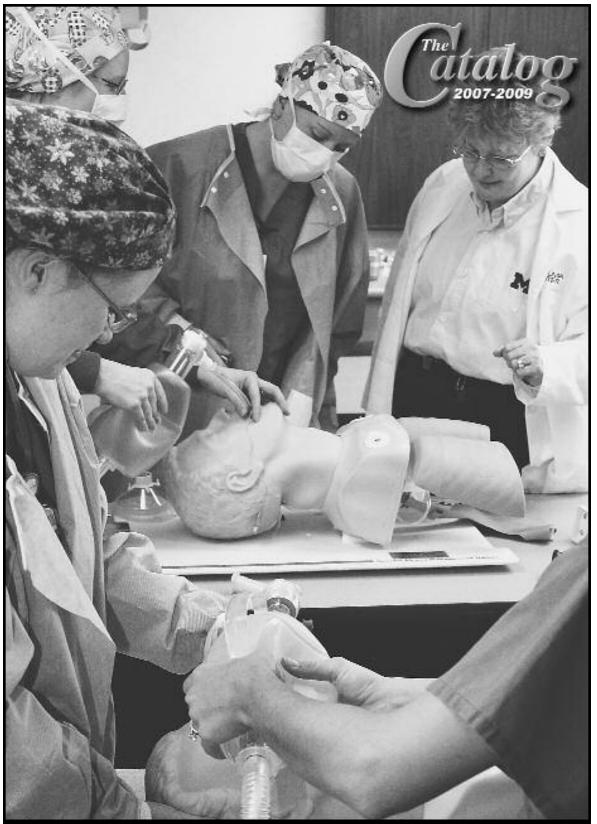
Website: http://michiganradio.org/

Station Manager: Jon Hoban

Michigan Radio (WUOM 91.7 Ann Arbor/Detroit, WVGR 104.1 Grand Rapids, and WFUM 91.1 Flint) is the most listened to public radio station in the state and broadcasts from "lake to lake" on three separate FM frequencies.

Michigan Radio's weekday format is news and information featuring national programs like NPR's *Morning Edition* and *All Things Considered*. Michigan Radio's reporters are located across the state covering the business, political, economic, and cultural stories that directly affect its listeners. These stories are often aired on other public radio stations across the state and are regularly featured on national news shows.

Michigan Radio is also home to The Great Lakes Radio Consortium--a news service covering environmental issues in the Great Lakes region and carried daily by over 140 stations nationwide.



Programs of Study

GUIDE TO PROGRAMS AND DEGREES UNDERGRADUATE DEGREES

GUIDE TO TROCKAMS		MIN. CREDITS		TEACHER	HONORS
SUBJECT AREA	MAJOR	FOR DEGREE	MINOR	CERTIFICATION	PROGRAM
Accounting	BBA	120	-	-	BBA
Actuarial Mathematics	BS	124	-	-	-
Africana Studies	BA	120	Yes	-	BA
American Literature (English)	-	-	Yes	-	-
Anthropology	BA	120	Yes	-	BA
Applied Science	BAS	124	-	-	-
Art (Visual) Education	BS	126	-	BS	
Art -Studio Art	BFA	124	Yes	-	BFA
Art/Art History	- DC	-	Yes -	-	-
Biochemistry Biology	BS BS	124 124	Yes	- BS/Minor	BS BS
British Literature (English)	-	-	Yes	-	-
Business	BBA	120	Yes	-	BBA
Chemistry	BA/BS	120/124	Yes	BA/Minor	BS
Clinical/Community Psychology	BS	124	-	-	BS
Communication	BA	120	Yes	_	BA
Computer Science	BS	124	Yes	-	BS
Computer Information Systems	BS	124	Yes	-	-
Criminal Justice	BA	120	-	-	BA
Dance	-	-	Yes	-	-
Earth Science	-	-	Yes	BS	-
Environmental Science & Planning	BS	120	-	BS/Minor	BS
Environmental Health	-	-	Yes	-	-
Economics	BA	120	Yes	-	BA
Education, Elementary	BS	128	-	BS	BS
Education, Secondary	BA/BS	124	-	BA/BS	BS
Engineering Science	BS	128	-	-	BS
English	BA	120	-	BA/Minor	BA
English, Specialization in Composition					
Studies & Foundation of Writing Instruction	-	-	Yes	-	-
English, Specialization in Creative Writing		-	Yes	-	-
English, Specialization in Writing	BA	120	Yes	-	-
English, Specialization in Technical &					
Professional Writing	-	-	Yes	-	-
Field Biology	-	-	Yes	-	-
Finance	BBA	120	- \/	- D A /h /i	BBA
French	BA	120	Yes	BA/Minor	BA -
French and International Studies	BA BA	120 120	-	-	-
French and Linguistics Geographic Information Science	- -	120	Yes	-	-
Gerontology/Specialist in Aging	-	-	Yes	-	-
Health Care Administration	BS	124	Yes	-	_
Health Education	BS	124	-	-	_
Health Education & Behavior	-	-	Yes	_	_
Health Science	BS	124	-	_	_
History	BA	120	Yes	BA/Minor	BA
Human Biology	BA	120	-	-	-
Interdisciplinary Studies	BIS	120	_	_	_
International and Global Studies	-	-	Yes	-	_
Law and Society	-	-	Yes	-	_
Linguistics (English)	_	-	Yes	-	-
Marketing	BBA	120	Yes	-	BBA
Mathematics	BA/BS	120/124	Yes	BA/BS/Minor	BA/BS
Medical Technology	BS	124	-	-	-
Middle Eastern Studies	-	-	Yes	-	-
Molecular Biology & Biotechnology	BS	124	-	-	-
Music	BA	120	Yes	-	BA
Music Education	BME	122	-	BME	BME
Music Performance	BS	124	-	-	-
Music Theatre	-	-	Yes	-	-
Natural History	BA	120	-	-	-
Nursing	BSN	120	-	-	BSN
Operations Management	BBA	120	-	-	BBA
Organizational Behavior &					
Human Resources Management	BBA	120	Yes	-	BBA
Philosophy	BA	120	Yes	-	BA
Philosophy, Emphasis in Ethics, Social	5 .	400			
and Political	BA	120	-	-	-

GUIDE TO PROGRAMS AND DEGREES UNDERGRADUATE DEGREES						
		MIN. CREDITS		TEACHER	HONORS	
SUBJECT AREA	MAJOR	FOR DEGREE	MINOR	CERTIFICATION	PROGRAM	
Philosophy & Psychology	BA	124	-	-	-	
Philosophy of Social Sciences	-	-	Yes	-	-	
Physical Geography	-	-	Yes		-	
Physics	BA/BS	120/124	-	BA/Minor	BA	
Political Science	BA	120	Yes	BA/Minor	BA	
Psychology	BA	120	Yes	BA/Minor	BA/BS	
Public Administration	BA	120	Yes	-	BA	
Radiation Therapy	BS	141	-	-	-	
Religious Studies	-	-	Yes	-	-	
Research Psychology	BS	124	-	-	-	
Social Sciences, Joint Programs	BA	120	-	-	-	
Social Studies	-	-	-	BA/Minor	-	
Social Theory & Practice	-	-	Yes	-	-	
Social Work	BA	120	-	-	BA	
Sociology	BA	120	Yes	-	BA	
Spanish	BA	120	Yes	BA/Minor	BA	
Spanish and International Studies	BA	120	-	-	-	
Spanish and Linguistics	BA	120	-	-	_	
Special Concentration	BA	120	-	-	_	
Speech	-	-	-	BA/Minor	-	
Theatre	BA/BFA	120/126	Yes	<u>-</u>	BA	
Theatre Design and Technology	BS	120	-	-	_	
Visual Communications	BFA	124	-	-	_	
Wildlife Biology	BS	124	_	-	BS	

BACHELOR'S DEGREES

ВА	Bachelor of Arts	BFA	Bachelor of Fine Arts
BS	Bachelor of Science	BAS	Bachelor of Applied Science
BIS	Bachelor of Interdisciplinary Studies	BME	Bachelor of Music Education
BBA	Bachelor of Business Administration	BSN	Bachelor of Science in Nursing

GRADUATE DEGREES

Master of Arts in Education

Women's and Gender Studies

Specialization in Early Childhood Education

Specialization in Literacy (K-12)

Specialization in Urban/Multicultural Education Specialization in Technology in Education

Specialization in Special Education

Master of Arts in Elementary Education with Teacher Certification Master of Arts in English

Concentration in British Literature Concentration in American Literature Concentration in Composition and Rhetoric Concentration in Linguistics and Language Concentration in Pedagogy in English

Master of Arts in Social Sciences

Global Studies Track Gender Studies Track US History & Politics Track

Master of Business Administration

General Program in Business Administration Concentration in Accounting

Concentration in Finance

Concentration in Health Administration

Concentration in International Business

Concentration in Lean Manufacturing

Concentration in Organizational Leadership

Master of Liberal Studies in American Culture Master of Public Administration

General Program in Public Administration

Concentration in Administration of Nonprofit Agencies

Concentration in Criminal Justice Administration

Concentration in Educational Administration

Concentration in Health Care Administration

Master of Science in Anesthesia

Master of Science in Biology

Master of Science in Computer & Information Systems

Master of Science in Health Education

Master of Science in Nursing

Adult Nurse Practitioner Track Family Nurse Practitioner Track

Adult Psychiatric Mental Health Nurse Practitioner Track

Doctor of Physical Therapy

PRE-PROFESSIONAL STUDIES

For information on preparation for study in Dentistry, Law, Medicinal Chemistry, Medicine, Nursing, Pharmaceutical Sciences, Pharmacy, Radiation Therapy and Veterinary Medicine, consult the Index.

PROGRAMS OF STUDY

Undergraduate Study

Degrees Offered

Undergraduate programs of study lead to the degrees Bachelor of Arts (BA), Bachelor of Fine Arts (BFA), Bachelor of Science (BS), Bachelor of Applied Science (BAS), Bachelor in Interdisciplinary Studies (BIS), and Bachelor of Music Education (BME) from the College of Arts and Sciences; Bachelor of Arts (BA) and Bachelor of Science (BS) from the School of Education and Human Services; Bachelor of Science (BS) and Bachelor of Science in Nursing (BSN) from the School of Health Professions and Studies; and Bachelor of Business Administration (BBA) from the School of Management. A comprehensive guide to programs and degrees is provided in the chart at the beginning of this Catalog section. See the following section for General Education Program information. Students must consult Catalog sections for the College of Arts and Sciences, the School of Education and Human Services, the School of Health Professions and Studies, or the School of Management for additional regulations and requirements.

Graduation Requirements

Requirements for graduation include:

- A. Completion of 120 or more credits. The number of credits needed varies with the degree sought and the concentration program pursued.
- B. Completion of the General Education Requirements. (See the "General Education Program" section of this *Catalog*.)
- Completion of the additional requirements for a degree and a concentration program.
- D. Completion of a minimum number of credits in upper division courses (courses numbered 300 or above). Since this minimum number varies among academic units and programs, the student should consult the requirements of the College of Arts and Sciences, the School of Education and Human Services, the School of Health Professions and Studies, or the School of Management, and also the requirements of the intended concentration program.
- E. Maintenance of a minimum 2.0 overall grade point average. Higher grade point averages are required by many programs.
- F. Completion of at least 45 credits while enrolled at the University of Michigan-Flint.
- G. Completion of all coursework. Course grades of "I" (incomplete) or "**" (grade not yet submitted) must be replaced with a final grade to confirm completion.
- H. Submission of the application for the diploma.

Graduate Study

See "Graduate Study" section in the back of this Catalog.

Office of Extended Learning

240 David M. French Hall

(810) 762-3200 or (800) 942-5636 ext. 2-3200

Fax: (810) 766-6803 Email: oel@umflint.edu Website: http://oel.umflint.edu

Director: Deborah White

Academic Online Programs: Nick Gaspar, Theresa Stevens Noncredit Professional Development Programs: Andrea Becker,

Terri Blackwell, Charles Wright Secretarial Staff: Krista Heiser

Mission Statement

The mission of the Office of Extended Learning is to provide non-traditional learning opportunities for academic and professional enrichment to serve lifelong learners. In collaboration with the UM-Flint community, OEL will expand alternative methods of educational delivery based on sound pedagogy and the University of Michigan's high-quality standards and traditions.

Online Academic Course Offerings

OEL facilitates the development of online academic courses, which may be offered fully online or in mixed-mode requiring a few visits to campus. All academic online courses are instructor-led using the Web-based Blackboard course management system. In addition, many faculty in face-to-face classes use Blackboard to make assignments, documents, discussions and grades available to students via the Web.

UM-Flint offers hundreds of online courses each year, as well as complete online and mixed-mode programs.

Student Support

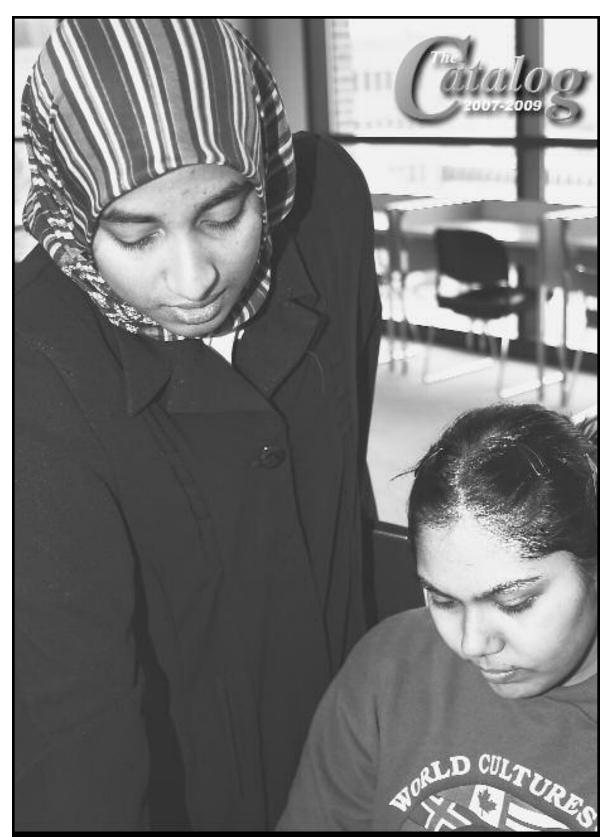
OEL provides on-campus orientation sessions for students new to online learning prior to the start of each semester, and has a "PowerPack" tab in Blackboard. OEL also staffs a help desk for online students, (810) 237-6691, Monday through Friday, 6 a.m. to 10 p.m., and weekends 10 a.m. to 6 p.m.

Noncredit Professional Development

OEL provides professional development courses and certificate programs for accountants, business and healthcare professionals, and K-12 teachers and administrators. K-12 courses are approved by the Michigan Department of Education for State Board continuing education units (SB-CEUs).

Additional Non-credit Programs

OEL also has the capability to customize training programs for business, industry, labor, public and not-for-profit and professional organizations.



General Education Program

General Education Worksheet

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1. English Composition (ENO 112 of equivalen	I.	English Composition	(ENG 112	or equivalen
----------------------------------------------	----	----------------------------	----------	--------------

- II. Fine Arts (3 credits)
- III. Humanities (9 credits in at least 2 fields)
- IV. Natural Sciences (8 credits in laboratory science courses)
- V. Social Sciences (9 credits in at least 2 fields)
- VI. Additional Courses (to bring total number of general education credits to 50)

English Composition	cr.	Humanities	
ENG 111			
ENG 112			
Fine Arts	cr.		
		Social Sciences	
Natural Sciences	cr.		
Additional Courses (from fine nathematics, and computer science, but		atural sciences, social sciences, foreign languag ne of concentration)	es, l
			es, li
			es, li
			es, li

GENERAL EDUCATION PROGRAM

General Education requirements apply to all students pursuing bachelor's degrees offered by the University of Michigan-Flint. Students should plan to satisfy these requirements as early as possible to allow flexibility in completing program and upper division requirements.

The College of Arts and Sciences, the School of Education and Human Services, the School of Health Professions and Studies, and the School of Management determine the General Education program requirements for their own students. The majority of the requirements below apply across units; however, students should consult their unit's section for possible modifications. Petitions by students for waiver of General Education requirements are made to the academic standards committee of the college or school in which the student is enrolled.

Program Mission

The General Education Program at the University of Michigan-Flint fulfills an important academic role in the student's total educational experience. The Program is designed to provide training in reasoning and critical thinking, and to introduce the fundamental disciplines through which people seek to understand themselves, their surroundings, and cultures different from their own. In accordance with the University's mission, the Program aims to educate all students in an environment that emphasizes literacy, critical thinking, and humanistic and scientific inquiry.

General Education Goals and Assessment

The General Education Program is designed to provide a broad base for learning both at the University of Michigan-Flint and after graduation. While the General Education Program offers students considerable flexibility in selecting courses, it has a set of common educational objectives for all students, and courses in the Program are designed to meet these objectives. The following goals in the areas of knowledge, perspectives, reasoning and skills were approved by the faculty of the College of Arts and Sciences. Courses in the General Education Program are designed to meet one or more of these goals, which exemplify qualities that prepare a liberally educated person for a successful and satisfying life. The General Education Program participates in the University-wide effort to assess its academic programs. Information on assessment plans, including goals, methods and outcomes is available at http://assessment.umflint.edu.

Knowledge

- Understanding of one's position within and relationship to the global community
- Understanding of diversity as a national and global phenomenon with a particular focus on the American experience.

- Understanding the evolution of ideas and range of expressions through the humanities and the arts
- Understanding scientific processes and concepts and their relation to social, natural, and physical phenomenon.

Perspectives

- Recognition of the value and importance of learning.
- Appreciation for the importance and value of a broad range of disciplines.
- Appreciation for cultural, racial, and gender differences, similarities and contributions at both national and global
- Recognition of the value and importance of ethical decisionmaking.
- Appreciation for the creativity, intuition, and leap of thought essential to artistic expression, creative writing, and the advancement of knowledge.

Reasoning

- Ability to take reasoned positions on issues of importance and support those positions with evidence.
- Ability to apply reasoning to solve authentic problems through experimentation, data collection, and induction of principles.
- Ability to apply quantitative reasoning to problem-solving.
- Ability to critically examine issues that affect their world.

Skills

- Proficiency and clarity in oral and written expression.
- Acquisition of fundamental numerical skills.
- Ability to analyze and interpret information from a variety of resources, including data, primary sources, and secondary materials.
- Ability to use computer-related technologies and applications appropriate to their disciplines.

Program Requirements.

The General Education Program consists of requirements in six groups: English Composition, Fine Arts, Humanities, Natural Sciences, Social Sciences, and Additional Courses as described below. A worksheet is provided at the beginning of this Catalog section.

I. English Composition.

Completion of ENG 112 or the equivalent. This requirement is ordinarily satisfied by ENG 111 and 112. Some students will need additional credits in ENG 100 and ENG 109 to complete the requirement. Reading test scores and a writing placement exam are used to determine placement. See the English Department pages for more information on reading placement. Based on their performance on the Writing Placement Exam, all incoming students and transfer students who do not transfer in sufficient applicable writing credits will be placed in the appropriate starting course: ENG 109 for 3 credits, ENG 109 for 1 credit concurrent with ENG 111/112, ENG 111, or ENG 112 (only students with previous applicable credit for ENG 111 are eligible for any ENG 112 placement). Writing Placement Exam performance will not exempt students from ENG 111 or ENG 112 but rather will determine if additional help through ENG 109 is needed during or before completing the ENG 111 and ENG 112 sequence.

Transferring students must have completed a sufficient number of credits in writing courses that meet the state outcomes of UM-Flint's writing courses to fulfill the English Composition requirement. Students transferring from schools on the quarter system must in most cases have completed three quarters of appropriate composition courses in order to fulfill the English Composition requirement. Students selected for the Honors Program ordinarily satisfy this requirement by completing HON 155 and HON 156. The University strongly recommends that students complete this requirement as early as possible in their first 45 credit hours of coursework.

II. Fine Arts (f).

Three credits in courses designated as applicable to the *fine arts* requirement (art, dance, music, theatre, or other departments). The letter *f* immediately following the credit parentheses of a course indicates that the credit applies to the *fine arts* General Education Requirement.

III. Humanities (h).

Nine credits in courses designated as applicable to the *humanities* requirement and elected in at least two of the following fields: English and American literature, comparative literature, foreign literature, geography, humanities, philosophy, and other departments. The letter *h* immediately following the credit parentheses of a course indicates that the credit applies to the *humanities* General Education Requirement.

IV. Natural Sciences (n).

Eight credits in laboratory science courses designated as applicable to the *natural sciences* requirement (astronomy, biology, chemistry, environmental science, physical geography, physics, psychology, science, and other departments). The letter *n* immediately following the credit parentheses of a course indicates that the credit applies to the *natural sciences* General Education Requirement.

V. Social Sciences (s).

Nine credits in courses designated as applicable to the *social sciences* requirement and elected in at least two of the following fields: African-American studies, anthropology, criminal justice, economics, geography, history, international studies, linguistics, Mexican American and Latino studies, political science, psychology, resource ecology, social work, sociology, substance abuse treatment, women's and gender studies, and other departments. The letter *s* immediately following the credit parentheses of a course indicates that the credit applies to the *social sciences* General Education Requirement.

VI. Additional Courses.

Students elect courses from fine arts, humanities, natural sciences, social sciences, foreign languages, linguistics, mathematics, and computer science, but excluding the discipline of the student's concentration, to bring the total number of general education credits to 50.

Please note:

The faculties of the College of Arts and Sciences (CAS) and the Schools of Education and human Services (SEHS), Health Professions and Studies (SHPS) and Management (SOM) are considering changes to the General Education requirements for their respective students. Please visit the on-line catalog at www.umflint.edu/departments/catalog/ to see the specifics of these plans, and talk to an academic advisor.



College of Arts and Sciences

COLLEGE OF ARTS AND SCIENCES

Office of the Dean of the College of Arts and Sciences 516/517 David M. French Hall (810) 762-3234

Web Address: www.flint.umich.edu/Departments/cas

Dean: Dr. D.J. Trela

Associate Dean: Dr. Robert Barnett Assistant Dean: Dr. Roy Barnes

Executive Secretary to the Dean: Mary Packer

Budgeting Intermediate Supervisor: Roxanne M. Brunger Institutional Advancement College of Arts and Sciences: Administrative Assistant Intermediate: Anna Gross

Secretary Senior: Rhonda Broadworth Secretary Intermediate: Jean M. Harkins

At the heart of the educational program at the University of Michigan-Flint is the College of Arts and Sciences (CAS), offering over 40 concentration programs in the liberal arts and sciences, as well as programs for State of Michigan certification in secondary teaching. These programs lead to the degrees of Bachelor of Arts, Bachelor of Science, Bachelor in General Studies, Bachelor of Applied Science, Bachelor of Fine Arts, and Bachelor of Music Education.

Graduate programs in English, Liberal Studies in American Culture, Biology, Computer and Information Systems, Public Administration and Social Sciences. These programs lead to degrees Master of Arts in English, Master of Liberal Studies in American Culture, Master of Science in Biology, Master of Science in Computer and Information Systems, Master of Public Administration and Master of Arts in Social Sciences.

The liberal arts and sciences faculty offers to all students an educational program which combines the traditional disciplines of the humanities, fine and applied arts, and natural and social sciences with several career and professional areas. Study in the liberal arts and sciences develops the student's ability to think, to respond to ideas, and to test hypotheses, and provides the skills, knowledge and competencies which prepare graduates to be effective professionals and informed citizens.

Mission of the College

An educated citizenry is the foundation of a democratic society. The College of Arts and Sciences stands at the heart of a University of Michigan-Flint education, offering general education and degree programs in the liberal and fine arts, the natural and social sciences, and selected applied fields. Graduate degree programs are designed to meet the needs of the population in our urban and regional service area. The work of the college requires an empowered faculty dedicated to the education of students and the advancement of knowledge, students who actively seek to learn, and a supportive community.

The mission for the College of Arts and Sciences is to create and sustain a community of lifelong learners in an environment that emphasizes literacy, critical thinking, and humanistic and scientific inquiry.

The College will:

foster excellence in teaching and learning

- engage students in learning partnerships with faculty
- develop mastery of disciplines and confidence in their application for a future of meaningful and productive work
- support students and faculty in traditional and applied research and creative endeavors
- engage faculty and students in professionally related service to the university and society
- promote and defend academic freedom, diversity, equality and justice

Academic Regulations and Procedures

All regulations of the University of Michigan-Flint apply to students in the College of Arts and Sciences. The student should note these regulations printed in earlier sections of this *Catalog*. Specific rules and regulations adopted by the faculty of the College of Arts and Sciences are presented in the following sections.

Credits and Course Level

All bachelor's degree programs of the College of Arts and Sciences require completion of 120 or more credits, depending on the degree and program. At least 33 credits must be in upper division courses; that is, courses numbered 300 or above.

Course Load

A normal undergraduate program consists of approximately 15 credits each semester. With the consent of the faculty advisor, a student may carry up to 18 credits in a semester plus nine in spring and summer terms. In exceptional cases the Committee on Academic Standards may permit students of superior scholarship to elect more than the maximum number of credits.

A student who is employed should so inform the faculty advisor and should limit the course load accordingly. A normal program for a student employed full-time is six credits each semester. With the approval of the advisor, this load may be extended to a maximum of ten credits. A student with part-time employment of more than 15 hours a week should limit the academic program to nine credits. With the approval of the advisor, this load may be extended to a maximum of 12 credits.

Course Election and Changes

Prior to the first official day of the semester the student must drop/add on the SIS Web site. Once classes begin, the student must obtain a Drop/Add form, have it signed by the instructor, and submit the form to the Office of the Registrar.

Grading System

The following grading system is used in the College of Arts and Sciences: A, excellent; B, good; C, fair; D, poor; E, failure; P, pass; F, fail; I, incomplete; N, no credit; W, officially withdrawn

(without penalty). The following scale is used in calculating grade point averages:

Letter Grade	Honor Points
A+	4.0
A	4.0
A-	3.7
B+	3.3
В	3.0
B-	2.7
C+	2.3
C	2.0
C-	1.7
D+	1.3
D	1.0
D-	0.7
E	0.0

Grade point averages are computed by dividing total honor points (course credits multiplied by course grade points) by total credits. The computation is limited to points and credits earned at the University of Michigan-Flint.

The report of I (incomplete) may be made by the instructor if the student is passing but unable to complete the coursework within the specified time. An I may be made up while a student is not enrolled and must be made up by the end of the fifth week of the next semester in which a student is enrolled or one calendar year from when the I was given, whichever is first. If for sufficient reason the student cannot remove the incomplete by one of the above deadlines, the Dean of CAS may grant an extension of the time upon request from the student and the instructor. It is the student's responsibility to ask the instructor for an extension of time and file the required form with the Registrar prior to the deadline. Failure to make up the grade within the time allotted results in the I being automatically changed to a grade of E, F or N as applicable. The policies of the School of Management concerning incomplete grades differ from those of the College of Arts and Sciences. See the School of Management section of this Catalog.

The grade N, which signifies neither credit nor grade point value, is used in numerous courses. For these courses the lowest grade for which credit is earned is one of the following: C, C-, D, D-. The use of this grading system in a course is indicated in course listings and in the course schedule and is announced at the beginning of these courses. Students should be aware that although N grades do not affect the grade point average, the accumulation of an excessive number of Ns is considered insufficient progress toward a degree. Therefore, after the first nine (9) credits for which a grade of N is received, any subsequent grade of N will be recorded as an E, regardless of whether a course in the original nine credits is retaken.

The grade Y indicates "Work in Progress" and is therefore used only for courses designated to extend beyond a single semester. After completion of the work, the Y grade will be removed and replaced by an appropriate grade, or it may also be replaced by an (I) Incomplete.

A grade once reported (with the exception of I) may be changed only to correct a demonstrable clerical error and then only with the approval of the Dean.

Recognition of Superior Scholarship

Graduating seniors with cumulative grade point averages of at least 3.5 but less than 3.75 are recommended for the degree "with honors" and those with cumulative grade point averages of at

least 3.75 are recommended for the degree "with highest honors." In computing averages, only courses taken at the University of Michigan-Flint are included, and only complete terms or semesters are counted.

See "Undergraduate Honors" in the "Academic Policies of the University" section of this *Catalog* for information regarding campus- and system-wide honors recognition.

Distinguished scholarship is also recognized by awards offered by the faculty of the University of Michigan-Flint and by other organizations.

Credit Without Grade (Pass/Fail)

The provision for credit without grade (pass/fail) is intended to encourage students to attempt courses outside their major fields of interest. Subject to the following regulations, a student may elect a limited number of courses without concern for the cumulative grade point average.

The following conditions must be met unless a course is offered only on a Pass/Fail basis:

- A. The student has accumulated 55 or more credits.
- B. The student is in good academic standing (GPA 2.0 or better).
- C. Only one course may be elected pass/fail per semester.
- D. The election does not put the student over the four class pass/fail election limit.
- E. The course is outside the student's concentration *and outside* any elected minor.
- F. The course may not be used to fulfill general education requirements (except for a foreign language).

If a student intends to elect a course for credit without grade, this must be indicated on the course election request form. This option may not be elected after the end of the first two weeks of the semester, nor changed to credit with grade after the announced deadline for dropping classes.

Students choosing the credit without grade option are expected to complete all assigned work and examinations of the course. If in the judgment of the instructor a grade of C or better is earned, the work is reported as "Pass," and the credits for the course are received. If the grade earned is less than C, the report is "Fail," and the course appears on the transcript without grade designation and without credits.

Courses elected for credit without grade are not included in the calculation of the grade point average.

Credit by Examination

The provision for credit by examination is intended to encourage students to engage in independent study.

A maximum of three courses may be passed by examination, and only courses offered by the University of Michigan-Flint can be used. Certain courses are excluded, as determined by the departments.

Students who feel that they have the necessary background to pass a course by examination should request an interview with the chair of the appropriate department to assess competence. The department then sets up an examination committee. Having received written approval from the department chair and the committee, the student registers at the Office of the Registrar and thereafter takes the examination. The appropriate letter grade is entered on the student's record

as if the course had been taken conventionally.

Credit without grade cannot be earned by this means, and ordinarily a student may attempt credit by examination in a given course only once. Entering freshmen should see also the section on the Advanced Placement Program.

Experimental Courses

A faculty member and 12 or more students may develop and offer a one-semester course for no more than three credits on an experimental basis, subject to the approval of the appropriate department. The course should not be a minor variation of an existing course.

Written notice of intent to offer such a course should be given to the Dean of the College of Arts and Sciences at least six weeks before the registration period for the semester in which the course is to be offered. Normally, the course carries a departmental course number, but if it is essentially interdisciplinary the Dean designates it "Interdisciplinary Study."

Concentration credit for such courses is permitted only by approval of the appropriate department; general education credit only by approval of the Curriculum Committee.

Academic Standing

A student in the College of Arts and Sciences who maintains a grade point average of at least 2.0 for courses elected while enrolled in the University is in good academic standing.

The academic records of all students whose grade point averages fall below C (2.0) are reviewed at the end of each semester by the Committee on Academic Standards. According to individual circumstances, students with deficient academic records may be placed on warning or academically dismissed. Students on warning must make substantial improvement during the following semester in order to continue at the University.

Appeal to the Committee on Academic Standards

Students who believe that they are unreasonably affected by a policy of the College of Arts and Sciences may appeal to the Committee on Academic Standards. Petition forms are used to request exceptions in individual cases; information can be obtained from advisors or the College of Arts and Sciences Dean's Office.

Business Credit Restrictions in CAS Degree Programs

For all undergraduate degree programs in CAS no more than 30 credits in business courses (BUS in the *Catalog* and course schedule) may be counted in the total credits required for graduation. This 30 credit maximum includes both credits transferred in and credits taken at the University of Michigan-Flint.

Changes in Academic Rules and Degree Requirements

- A. Changes made in general degree requirements, including general education requirements, and in specific concentration and minor requirements go into effect the Fall semester following approval and apply to all students admitted to the University that term or thereafter. In non-Catalog-publication years, these changes will be published in a special addendum to the Catalog, to be made available to all advisors and students through the Academic Advising and Career Center, and through the on-line version of the Catalog.
- B. All other academic rules and regulations go into effect the

- term after which they are approved. (Publication may be in the *Catalog*, the *Schedule of Courses*, or through the Academic Advising and Career Center.)
- C. Continuously enrolled students (those who are enrolled for classes at least one semester or term of each 12-month period) are entitled to fulfill the requirements in effect the first semester in which they were admitted to the University. Students who reenroll are required to fulfill the requirements of the Catalog in effect on the date of reenrollment. Students may elect to fulfill requirements of any subsequent Catalog.
- D. Exceptions to these guidelines may be granted in some circumstances, when approved by the governing faculty of the unit affected. If such an exception is approved, it is the responsibility of the department or program requesting the exception to publicize the approved changes by circulating the information to academic advisors and to students affected by the changes.

Post-Professional Bachelor's Degrees

UM-Flint students who entered a professional program (e.g., medical school, dental school, physician assistant program, doctor of pharmacy program, etc.) prior to completion of their Bachelor's degree may be eligible to transfer credit from their professional program to complete their College of Arts and Science degree requirements. A maximum of 30 credit hours from the professional program may be applied toward the UM-Flint degree. To obtain a Bachelors degree using transfer credits from a professional program, the student must meet the following conditions:

- A. Completion of CAS general education requirements.
- B. Completion of a minimum of 45 credit hours at UM-Flint.
- C. Acknowledgement, from the UM-Flint department or program with whose concentration program the student wishes to graduate, that the student has met the department's or program's graduation requirements.
- D. Approval of a petition to the Academic Standards Committee that the requirement that the last 30 hours of course work be completed at UM-Flint (the 30 hour rule) be waived.

Student Grievance Procedures

- A. The general procedure for resolving student grievances in matters of dispute between student(s) and instructor(s) regarding classroom instruction, arbitrary and/or inconsistent application of classroom policies and procedures including assignment of grade(s), or allegations of discrimination shall be as follows. For a discussion of discrimination, see the section on discrimination under Student Rights Policy in this Catalog.
 - The instructor(s) shall be consulted directly in an effort to resolve the dispute.
 - Should the dispute not be resolved, the student may refer the problem to the instructor's department or program chair within 30 days of the start of the next regular academic semester (excluding spring or summer term).
 - If a resolution is not reached through discussion with the department or program chair, a written complaint shall be submitted within five school days to the chair, who shall,

- within five school days, return to the student(s) a written confirmation of receipt of the grievance.
- 4. Within 30 days of receiving the grievance, the department or program chair shall return to the student(s) a written decision. This decision shall represent the conclusion of at least a majority of the full-time, regular teaching faculty of that department or program. The student may appeal decisions of the department or program faculty to the Committee on Academic Standards of the College. The Committee shall then consider all evidence and testimony and shall render its decision not later than one month after submission of the appeal. Its decision shall be binding on both the student and the instructor and shall be final.
- B. Decisions on matters which involve department or University policies, where the Academic Standards Committee's decision is the original decision, may be appealed to the Dean and the Executive Committee, whose majority decision is final.

CAS Degree Programs

Concentration Programs

To achieve a fuller understanding of one branch of learning, every student must complete the requirements of a concentration program (major). For a complete listing of CAS concentration programs, see the *Guide to Programs and Degrees* in the section *Programs of Study*. A student may choose to fulfill the requirements of two or more concentration programs concurrently.

Freshmen and sophomores should give early consideration to the work of the junior and senior years and to the general area in which their concentration will probably lie. Deciding on a concentration program should not be postponed too long, since concentration programs have prerequisites which need to be completed before the junior year to avoid unnecessary delay.

All students, upon becoming juniors, must select a concentration program. A student may change the concentration after becoming a junior but may find that the time required to complete the program will be lengthened.

Bachelor of Arts (BA)

The Bachelor of Arts degree is awarded in recognition of study in a specialty area within the context of a broad liberal arts education.

General Degree Requirements

- A. Completion of the general education requirements.
- B. Completion of ARB 112, FRN 112, GER 112, SPN 112, LAT 105, RUS 112, or JPN 112, or equivalent proficiency by examination (0-8 crdits). Students who wish to meet the area option requirement in a foreign language with courses taken in high school or at other colleges and universities, or those who have attained fluency in a foreign language without formal course work, must demonstrate such equivalent proficiency by examination.
- C. Completion of at least 120 credits, at least 33 of which in upper division courses (courses numbered 300 or above) from any discipline. Not more than 40 credits in any subject may be counted in the total credits required for graduation. Not more than 65 credits in any two subjects may be counted.

- D. Completion of concentration (major program) requirements in a concentration approved for the Bachelor of Arts degree. Concentration programs offered for the Bachelor of Arts degree include general programs and Teacher's Certificate programs. For a complete listing of CAS concentration programs, see the Guide to Programs and Degrees in the section Programs of Study. A student may choose to fulfill the requirements of two or more concentration programs concurrently, subject to the rules above.
- E. A cumulative grade point average of C (2.0) or better in the concentration program and in the total work at the University of Michigan-Flint.

Bachelor of Science (BS)

The Bachelor of Science degree is awarded in recognition of study in certain concentration programs, generally requiring more than 40 credits in one subject area, in conjunction with study of the liberal arts.

General Degree Requirements

- A. Completion of the general education requirements.
- B. Completion of at least 124 credits, at least 33 of which in upper division courses (courses numbered 300 or above) from any discipline.
- C. Completion of concentration (major program) requirements in a concentration approved for the Bachelor of Science degree. Concentration programs offered for the Bachelor of Science degree include general programs and Teacher's Certificate programs. For a complete listing of CAS concentration programs, see the Guide to Programs and Degrees in the section Programs of Study. A student may choose to fulfill the requirements of two or more concentration programs concurrently.
- D. A cumulative grade point average of C (2.0) or better in the concentration program and in the total work at the University of Michigan-Flint.

Bachelor of Interdisciplinary Studies (BIS)

The Bachelor of Interdisciplinary Studies degree is awarded in recognition of completion of an individually designed program of study not provided by existing concentrations. It may not be a minor variation of an existing program, and must draw from two or more departments or programs. (Note: Another option for individually designed study is the Special Concentration, leading to the Bachelor of Arts degree.)

General Degree Requirements

A. Completion of a student-designed program of study consisting of at least 45 credits and approved by the Curriculum Committee. The plan of study will be thematic and designed to address the specific needs of the student wishing to pursue a particular concentration not available within currently offered concentrations. In the spirit of the interdisciplinary component of the program, the course of study must draw from two or more departments or programs, including at least one from the College of Arts and Sciences, from which the majority of credit will be drawn.

- The student will select at least two appropriate faculty advisors, one from each of the departments or programs from which the student will be taking the majority of courses. These advisors will serve as the "Board of Study" and will assist the student with the design of the course of study. Students are encouraged to submit the proposed course of study by the end of the sophomore year, so that the plan can be approved by the end of the first semester of the junior year.
- 2. The course of study will be submitted to the IDS coordinator to ensure that it meets all degree requirements. The IDS coordinator will then submit the student's plan to the Curriculum Committee for final approval.
- 3. The proposal must include a rational for the composed concentration, complete with specific education objectives and a description of how it will be determined that these objectives will have been met (portfolio, internship, research, major paper).
- Any subsequent changes to the course of study must be presented to the Curriculum Committee for approval, and will follow the normal procedure for the waiving of degree requirements.
- In the senior year, the student will present or produce a final project (IDS 499, 500). This final project will be subject to review by the Board of Study and one member of the CAS Curriculum Committee.
- Upon successful completion of the approved program of study, the Board of Study will present its recommendation that the Curriculum Committee grant final approval in anticipation of the conferral of the degree of Bachelor of Interdisciplinary Study.
- B. Completion of the CAS general education requirements.
- C. Completion of at least 120 credits, not fewer than 58 earned at the University of Michigan, and including at least 33 credits in upper division courses (courses numbered 300 or above).
- D. A cumulative grade point average of C (2.0) or better in the student's total work at the University of Michigan-Flint.

Bachelor of Applied Science (BAS)

The Bachelor of Applied Science (BAS) degree is awarded in recognition of baccalaureate level study beyond approved two-year programs in specified technical areas. The degree permits students with education and experience in a technical field to complete a baccalaureate degree in a program appropriate to the student's interests and needs.

Admission Requirements

- A. See "Transfer Students" in the "Admissions and Recruitment" section of this *Catalog* for general admission requirements.
- B. Completion of an Associate in Applied Science degree is

required for admission to the BAS program. The applicant should have at least sixteen (16) transferable semester hour credits which apply toward the general education requirements of the University of Michigan-Flint.

Degree Requirements

- A. Completion of an approved Associate in Applied Science (AAS) degree. Credit for technical courses transferred in under this program applies only to the BAS degree. Such technical courses cannot be used toward any other degree offered by the University of Michigan-Flint. All AAS degree concentrations are accepted toward the BAS degree, including such areas as business, construction, foods, graphic design, health, industrial management, and mechanical and electronic technology. The approval of specific programs and of the transferability of credits toward the BAS degree rests with the BAS Committee, which is chaired by the program liaison. Transfer of credit hours may not exceed sixty-two (62) credits, and is permitted only for courses in which the final grade earned was a C (2.0) or better.
- B. Completion of the general education requirements of the University of Michigan-Flint.
- C. Completion of at least 124 credit hours, at least 33 of which in upper division courses (courses numbered 300 or above), and at least 30 of which taken at the University of Michigan-Flint. No more than thirty (30) credits in business courses may be counted. This includes both transfer credits and credits earned at the University of Michigan-Flint, with the exception that students with an Associate in Applied Science (AAS) degree in business programs may retain all business credits that are part of an accepted transfer program. (Any additional credits in business earned after transfer to the University of Michigan-Flint may not be applied to the program. Students who wish to take more business courses should plan to apply to the School of Management and work toward a Bachelor of Business Administration degree.)
- D. Completion of a concentration in Applied Science, consisting entirely of technical credits taken during the associate degree program, and one of the following options, chosen in consultation with an advisor and allowing pursuit of areas of interest in some depth.
 - **Option 1.** Any one of the concentration minors offered by the University of Michigan-Flint. (These are listed in the *Catalog* "Guide to Programs and Degrees," and are described in the introductory section of each department.)
 - **Option 2.** Fifteen (15) semester hours in each of two disciplines of the student's choice: At least six (6) semester hours in one discipline must be in courses numbered 300 or above; three (3) semester hours in the other discipline must be in courses numbered 300 or above.
- E. A cumulative grade point average of C (2.0) or better in the total work at the University of Michigan-Flint.

Bachelor of Fine Arts (BFA)

The Bachelor of Fine Arts degree is awarded in recognition of study which develops artistic knowledge and skills toward the pursuit of

creative excellence. Concentration programs are available in Art and Theatre. See Art and Theatre for further information.

Bachelor of Music Education (BME)

The Bachelor of Music Education (BME) is awarded in recognition of study dedicated to the training of musicians. See Music for further information.

Africana Studies (AFA)

346 David M. French Hall (810) 762-3353 FAX (810) 766-6719

Website: http://www/flint/umich/edu/departments/africana

Chair: Ernest N. Emenyonu
Principal Secretary: Judy Bedore

Professor Ernest N. Emenyonu; Associate Professor Guluma Gemeda; Lecturers Patricia Emenyonu, Walter Milton, Jr., George Moss, Carolyn Nur Wistrand, Kim Yarber.

Department Mission and Program Assessment

The Department of Africana Studies at the University of Michigan-Flint exists to prepare students for the ever-demanding need to engage and function successfully in a diverse society. In addition to providing an understanding of the histories, experiences, and contributions of the peoples of Africa and the African Diaspora, the Department supports a well-rounded education in the tradition of the liberal arts and sciences and its range of course offerings extends into education, health, policy, management, sociology, political science, economics, literature, religion and drama. The Department of Africana Studies is a multi-disciplinary unit dedicated to the production of cultural workers, teachers, human resources people, public relations officers who would help transform communities into environments that are democratic, patrons of the arts, and economically sound. The spirit of inquiry and careful scholarship are the hallmarks of the Department's approach to the various disciplines that comprise Africana Studies. The Department participates in the University-wide effort to assess its academic programs. Information on assessment plans, including methods and outcomes is available http://assessment.umflint.edu.

Programs in Africana Studies

Two concentration programs are offered, both leading to a Bachelor of Arts degree: the General Program in Africana Studies and the Honors Program in Africana Studies. A Minor in Africana Studies and an Africana Studies Certificate Program are also available.

General Program in Africana Studies.

All majors are encouraged to meet with their Africana Studies advisors at least twice during each semester or term that they are enrolled. Students may choose from a wide range of special topic courses, such as AFA 391, 395, or 396, to round out their course of study.

Requirements. Completion of 33 credits distributed as follows:

A. Introductory Courses (6 credits).

AFA 201, 220.

B. History and Literature (9 credits).

AFA 300/CPL 301.

- 1. AFA/HIS 230.
- Two from the following, including at least one 300-level literature course.
 History. AFA 320, 322, 338, 363, 395, 396, 435; AFA/HIS 231, 334, 335.
 Literature. AFA 216, 301, 318, 319, 321; AFA/CPL 257,
- C. Politics, Economics, Religion and Philosophy (3 credits). One from: AFA 357, 391, 395, 396; AFA/ANT 369; AFA/ANT/PHL 203; AFA/ECN 244; AFA 358/HIS 359; AFA/PHL 205; AFA/POL 304, 340, 360.
- D. Arts, Cultures and Languages (6 credits). Two from: AFA 302, 310, 311, 363, 391, 395, 396; AFA/ANT 250, 260; AFA/ART 308; AFA/DAN/INT 204; AFA/MUS 200, 202, 313, 413; AFA/THE 239, 242.
- E. Education, Psychology, Health and Social Sciences (6 credits).
 Two from: AFA 361, 362, 391, 395, 396; AFA 331, 399, 590;
 AFA/PSY 219; AFA/SOC 270; AFA/SOC/WGS 359, 373.
- F. Senior Seminar/Senior Experience (3 credits). AFA 490. AFA 391, 395, 475; AFA 375/EDS/SWR 361 also recommended.
- G. All requirements of the College of Arts and Sciences Bachelor of Arts degree, including general education requirements and a foreign language requirement, in a foreign language recognized as being related to the African experience. These include: Arabic, Ewe, French, German, Portuguese, Spanish, Swahili, Twi, Yoruba, or other appropriate languages when offered. (Some of the applicable foreign languages are not offered at UM-Flint. This requirement can be met through transfer credits and/or test results from other schools.

Honors Program in Africana Studies

All majors are encouraged to meet with their Africana Studies advisors at least twice during each semester or term that they are enrolled.

Requirements. Fifty credits, distributed as follows:

- A. All requirements of the General Program in Africana Studies (33 credits).
- B. AFA 395, 396 (6 credits).
- C. All requirements of the University Honors Scholar Program, to include AFA/HON 495, 496; HON 390 (11 credits).

Prospective Honors concentration students are urged to acquaint themselves as early as possible with the requirements above as well as with the particular procedures for acceptance into the Africana Studies Honors Program. See the departmental honors advisor or the Honors Program Director for this information.

Minor in Africana Studies

The Africana Studies minor complements many major concentrations. All students completing a minor are encouraged to meet with their Africana Studies advisors at least twice during each semester or term that they are enrolled.

Requirements. Twenty-one credits, distributed as follows:

- A. Introductory Courses (6 credits). AFA 201, 220.
- B. History and Literature (6 credits). Two from: AFA 216, 301, 318, 319, 320, 322, 338, 363, 395, 435; AFA/CPL 257; AFA 300/CPL 301; AFA/ENG 215; AFA/HIS 230, 231, 334, 335.
- C. Politics, Economics, Religion and Philosophy (3 credits). One from: AFA 357; AFA/ANT 368; AFA/ANT/PHL 203; AFA/ECN 244; AFA 358/HIS 359; AFA/PHL 205; AFA/POL 304, 340, 360.
- D. Arts, Cultures and Languages (3 credits). One from: AFA 302, 363; AFA/ANT 250, 260; AFA/ART 308; AFA/DAN 310, 311; AFA/DAN/INT 204; AFA/MUS 313, 413; AFA/THE 239, 242.
- E. Education, Psychology, Health and Social Sciences (3 credits). One from: AFA 361, 362, 399; AFA 331; AFA/PSY 219; AFA/SOC 270; AFA/SOC/WGS 359, 373.

Africana Studies Certificate Program

The Africana Studies Certificate Program offers a wide range of courses to students and members of the community who would like to enrich their knowledge of African and African American experiences. The program intends to benefit those who serve the African American communities and institutions such as the NAACP, National Urban League, Flint Area Coalition to End Racism (FACTER) and others. The program also aims to serve K-12 school teachers in mid-Michigan, as well as employees in higher education from the Flint area.

Requirements. Completion of 18 credits distributed as follows:

- Introductory courses (3 credits).
 One from: AFA 101; AFA/CPL 206/ENG 209; AFA/HIS 235.
- Economics, politics, religion and philosophy (3 credits).
 One from: AFA/ANT/PHL 203; AFA/PHL 205; AFA 220, 244, 362; AFA/POL 304, 340; AFA 358/HIS 368; AFA 360/POL 343*.
- Education, psychology and social work (3 credits).
 One from: AFA/PSY 219; AFA/EDU 331, 399*;
 AFA/SOC/WGS 359*; AFA 361, 475; AFA/EDU/SOC 375.
- History (3 credits).
 One from: AFA/HIS 230*, 336*; AFA 320, 322; AFA/HIS 334, 335*, 338, 433, 435.
- Language and literature (3 credits).
 One from: AFA/CPL/THE 207; AFA/ENG 215*; AFA 300/CPL 301; AFA/CPL/WGS 318.
- Art, music and dance (3 credits).
 One from: AFA/MUS 202, 313; AFA/THE 239, 242*; AFA/ART 308; AFA/THE 312.

*Courses with asterisks are available on-line.

Courses in Africana Studies

101. (201). Introduction to Africana Studies. (3)s.

Interdisciplinary examination of the Africana experience. The

African American diaspora - the dispersion of persons of African American descent throughout the world - and trends, issues and forces that have shaped that experience; the contemporary status and condition of African Americans.

200. The History of Blues, Jazz and Rap. (3).

Examination of the foundations for Jazz, Rock'n'Roll, Gospel Music, Soul, Rhythm and Blues as well as other popular forms of American music. Microcosm of American life in its portrait of Africana peoples' experiences in America. *Also listed as MUS 200*.

202. African Music and Cultures. (3).

Overview of the three types of music in Africa today: traditional, popular and written art music. Investigation of the diversity and shared characteristics of African cultures with reference to historical, social and cultural backgrounds of the music. *Also listed as MUS 202*.

203. Origins of Modern Racism. (3)h.

Survey of the development of modern Western ideas of racism in the period 1492-1800, with particular attention to moral and political philosophies that developed in conjunction with the colonization and enslavement of African and Native American peoples in the New World. Figures studied may include Columbus, Las Casas, Montaigne, Locks, Rousseau and Jefferson. Also listed as ANT 203 and PHL 203.

204. World Dance Forms. Sophomore standing; DAN 116, 117, 118, or 120, 121, or 130, 131; or consent of instructor. (2)f.

Movement and lecture course with emphasis on global cultures and their folk traditions through dance. Specific area of exploration determined a semester prior to course offering. *Also listed as DAN 204 and INT 204*.

205. African Religions and Philosophy. *A course in philosophy numbered 100 or higher. (3)h.*

Examination of some African religions and African philosophy, to gain greater insight and understanding of traditional African religions and African philosophy such as Yoruba and Akan. The role of these traditional African religions and philosophies in the lives of continental and diaspora Africans, as well as non-Africans. Also listed as ANT 205 and PHL 205.

206. (319). Survey of African Literature. (3)h.

Introduction to works of representative writers from all parts of the African continent. Also listed as CPL 206 and ENG 209.

207. Modern African Drama and Poetry. (3)h.

Introduction to contemporary African drama and poetry, whose themes reflect socio-cultural, political and religious events prevalent in the societies from which they emanate. The relationship between traditional and modern drama and poetry. Analysis of language in selected poems and plays, including works by Wole Soyinka, Ama Ata Aidoo, Tess Onwueme, Athol Fugard, Dennis Brutus, and Niyi Ozundare. *Also listed as CPL 207 and THE 207*.

208. Multicultural Drama. (3)h.

Multicultural drama within the context of the modern theatre. Examination of diverse cultures that impact contemporary society. Assimilation, integration, and cultural identity focal areas of scrutiny in a Western context on nonwestern and western authors. *Also listed as THE 208*.

213. Gospel Choir. Consent of instructor and freshman or sophomore standing only. (1)f.

Rehearsal and performance of works in the Gospel Music tradition. May be repeated for multiple credit. *Also listed as MUS 213*.

215. Survey of African-American Literature. Prior or concurrent election of ENG 112. (3)h.

Introduction to American literature written by African-American writers. Major authors studied in historical context along with cultural elements of folklore and related arts. *Also listed as ENG 215*.

216. Afro/Latino/Caribbean Women Writers. Prior or concurrent election of ENG 112. (3) h.

Overview of the major genres, publishing activities, goals and concerns of female writers from the Anglophone, Francophone and Dutch Caribbean. The Caribbean Women Writers' Project and the ways in which anticolonial discourse, issues of exile and sanctuary, and revisions of the literary tradition of the Caribbean are manifested in their literature. *Also listed as WGS 216*.

219. Psychology of the Black Experience. PSY 100 or consent of instructor. (3)s.

Experience of Blacks examined from a psychological point of view. Focus on the psychological consequences of being Black in the United States; however, world-wide perspective included. Empirical and theoretical views. *Also listed as PSY 219*.

220. Africana Theories of Knowledge. (3)h.

Basic issues arising in Africana epistemology and cosmologies. Introduction to critical thinking about various "knowledges" in an analytical and comparative manner. Use of qualitative research tools as means of generating African centered ways on knowing the world; African religions and philosophies.

230. Survey of African History to 1800. (3)s.

African history from ancient times to the end of the 18th century. Economic, political and social foundations of ancient African civilizations. The encounter with Europe; development of the Atlantic slave trade in 16th century; consequences of Africa and people of African descent. Growth of legitimate trade and the beginning of colonial conquest in Africa. Lectures, documentary films, videos, class discussions. Also listed as HIS 230.

235. Introduction to the History of African Diaspora. (3)s.

This course explores key issues and events in the history of the

African Diaspora. The African Diaspora is broadly defined to encompass the experiences of people of African descent across time and vast geographical areas. Taking the current trends in Diaspora studies literature into account, it emphasizes the "homeland plus Diaspora" model, and examines the history of the people of African descent in Africa and other parts of the world. It also evaluates the contributions of Africans in the formation of multi-ethnic, cross-cultural societies in Asia, Europe and the Americas. The course discusses the dialectical relationships between Africans and the people of the African Diaspora, and the cultural and intellectual world that they created since the sixteenth century. Using appropirate textbooks, essays, primary sources and documentary videos, the course attempts to help understand the historical and cultural bonds between Africans and people of African Diaspora. After a brief overview of the African background, it chronologically introduces the African Diaspora experiences in Asia, Europe, the Caribbean, North and South America. It deals with the Atlantic slave trade and the connections between slavery and the development of racism in America. This course is recommended for students who are completing a certificate program in Africana Studies, those who are at entry level or junior standing. Also listed as HIS 235.

239. Drama of the Harlem Renaissance. (3).

Examination of the development of African American drama with emphasis on the major playwrights of the Harlem Renaissance. Exploration of the political, social, and racial climate addressed in their dramatic texts. *Also listed as THE* 239.

242. Contemporary Black Theatre in America. (3)h.

Contemporary Black dramas and dramatists in America since 1950, and the production of Black theatre in America today. First segment includes literature, sociology, mythology, and music behind the plays studied. Theatre segment considers the operation and recent flourishing of Black theatre in America. Attendance at performances and participation in performance activities may be required. *Also listed as THE 242*.

244. The Economics of the Black Community. (3)s.

Economic problems of the Black American in the historical development of the United States. Analysis of discrimination in consumer, labor, housing, and capital markets. Importance of human resources in economic development. Discussion of ways to bring about economic change.

250. African Cultures. (3)s.

Introduction to the African continent as a geographic, political and symbolic entity juxtaposing territories, histories and cultures. Anthropological emphasis on West Africa, including matriliny and other lineage systems, polyrhythmic music, gender, religion (e.g., Vodu), economic and political organization, and colonial impact, from the viewpoints of Africans themselves, as subjects and agents. *Also listed as ANT 250*.

257. Protest in African Literature. At least sophomore standing. (3)h.

Reading and discussion of poets, novelists, and essayists from West, East, and South Africa who have written in protest of French, English, Portuguese, and neocolonial oppression. Gender struggles and inequalities in indigenous systems. Analysis of cultural differences between African peoples and colonizing powers, as they are represented in literature and as they intersect with political and social realities; efforts to change them. *Also listed as CPL 257*.

260. African Diaspora in the Americas. ANT/INT 100 or consent of instructor. (3)s.

Racialized groups and evolving black consciousness of African descendants in the Americas and the Atlantic World. Studies of race, racism, and anthropological social identities during the Atlantic slave trde and in contemporary global society. The relationship between philosophies of culture and historiography in the context of slavery, forced removals, and global economic and ontological hegemony. *Also listed as ANT 260.*

265. Caribbean Society and Culture. (3).

Introduction to social, political, economic and cultural life of the Caribbean, focusing on the English-speaking Caribbean while also addressing important lessons in the experiences of peoples from the wider Caribbean. Social-scientific disciplinary focus combining historical and thematic issues, with particular attention to problems of colonialism, race, inequality, and efforts towards democracy. Also listed as ANT 265 and SOC 265.

270. Race and Ethnic Relations. SOC 100 or ANT/INT 100. (3)s.

Analysis of the implications of racial differences, the factors affecting prejudice and discrimination, structural aspects of group conflicts, and the possibilities of change in American and other societies. *Also listed as SOC 270.*

300. Introduction to Francophone African Literature. *ENG* 112, (3)h.

Introduction to Francophone African Literature. The Negritude (Movement) School and its impact on African Literature. Readings from the works of Leon-Gontran Damas, Birago Diop, Aime Cesaire, Leopold Sedar Senghor, and others. *Graded ABCD>N. Also listed as CPL 301*.

301. Early African-American Literature. AFA 101, 260. (3).

African-American literary tradition as a long and connected enterprise of imaginative expression and revision. Overview of the genres and historical figures key to the development of the traditions of African-American writers.

304. Black Social and Political Movements. AFA 101 or a course in political science or consent of instructor. (3)s.

Analysis of the strengths and weaknesses of past and current movements seeking social and political change on behalf of African-Americans, from an interdisciplinary perspective. The Civil Rights Movement, Back to Africa Movement, spiritual movements, resistance movements, and independent political movements. *Also listed as POL 304*.

[305. Topics in African Languages and Cultures. AFA 101 or consent of instructor. (3). Also listed as ANT 305.]

308. African and African-American Art. At least sophomore standing. (3)h.

Survey of Africa's art history, from Stone Age to early 20th century; introduction to select group of African-American artists. Lectures, museum visits, hands-on projects, short research paper. *Also listed as ARH 308*.

310. Performance Traditions & Aesthetics of the African World. AFA 101 or consent of instructor. (3)f.

Development of Black performance theory and practice in the African world. Emphasis on theoretical foundations of Black Expression world wide.

311. African World Performance Studio. Consent of instructor. AFA 310 recommended. (3)f.

Practical aspects of artistic expression through drama, poetry, storytelling, music, dance, and some visual arts. A performance collective will be formed to showcase work of enrolled students. Graded Pass/Fail.

312. Black Arts Movement. *AFA 215 or consent of instructor.* (3)h.

Examination of the Black Arts Movement of the 1960s and early 1970s. Study of the works of the black writers, poets and dramatists of the Arts Movement including those of Larry Neal, Leroi Jones/Amiri Baraka, Harold Cruise, and Nikki Giovanni. *Also listed as THE 312*.

313. African-American Music. A course in Africana Studies or consent of instructor. (3)h.

Examination of the music developed and influenced by African-Americans in the United States. African-American music styles, forms and performance practices that were influenced by European music; African music retentions. *Also listed as MUS 313*.

318. (218). Women Writers of the African World. *Sophomore standing or consent of instructor.* **(3)***h.*

Survey of literature by women from Africa, the Caribbean, North America, and Europe. Focus on the works and experiences of writers and the genres that shaped their experiences. Selected works from genres such as the Buildungsroman, the mature novel, drama, and/or non-fictional prose. Also listed as CPL 318 and WGS 318.

320. Contemporary East African History. AFA/HIS 230 or consent of instructor. (3)s.

Contemporary political, economic, and social history of East Africa; historical background for major conflicts in the region.

321. Twentieth Century African-American Literature. *AFA* 101, 260. (3).

Overview of the major genres, publishing activities, and concerns of twentieth century African-American writers and examination of at least two traditions in the development of the literature. Eras considered include pre-World War I, the Harlem Renaissance, the Urban Era, and contemporary literature.

322. History of West Africa and the Atlantic World. *AFA/HIS* 230 or 335 or consent of instructor. (3)s.

Political, social, and economic history of West Africa's contact in the Atlantic world, from the 16th to the 19th centuries.

331. Urban Education: Conflicts and Strategies for Change. *At least junior standing.* (3).

Current social, economic, and educational conflicts affecting urban education in America. Intended to aid students in developing systematic individual strategies for change in urban education.

334. History of Ethnic and Racial Minorities in the United States. At least junior standing; a course in US history; or consent of instructor. (3)s.

Historical examination of the role of minority groups in the United States with emphasis on the changing patterns of immigration, the process of assimilation, the evolution of ethnicity, and the differences and similarities in the experiences of minority groups. *Also listed as HIS 334*.

335. The History of the African-American. A course in American or African history. (3)s.

African American experience from African origins to 1877. Pre-16th century African civilizations, the Atlantic slave trade, the middle passage, racial slavery during the colonial and early republic. Survival strategies of the enslaved and free, struggles for freedom, equality, and social justice during the colonial and post revolutionary period. The abolitionist movement; the role of African Americans in the Civil War and reconstruction. Lectures and documentary videos. *Also listed as HIS 335*.

336. (231). Africa in Modern Times, 1800 to Present. (3)s.

Coming of European colonialism to Africa in the late nineteenth century and the efforts of Africans to recapture their independence. Survey through the present period. *Also listed as HIS 336.*

338. Topics in African-American History. A course in American or African-American history. (3)s.

A different topic taught each year. May be reelected once. *Also listed as HIS 338*.

340. African Politics. A course in political science or consent of instructor. (3)s.

Analysis of traditional African political structures, the changes occasioned by colonial rule, and the political processes of independent African states. *Also listed as POL 340*.

357. The Black Church and the Civil Rights Movement. *AFA* 101 or 220 or consent of instructor. (3).

Sociopolitical, economic, philosophical and theological factors underlying the Modern Civil Rights Movement. Black religious institutions from the Great Depression; renewal and call to arms during the tumultuous era of the late 1950s and 1960s; development of today's "Black Church."

358. The History of African-American Religion. Sophomore standing or consent of instructor. (3)h.

Exploration of the core values associated with the struggle to

create and maintain the African-American religious experience in America, which has borrowed values from a number of cultures and has served to influence the on-going process of defining American culture. *Also listed as HIS 368*.

359. The Black Family. SOC 100. (3)s.

Sociological and social-psychological analysis of the Black family in America. Impact of changes in race relations and of urbanization on the Black family. Assessment of various stereotypes existing in mass media and in sociological and psychological literatures. Also listed as SOC 359 and WGS 359.

360. Conflict and Development in Southern Africa. Two courses in social sciences or consent of instructor. (3)s.

Contemporary development and social change in Southern Africa, discussion of U.S. foreign policy toward the area with an analysis of western investment strategies and human rights violations. *Also listed as POL 343*.

361. Health Issues and Black Americans. AFA 101 or 220; or consent of instructor. (3).

Exploration of the status of the health care institution in the United States and the nature of response to demonstrated health needs of Black Americans.

362. Politics and the Black Family in Modern America. *AFA* 101 or 220 or consent of instructor. (3).

Examination of racial politics, pluralism, and policymaking in contemporary America, as they affect the Black Family.

363. Black Cultural Criticism. AFA 101 or 220 or consent of instructor. (3).

Exploration of the role social institutions play in shaping views and defining values of society as it relates to issues of race, class, gender, sexual orientation that permeate identities of Black and other marginalized people of the world.

369. African Religions. AFA 101 or ANT 100 or consent of instructor. (3).

Examination of African religions through anthropological and literary texts, including consideration of West African religions and central African indigenous practices. *Also listed as ANT 369*.

373. Institutional Racism. *SOC 100 or consent of instructor.* (3)s.

Analysis of racism within the basic institutions of American society. Emphasis on the way institutional racism affects members of various ethnic minorities. *Also listed as SOC 373*.

375. Community Building through Educational Involvement. AFA 101 or ANT/INT 100 or SOC 100 or SWR 100; at least junior standing; or consent of instructor. (3).

Participation and observation in schools and community-based organizations, integrated with an interdisciplinary seminar on urban social issues and cultural variation. Skills required for various forms of community action; techniques include qualitative research methods, assessment, planning, intervention, and evaluation. Also listed as EDS 361 (EDU 375) and SWR 361 (SWK 375).

- 391. Directed Readings in Africana Studies. At least sophomore standing and consent of instructor. (1-3)s or h.
- 395. Topics in African Diaspora Studies. Consent of instructor. (3)s.

Issues and problems in Africana Studies. Topic in the social sciences announced for each offering of the course. May be reelected once.

396. Topics in African Studies. Consent of instructor. (3)s.

Issues in African studies. Topic in the social sciences announced for each offering of the course. May be reelected once. Graded ABCDE/Y.

399. Africana Studies for Teachers. Sophomore standing. (3).

Overview of Africana Studies content useful to teachers in public schools.

400. 20th Century Major African Authors. At least junior standing, a course in literature, a course in African literature; or consent of instructor. (3)h.

Intensive study of works by important 20th century authors from different African countries, including Wole Soyinka, Chinua Achebe, Ngugi Wa Thiong'o, Leepold Sedar Senghor, Nawal El Saadawi, Naguib Mahfouz, Dennis Brutus, Mariama Baa, Nadine Gordimer.. Focus on evolution of the author's canon, impact on the literary context, relationship between imaginative creativity and biography, historical and cultural contexts. Also listed as CPL 400.

413. Gospel Choir. Consent of instructor, junior or senior standing. (1)f.

Rehearsal and performance of works in the Gospel Music tradition. May be repeated for multiple credit. Also listed as MUS 413.

433. Muslims in North America. (3)s.

Origins, conditions, cultural practices, and conflicts of Muslims in North America. Examination of the critical issues of adaptation, authenticity, and diversity confronting Muslims in the United States and Canada, focusing on the different African-American Muslim communities, especially the "Nation of Islam." Investigation of existing stereotypes of Muslims in contemporary popular culture, including novels, films and comics. Also listed as HIS 433.

435. Black America Since the Civil War. At least junior standing. (3)s.

Examination of movements, organizations, personalities, and leadership trends among Black Americans since the Civil War. Also listed as HIS 435.

475. Study Tour of Africa/African Diaspora. AFA 230 or consent of instructor. (3).

Exploration of cultures of Africa and/or African Diaspora through study tour of select areas. For students with concentrations or minors in Africana Studies and others interested in first-hand cultural and intellectual experiences in Africa and/or the African Diaspora.

480. Africa in 20th Century Anglophone World Literature. At least junior standing, a 300-level course in literature, a course in African literature; or consent of instructor. (3)h.

Depictions of Africa in multiple world literary traditions, by renowned writers including Joseph Conrad, Joyce Cary, Toni Morrison, V.S. Naipaul, Derek Walcott, Nawal El Sadaawi, Wole Soyinka, Chinua Achebe, Nadine Gordimer, Dennis Brutus, and Ngugi Wa Thiong'o. Analysis of changing perspectives, from Africa as "other world" to contemporary visions of acceptance and identification; connections between literary works and their socio-political/ideological contexts. Also listed as CPL 480.

490. Seminar in Africana Studies. At least junior standing. (3).

Research papers and assigned readings designed to integrate techniques and materials of previous Black study. Topic announced prior to registration.

495. Honors Thesis I. Consent of the Honors Council or its designate; consent of Department Chair. Open only to Honors Program students in Africana studies. (4).

Credit and grade are not given until successful completion of HON 496. Also listed as HON 495. Graded ABCDE/Y.

496. Honors Thesis II. Consent of the Honors Council or its designate; consent of Department Chair; prior or concurrent election of AFA 495. Open only to Honors Program students in Africana studies. (4).

Also listed as HON 496. Graded ABCDE/Y.

Graduate Course in Africana Studies

534. History of Ethnic and Racial Minorities in the United **States.** *Graduate standing.* (3).

See AFA 334 for description. Not open to students with credit for AFA/HIS 334. Also listed as HIS 534.

590. Africana Studies for Teachers. Graduate standing; AFA 331. (3)

See AFA 399 for description. Not open to students with credit for AFA 399.

American Culture (AMC)

See Graduate Study.

Anthropology (ANT)

522 David M. French Hall (810) 762-3340

Chair: Beverley Smith

Principal Secretary: Lynne McTiernan

Faculty Advisors: Associate Professor Judy Rosenthal, Beverley Smith; Assistant Professor Ananth Aiyer; Instructor cum Assistant Professor Jennifer Alvey (WGS cross-appointed) Professor Emeritus: Hani I Fakhouri

Anthropology is the study of human culture in past and contemporary societies. Anthropology includes the sub-fields of archaeology, physical/biological anthropology, linguistic anthropology, and socio-cultural anthropology. The discipline of anthropology is a holistic study of humanity, our ancestors, and non-human primates. Archaeology examines the role of material culture to reconstruct cultural history, including technological, stylistic, and organizational changes in past cultures. Physical anthropology is concerned with the relationships between biology and culture, including human variation and adaptation, and incorporates concerns of disease, nutrition, and forensics. Linguistic anthropology deals with the relationships between language and culture, especially the ways in which language both reflects and influences perception and world view. The study of socio-cultural anthropology requires attention to institutions: kinship, gender, political organization, economic systems, religion, global political economy, and the construction of inequality.

Department Mission and Program Assessment

The programs of Anthropology and Sociology have a common goal of introducing students to alternative perspectives of their world. Through examination of other cultures throughout the world and/or their own society, the faculty of the Anthropology and Sociology programs strive to develop students' abilities for critical thinking and analytical reasoning. The program participates in the University-wide effort to assess its academic programs. Information on assessment plans, including goals, methods and outcomes is available at http://assessment.umflint.edu.

Programs in Anthropology

Two concentration programs are offered, both leading to the Bachelor of Arts degree: the General Program in Anthropology and the Honors Program in Anthropology. A Minor in Anthropology is also available.

General Program in Anthropology

Prerequisite. ANT/INT 100 (3 credits).

Requirements. Thirty-nine to 43 credits distributed as follows:

- A. Archaeology/Biological/Linguistic Anthropology (6-7 credits). Two from: ANT 105, 110; ANT/LIN 290.
- B. Cultural Area Courses (6 credits) Two from: ANT 240, 271, 284, 295; ANT/AFA 250.
- C. Social Theory (3 credits). ANT/SOC 302 or 303.
- D. Institutions and Cultural Studies (6 credits). Two from: ANT/SOC 325; ANT/HCR 330; ANT/POL 351; ANT/INT 352; ANT 340, 355; ANT/WGS 378.
- E. Specialized Topics in Anthropology (6 credits). Two from: AFA/ANT/PHL 203; ANT/INT 299, 415; ANT 311, 318, 322, 370, 380, 398; ANT/LIN 335; ANT/AFA 369; ANT/SOC 375; ANT/SOC/INT/WGS 376.
- F. Capstone (3 credits) ANT 405 or 499.
- G. Cognate Fields: (9-12 credits). Three courses numbered 300 or higher from the fields of biology, criminal justice, economics, earth and resource

- science, history, linguistics, philosophy, psychology, political science, and/or sociology, chosen in consultation with advisor.
- H. All requirements of the College of Arts and Sciences Bachelor of Arts degree, including general education requirements and a foreign language.

Honors Program in Anthropology

Faculty Advisor: Dr. Rosenthal

Prerequisites. ANT/INT 100, SOC 210.

Requirements. Thirty credits distributed as follows:

- A. All requirements of the General Program in Anthropology.
- B. ANT 495, 496, Honors Thesis I, II (4 each).
- C. All requirements of the University Honors Scholar Program.

Prospective Honors Program students are urged to acquaint themselves as early as possible with the requirements above as well as with the particular procedures for acceptance into the Anthropology Honors Program. See the Anthropology Honors Advisor or the Honors Program Director for this information.

Minor in Anthropology

Requirements. Eighteen credit hours as follows:

- A. ANT/INT 100 (3 credits).
- B. Archaeology/Biological Anthropology (3 credits). ANT 105 or 110.
- C. Culture Area Studies (3 credits). One from: ANT 215, 240, 271, 284; AFA/ANT 250.
- D. Social Theory (3 credits). ANT/SOC 302 or 303.
- E. Electives (6 credits). Two from: AFA/ANT/PHL 203; ANT/LIN 290; ANT 311, 318, 322, 325, 340, 352, 355, 369, 398; ANT/HCR 330; ANT/INT 299; ANT/INT/SOC/WGS 376; ANT/LIN 335; ANT/POL 351; ANT/INT/SOC 375; ANT/WGS 378.

Courses in Anthropology

100. Introduction to Cultural Anthropology. (3)s.

Examination of the enormous cultural diversity within and between the world's peoples. and the political importance of this diversity today. Subsistence methods, kinship patterns, power relations, linguistic variations, cultural conflicts, and forms of inequality around the world. "Culture" as a historically dynamic process that is both creative and constantly undergoing transformation. *Graded ABCDD->N. Also listed as INT 100.*

105. Human Origins and Prehistory. (4)n.

Introduction to physical anthropology and human prehistory. Foundations in molecular and population genetics, and human

variation. Primate anatomy and behavior as a model for early hominids. Evidence and processes of human evolution and sociocultural change. Archaeological methods and approaches to interpreting human prehistory. Lecture and Laboratory.

110. Introduction to Archaeology. (3)s.

Contribution of archaeology to understanding past cultures and the process of cultural change; the relationship of archaeology to anthropology; survey of concepts and methods of investigating the human past.

203. Origins of Modern Racism. (3)h.

Survey of the development of modern Western ideas of racism in the period 1492-1800, with particular attention to moral and political philosophies that developed in conjunction with the colonization and enslavement of African and Native American peoples in the New World. Figures studied may include Columbus, Las Casas, Montaigne, Locke, Rousseau and Jefferson. *Also listed as AFA 203 and PHL 203*.

205. African Religions and Philosophy. *A course in philosophy numbered 100 or higher. (3)h.*

Examination of some African religions and African philosophy, to gain greater insight and understanding of traditional African religions and African philosophy such as Yoruba and Akan. The role of these traditional African religions and philosophies in the lives of continental and diaspora Africans, as well as non-Africans. Also listed as AFA 205 and PHL 205.

- [215. Islamic Civilization. (3)s. Graded ABCDD->N.]
- **240.** Cultures of the Middle East. ANT/INT 100 or consent of instructor. (3)s.

Ethnographic survey of urban, peasant, and nomadic regional cultures and their interrelationships. Ecology, culture, institutions, history, social change, and contemporary issues.

250. African Cultures. (3)s.

Introduction to the African continent as a geographic, political and symbolic entity juxtaposing territories, histories and cultures. Anthropological emphasis on West Africa, including matriliny and other lineage systems, polyrhythmic music, gender, religion (e.g., Vodu), economic and political organization, and colonial impact, from the viewpoints of Africans themselves, as subjects and agents. *Also listed as AFA 250.*

260. African Diaspora in the Americas. ANT/INT 100 or consent of instructor. (3)s.

Racialized groups and evolving black consciousness of African descendants in the Americas and the Atlantic World. Studies of race, racism and anthropological social identities during the Atlantic slave trade and in contemporary global society. The relationship between philosophies of culture and historiography in the context of slavery, forced removals, and global economic and ontological hegemony. *Also listed as AFA 260*.

271. Native Americans. (3)s.

Survey of the First Nations of North American from an anthropological perspective. Diversity and complexity of

traditional culture; specific Nations representing wide range of geographic regions and socio-political organization. Understanding traditional culture in order to understand relationships among First Nations and colonialists from the 16th to 20th centuries.

284. Cultures and Peoples of Latin America. *ANT/INT 100.* (3)s.

Survey of the cultures and political economy of Latin America and Latin American peoples. Emphasis on regional diversity and national specificities. Processes and events that have had a decisive influence on the region will be discussed. These include colonialism, **mestizaje**, authoritarianism and state violence, land reform, **machismo**, religious transformations, U.S. foreign policy and migration. Focus on the relationship between tradition and conflict as manifested across the region and its impact on contemporary cultures in Latin America and among Latin Americans in the U.S.

290. Language and Culture. ANT/INT 100 or LIN 200. (3)s.

Analysis of the relationship between linguistic categories and patterns of culture. *Also listed as LIN 290.*

295. Cultures of South Asia. ANT/INT 100. (3)s.

Survey of traditions, peoples, and cultural diversity in the Indian sub-continent. Nation-formation, the caste system, religious conflict, social inequalities, population, popular culture, and diasporas. Impact of British colonialism; struggles for independence; cultural politics of post-colonial social formations in the area. Focus on agrarian and rural issues.

299. Third World Cultures Through Film. (3)s.

Focus on ways in which social and cultural themes surrounding the "Third World" are represented in fictional and non-fictional films, important cultural documents and social commentaries which help establish a cross-cultural framework for exploring the politics of cultural conflict and transformation. Through films, associated readings, and class discussions, students learn to critically interrogate and analyze shifting meanings of the concept of "Third World." *Also listed as INT 299*.

302. History of Social Thought. ANT/INT 100 or SOC 100. (3)s.

Development of sociological-anthropological theory from its origins to the present. Selected major theorists; readings chosen from original works. *Also listed as SOC 302*.

303. Contemporary Social Theory. ANT/INT 100 or SOC 100. (3)s.

Critical review of classical and contemporary social theory; problems concerning nature of sociological and anthropological explanations of society and inequality; significance of theoretical concepts in relationship to practice. Survey and comparison of recently articulated theoretical orientations. *Also listed as SOC 303*.

[305. Topics in African Languages and Cultures. AFA 101 or consent of instructor. (3). Also listed as AFA 305.]

311. Historical Archaeology. ANT 110 or consent of instructor. (3).

Consideration of the relationship between the documentary record of the historical period and empirical evidence of social and political behavior and events in North America. Exploration of potential for gaining information about aspects of American history not well documented in written records for which archaeology can contribute a different source of data and perspective.

318. Mesoamerican Archeology. ANT 110. (3)s.

Pre-contact cultures of Mexico, Central America, and western South America outlined from earliest presence of people in the region through the civilization of the Aztec, Maya, Inca, and others. Consideration of development of food production; the origin and collapse of complex socio-political organizations; impact of early European contact.

322. Eastern North American Archaeology. ANT 110. (3)s.

Precontact history of cultures of Eastern North America addressed through consideration of artifacts and other empirical evidence, tracing changes in technology, style, and by implication, social, political, and religious realms of past cultures from the Great Lakes to the Southeast. Changes in the relationship between people and their environment, changes in food, production strategies, and intercultural relationships.

325. Culture and Personality. ANT/INT 100 or PSY 100 or SOC 100. (3)s.

Cross-cultural examination of the construction of personhood and relationships between individuals and culture. Critique of psychological interpretations in anthropological texts and of universalizing tendencies in the field of psychology; the basic Freudian model in contrast with models of self in African, Asian, and Native American cultures. *Also listed as SOC/WGS 325*.

330. Medical Anthropology. *A course in anthropology or HCR 300. (3)s.*

Anthropological perspective on the relationship and interaction of biological, environmental, and socio-cultural factors in health, disease, and illness. Man's health behavior in both traditional and contemporary cultures as encountered in health care delivery by the medical systems and medical institutions. *Also listed as HCR 330.*

335. Language Variation in Society. ANT/INT 100 or ENG/LIN 200. (3)s.

Study of language variation within the same language community, the circumstances under which it occurs, and its relationship to group interaction. Regional dialects, ethnic dialects, sex-related language differences, pidgins and creoles, and languages in mutual contact. Also listed as LIN 335.

340. Urban Anthropology. ANT/INT 100. (3)s.

Anthropological interpretation of the rise and development of

urbanism: analysis of urban life with emphasis on its diversity, social complexity, poverty, and inequality.

351. Political and Legal Anthropology. ANT/INT 100 or POL 190 (3)s.

Study of comparative political systems, forms of authority, legitimacy and power in societies at different levels of social complexity and in different ecological contexts. Political organization and process analyzed in terms of their relationships to economics, religion, kinship, and other aspects of culture and society. *Also listed as POL 351*.

352. Culture and Economy in Cross-Cultural Perspective. *ANT/INT 100.* (3)s.

Exploration of different economic systems that have emerged around the world and the relationship between cultural dynamics and economic transformations. Critical analysis of concepts used to describe the "economy," emphasizing elements of production, distribution, consumption, and social reproduction. Primary focus on the "non-Western" world, how anthropologists analyze economic issues, and relevance to understanding capitalism and world systems. *Also listed as INT 352*.

355. World Religions. ANT/INT 100 or SOC 100. (3)s.

Examination of Judaism, Hinduism, Buddhism, Christianity, Islam, Vodu, and other religious forms as time permits. Central values, cultural contexts, and interpretive frameworks of world religions, including ethnographic considerations of non-orthodox forms; religion as reinforcement of political/cultural hegemonies and as resistance to such domination.

369. African Religions. AFA 201 or ANT 100 or consent of instructor. (3)vi1.

Examination of African religions through anthropological and literary texts, including consideration of West African religions and central African indigenous practices. *Also listed as AFA* 369.

[370. Museum Techniques. ANT/INT 100; ANT 110 or 271; or consent of instructor. (3)s.]

375. Social and Cultural Change. ANT/INT 100 or SOC 100. (3)s.

Institutions and social change. Emphasis on theories, ideologies, social movements and revolutions. Study of colonialism, economic crisis, peasant struggles, nationalism, indigenous rights, independence movements, and struggles over development and underdevelopment. Also listed as INT 375 and SOC 375.

376. Sex, Work, and International Capital. ANT 100 or SOC 100 or consent of instructor. (3).

Analysis of significance of women's labor to international capital in a cross-cultural perspective. Examination of social construction of "third world" and "development," and potential and limits of these categories in understanding ideological and material conditions of lives of women across race, class and national boundaries in the world of work. *Also listed as INT 376, SOC 376 and WGS 376*.

378. Sex and Gender in Cross-Cultural Perspective. ANT/INT 100. (3)s.

Comparison of gender divisions in various societies; social roles of men, women and other categories. African, Asian, and Native American conceptualizations of gender, in comparison with data from Western cultures. Cultural construction of femaleness, maleness, and sexual behaviors and their relationships (or lack of relationship) to gender stereotypes. *Also listed as WGS 378*.

380. Field Work in Archaeology. ANT 110 or consent of instructor. (4-6)s.

Introduction to reconnaissance and excavation of sites; preparation and cataloguing of museum specimens.

385. Japanese Society and Culture I. Enrollment in Japan Center Program. (4)s.

Exploration of Japanese culture from a variety of viewpoints and including such topics as the family, women's roles, education, religions, politics, architecture and economics. *Also listed as INT 385*.

386. Japanese Society and Culture II. Enrollment in Japan Center Program. (4)s.

Continuation of ANT/INT 385. Also listed as INT 386.

391. Directed Readings/Research in Anthropology. Consent of instructor, at least junior standing. (1-3).

Directed reading or research study by qualified students under instructor's supervision. By special arrangement only. *Also listed as SOC 391*.

- **398. Special Topics in Anthropology.** *Consent of instructor. (3).* This course will serve to provide an opportunity to offer courses that will be offered on time or occasionally where existing and/or visiting faculty are available.
- **400.** Ethnographic Methods. ANT 100 or SOC 100. (3)s.

Seminar focused on weekly readings of early and recent ethnographies and relationships between practices of fieldwork, writing, and theory. Relationships between ethnographers and the people they write about; ethical grounding of anthropology and its impact on the world in terms of local politics and dangers and broader human rights issues; critiques of methods of research and writing.

405. Anthropological Theory. SOC/ANT 302 or 303. (3)s.

Seminar on the twentieth century history of anthropological theory, including critical examination of orientations: functionalism, diffusion, cultural evolution, structural-functionalism, structuralism, political economy, cultural materialism, symbolic anthropology (interpretivism), discourse analysis, deconstruction, feminist approaches and postmodernism.

415. Seminar on Contemporary Global Issues. SOC/ANT 302 or 303 or senior standing; consent of instructor. (3)s.

Issue-based course linking recent social theory, empirical research, and predicaments of public policy within a

comprehensive global framework. Focus on globalization and issues of social and political importance central to recent debates within and outside the academy. Multi-disciplinary approach; materials drawn from the U.S., Europe, and developing world that highlight recent global socio-economic transformations. Designed to serve students majoring in a number of different fields, especially those engaged in specific research projects and/or preparing for graduate school. Also listed as INT 415.

- [455. Anthropological Interpretation of American Socio-Cultural Systems. Senior standing or consent of instructor. (3)s.]
- [470. American Ethnic and Cultural Diversity. ANT/INT 100 and senior standing, or consent of instructor. (3)s.]
- **495. Honors Thesis I.** *Consent of Department Chair. Open only to Honors Program students in anthropology.* (4).

Credit and grade for ANT 495 is not given until successful completion of ANT 496. Also listed as HON 495. Graded ABCDE/Y.

- **496. Honors Thesis II.** Prior or concurrent election of ANT 495 and consent of Department Chair. Open only to Honors Program students in anthropology. (4). Also listed as HON 496. Graded ABCDE/Y.
- **499.** Senior Seminar. ANT/SOC 302 or 303, senior standing. (3).

Critical review of the sociological and anthropological literature with attention to the interaction of theory and research.

Graduate Courses in Anthropology

511. Historical Archaeology. Graduate standing; ANT 110 or consent of instructor. (3).
See ANT 311 for description. Not open to students with credit for ANT 311.

515. Seminar on Contemporary Global Issues. Graduate standing; SOC/ANT 302 or 303 or consent of instructor. (3).

See ANT 415 for description. Not open to students with credit for ANT/INT 415. Also listed as INT 515.

525. Culture and Personality. Graduate standing; ANT 100 or PSY 100 or SOC 100. (3).

See ANT/SOC/WGS 325 for description. Not open to students with credit for ANT/SOC/WGS 325 Also listed as SOC 525 and WGS 525.

551. Political and Legal Anthropology. *Graduate standing.* (3).

See ANT 351 for description. Not open to students with credit for ANT/POL 351. Also listed as POL 551.

552. Culture and Economy in Cross-Cultural Perspective.

Graduate standing; ANT/INT 100 or consent of instructor. (3).

See ANT 352 for description. Not open to students with credit for ANT/INT 352. Also listed as INT 552.

[555. Anthropological Interpretation of American Socio-Cultural Systems. Graduate standing or consent of instructor. (3). Not open to students with credit for ANT 455.] 556. World Religions. Graduate standing. (3).

See ANT 355 for description. Not open to students with credit for ANT 355.

- [570. American Ethnic and Cultural Diversity. ANT/INT 100, graduate standing; or consent of instructor. (3). Not open to students with credit for ANT 470.]
- 575. Social and Cultural Change. Graduate standing, ANT/INT 100 or SOC 100; or consent of instructor. (3).

See ANT 375 for description. Not open to students with credit for SOC/ANT/INT 375. Also listed as INT 575 and SOC 575.

576. Sex, Work, and International Capital. *Graduate standing, SOC 100 or ANT 100; or consent of instructor.* (3).

See ANT 376 for description. Not open for students with credit for SOC/ANT/WGS/INT 376. Also listed as INT 576, SOC 576 and WGS 576.

578. Sex and Gender in Cross-Cultural Perspective. Graduate standing; ANT/INT 100. (3).

See ANT 378 for description. Not open to students with credit for ANT/WGS 378. Also listed as WGS 578.

Applied Science

See the "CAS Degree Programs." section of the Catalog.

Art (ART)

See "Communication and Visual Art"

Astronomy (AST)

Please refer to *Physics* for departmental contact information.

Recurring astronomical phenomena such as day and night, the lunar phases, summer and winter, eclipses, and the motions of planets, although not under man's control, can be predicted with accuracy by the orderly use of simple natural laws. A knowledge of astronomy, the ultimate frontier in space and time, extends one's awareness beyond ordinary terrestrial concerns. Study about and guided practice in using the actual methods and tools by which scholars have learned about the universe allow novices to sense the thrill of discovery and insight that motivates physical scientists. As the primary source of the earth's energy, the sun affects us in numerous ways. Many other celestial bodies also influence us in ways that are better understood through the study of astronomy.

Courses in astronomy are designed for students who seek to fulfill the general education requirement in natural science, or to meet the requirements for the Elementary Education major in Integrated Science, or to develop their understanding of classical and modern astronomy.

Courses in Astronomy

131. Astronomy of the Solar System. MTH 111 with a grade of C (2.0) or better, or equivalent as determined by math placement test. (3)n*.

Introduction to the instruments, methods and results of investigations of the sun, its planets, and their natural and artificial satellites. The development of astronomy from ancient ideas to recent discoveries. Lectures and sky observations. *AST 131 and 133, together, are applicable to the natural science general education requirement.

133. Introductory Astronomy Laboratory I. Prior or concurrent election of AST 131. (1)n*.

Observation and interpretation of astronomical phenomena within the Solar System. *AST 131 and 133, together, are applicable to the natural science general education requirement.

135. Beyond the Solar System. MTH 111 with a grade of C (2.0) or better, or equivalent as determined by math placement test; a course in physics, chemistry, physical geography, or astronomy. (3)n*.

Stellar types: structure, formation, evolution, and fate; planetary systems; nebulae; galaxies and larger structures; black holes, pulsars, quasars; cosmology; extraterrestrial life. *AST 135 and 137, together, are applicable to the natural science general education requirement.

137. Introductory Astronomy Laboratory II. Prior or concurrent enrollment in AST 135. (1)n*.

Observation and interpretation of astronomical phenomena outside the Solar System. *AST 135 and 137, together, are applicable to the natural science general education requirement.

291. Supervised Study in Astronomy. Consent of instructor. (1-3).

Laboratory work or study of the literature on designated problems chosen by the student in consultation with a faculty supervisor. For students who already have some knowledge of elementary astronomy. May be elected in more than one semester, up to a total of four credits.

Biology (BIO)

264 William R. Murchie Science Building

(810) 762-3360

FAX (810) 762-3310

Website: http://www.umflint.edu/biology/

Chair: Bruce D. Parfitt Secretary: Lisette Boss

Part-time Secretary: Ann Niemann

Professors Steven F. Myers, David L. Wigston; Associate Professors Gary L. Pace, Bruce D. Parfitt, Jerry D. Sanders, Joseph F. Sucic; Assistant Professors, Ann Sturtevant, Stephen J. Trumble; Lecturers Mary Ann Cardani, Nanette Kelly, Elizabeth A. Malinowski, Ernest J. Szuch, Dennis P. Viele, Jr., Tracy L. Wacker, Margaret Ware.

Professor Emeritus: Jane Taylor; Associate Professor Emeritus Paul A. Adams.

Supervisor of Science Laboratories: Larry Atherton Laboratory Demonstrator: Sheri Mayrberger

Biology is the study of the organization and operation of life at cellular, organismal, and population levels. An understanding of

biology leads to an appreciation of the complexity of the world of life and the role that human beings have within it. The department provides courses in biology that serve the needs of the general student as well as those specializing in the field. Students who concentrate in biology can design their programs to be the focus of a broad and liberal education, to prepare for graduate studies in a sub-discipline, to become certified as a secondary biology teacher, or to obtain pre-professional training in medicine, dentistry, and other health-related fields.

Department Mission and Program Assessment

The mission of the Biology Department is to provide students with a broad knowledge base in biology and the skills necessary to be successful in attaining their chosen career goals. In addition to the factual content, students learn the historical basis, the social context, and the scientific methodology of each of the major conceptual areas of biology. The Department participates in the University-wide effort to assess its academic programs. Information on assessment plans, including goals, methods and outcomes is available at http://assessment.umflint.edu.

Biology Writing Requirement

Each of the programs in biology requires completion with a grade of C (2.0) or better in two biology courses designated as writing courses or, in the case of BA programs one departmental writing course and COM 225 or COM/ENG 338. Departmental writing courses have assigned requirements that are evaluated for correct English compositional skills and evidence of research skills, and that count for at least 20% of the course grade. Such written assignments are completed outside of scheduled class meeting times, and some will be rewritten for re-evaluation. While subject to change, designated biology writing courses include: BIO 305, 319, 376, 421, 426, 430, 431, 432, 435, 436, 438, 439, 443, 453, 460, 468, 475, and 481. Completion of this requirement will be assessed by the department chair.

Programs in Biology

A graduate program (Master of Science in Biology) is described in the Graduate Study section of this *Catalog*. Seven undergraduate concentration programs are offered: the General Program in Biology (Bachelor of Science), the Program in Molecular Biology and Biotechnology (Bachelor of Science), the Program in Wildlife Biology (Bachelor of Science), the Teacher's Certificate Program in Biology (Bachelor of Science), the Honors Program in Biology (Bachelor of Science), the Program in Human Biology (Bachelor of Arts), and the Program in Natural History (Bachelor of Arts). Minors in Biology and Field Biology and a Teacher's Certificate Minor are also available.

Students who are seriously considering a biology program should consult with a biology advisor prior to registration for classes their first semester.

Master of Science in Biology

See Graduate Study.

General Program in Biology (Bachelor of Science)

Faculty Advisors: All regular, full-time biology faculty

The Bachelor of Science Program is the program selected by most biology majors. This program is designed to prepare students for a number of potential careers (see Biology Web page) for entry-level employment or graduate and professional training in some sub-discipline of biology. The five core biology courses in the Bachelor of Science program provide a wide breadth of preparation for more advanced coursework chosen by students to meet their individual needs and interests.

Requirements.

- All requirements of the Bachelor of Science degree of the College of Arts and Sciences, including general education requirements.
- B. At least 44 credits in biology including a core sequence of BIO 111, 113, 326, 327, 328, and two biology writing courses (no more than 16 biology credits below 300-level courses).
- C. At least 25 credits in non-biological sciences, mathematics and computer science, including CHM 260, 261, 262, either 263 or 265, at least 6 additional credits of chemistry (CHM 330 and 332 recommended); MTH 120 (unless equivalency is granted by the Biology Department), PHY 143, 145. Additional credits from any area of natural science or mathematics or CSC 121, 122, 175, or 271; excluding the following: chemistry below CHM 260, ENV 100, MTH 090, PHY 105, 110.
- D. Electives to complete a total of 124 credits.
- E. At least 33 credits taken in upper division courses (courses numbered 300 or above).
- F. A cumulative grade point average of 2.0 or better in biology and in all work at the University of Michigan-Flint.
- G. Grades of C- or better in all biology core courses to be used as prerequisites.

For the student planning to enter a graduate or professional school, one year of organic chemistry and one year of calculus are recommended.

Program in Molecular Biology and Biotechnology (Bachelor of Science)

Faculty Advisors: Dr. Joe Sucic, Dr. Jerry Sanders and Dr. Ann Sturtevant

The development of recombinant DNA technology, sometimes referred to us as genetic engineering, has radically altered the biomedical sciences. Recombinant DNA techniques have triggered the exponential growth of a new biological field-molecular genetics, or, more generally, molecular biology—which only two decades ago was in its infancy. Fundamental biological problems, untenable only a decade or two ago, are now being addressed using new molecular genetic methods. Recombinant DNA techniques are also revolutionizing disease diagnosis, as the genetic basis for diseases like cancer, muscular dystrophy, and Alzheimer's are being discovered; indeed, almost nightly you can see a story on the news or in the paper that describes a new discovery, facilitated by recombinant DNA methods, relating to these and other diseases. Applications of recombinant DNA methods, collectively called biotechnology, are yielding new approaches to disease treatment, drug development, forensics, and even the study of evolution.

The Program in Molecular Biology and Biotechnology provides students with a rigorous curriculum designed to prepare them for a career in this exciting and expanding area of biology. Students in this program will be exposed to state of the art molecular techniques, and students completing this program will be highly qualified to 1) seek employment at academic, industrial, or government laboratories engaged in molecular biology endeavors, or 2) pursue graduate studies in molecular biology and related fields such as microbiology, immunology, or cell biology.

Requirements.

- A. All requirements of the Bachelor of Science degree of the College of Arts and Sciences, including general education requirements.
- B. At least 40 credit hours in biology including BIO 111, 113, 326, 327, 328, 425, 435, 462, 467, 468 (no more than 16 biology credits below 300-level courses).
- C. Non-biological natural sciences. MTH 120, PHY 143, 145, CHM 260, 261, 262, either 263 or 265, 330, 331, 332, 333, 450
- D. Electives to complete a minimum of 124 credits.
- E. A cumulative grade point average of 2.0 or better in biology and in all work at the University of Michigan-Flint.
- F. Grades of C- or better in all biology core courses used as prerequisites.

Program in Wildlife Biology (Bachelor of Science)

Faculty Advisors: Dennis Viele, Ernie Szuch, Nan Kelly and Dr. David Wigston

Wildlife biology is a continuously expanding field, in which individuals will have the opportunity to study the dynamics of animal and plant communities of terrestrial and aquatic environments. The program in wildlife biology consists of three options. They provide students with a rigorous curriculum designed to prepare them for a career in this exciting and expanding area of biology. Students in this program will be exposed to wildlife management methods, field techniques and theoretical studies of wildlife species, populations and communities. Wildlife biologists will ultimately be responsible for the study and management of animal and plant populations within state, country and possibly international borders. Wildlife biologists may also be responsible for the study and management of non-game, endangered species or game animals and plants. This degree is intended to educate students in preparation for entry-level positions with state and federal agencies, private companies, and for the pursuit of higher academic degrees. The Program in Wildlife Biology is designed to produce well-rounded students; thus, we require our students to enroll in disciplines such as mathematics and statistics, chemistry, physics, communication, social sciences, and humanities. By using specifically identified coursework areas and mentoring, we will aid students in developing their intellectual capabilities in working with natural resources and people within that discipline.

Requirements.

- A. All requirements of the Bachelor of Science degree of the College of Arts and Sciences, including general education requirements.
- B. At least 40 credits in Biology, including BIO 111, 113, 326, 327, 328 (no more than 16 biology credits below 300-level

courses); at least one wildlife management course (e.g., BIO 423, 424, 426); and electives, including at least two biology writing courses, chosen from the options below:

Terrestrial Biology Option: BIO 316, 373, 403, 420, 421, 423, 426, 431, 460, 461, 480, 483, 484, 488, 491.

Marine and Aquatic Biology Option: BIO 373, 420, 423, 424, 426, 431, 442, 443, 460, 481, 483, 484, 491.

General Wildlife Biology Option: Any of the preceding option courses.

- C. Non-biological natural sciences: CHM 260, 261, 262, either 263 or 265, either 220 or 330 (CHM 330 and 332 recommended for advanced science degrees), 380; GEO 151, 203; MTH 120; PHY 143, 145; RPL 312, 370.
- D. Electives to complete a minimum of 124 credits.
- E. A cumulative grade point average of 2.0 or better in biology and in all work completed at the University of Michigan-Flint.
- F. Grades of C- or better in all biology core courses used as prerequisites.

Teacher's Certificate Program (Bachelor of Science)

Faculty Advisor: Dr. Gary Pace

The Teacher's Certificate Program in Biology provides students with a strong preparation in biology and other sciences and mathematics in accordance with the Michigan Curriculum Framework. Coursework covers all ranges of structural and systematic diversity, includes human anatomy, physiology, and health, and relates the concepts of biology to contemporary, historical, technological, and societal issues. Methods of scientific inquiry, as well as the application of statistics to the analysis of data, and laboratory safety are included throughout the program. It is recommended that the required minor for secondary school certification be in a natural science or mathematics. These minors are accomplished very naturally within the Bachelor of Science degree program. All available Teacher Certification Minors are listed in the Catalog under "Guide to Programs and Degrees," and appropriate minors include mathematics, chemistry, earth science, and physics. For additional information, see the sections entitled "General Requirements for Teacher Certification" and "Secondary Education Teacher's Certificate Programs" in the Catalog section for the Department of Education.

Requirements.

- A. All requirements of the Bachelor of Science degree of the College of Arts and Sciences, including general education requirements.
- B. At least 44 credits in biology, including the core courses: BIO 111, 113, 326, 327, 328 (no more than 16 biology credits below 300-level courses), two biology writing courses, and 3 to 4 credits from each of the following five categories:
 - Botany: BIO 316, 376, 422, 424*, 439, 440, 461*, 464, 465, 488*.
 - 2. Zoology: BIO 408, 412, 420, 421*, 431, 484*.
 - 3. Field*: BIO 443, 480, 481.

- 4. Advanced Cell: BIO (135), 435.
- Human Anatomy/Physiology: BIO 104; or 167 & 168; or 407 & 432; or 434 & 432.

Italicized course numbers represent recommended choices within each category.

*Students completing a field-oriented course in both the botany (1) and zoology (2) categories may then complete their requirements for a field (3) course with any additional course from either category (1) or (2). BIO 453, Evolution and Adaptation, is also recommended to prospective teachers.

- C. At least 25 credits in non-biological sciences, mathematics and computer science, including CHM 260, 261, 262, either 263 or 265, at least 6 additional credits of chemistry (CHM 330 and 332 recommended); MTH 120 (unless equivalency is granted by the Biology Department) and PHY 143, 145. Additional credits from any area of natural science or mathematics or CSC 121, 122, 175, or 271; CHM 302, 310; excluding the following courses: chemistry below CHM 260; ENV 100; MTH 090; PHY 105, 110.
- A Teacher's Certificate Minor; see the particular department or program for requirements.
- E. Grades of C- or better in all biology core courses to be used as prerequisites.

Honors Program in Biology (Bachelor of Science)

Faculty Advisor: Dr. Gary Pace

The Honors Program in Biology seeks to provide exceptional students an opportunity for formal academic recognition in a program even more rigorous than the curriculum required of other biology students.

Students considering this Honors Program should consult with the Biology Department's honors advisor as soon as possible after being admitted to the University Freshman/Sophomore Honors Scholar Program. This facilitates the planning of the student's program. The importance of this early consultation should not be underestimated. There is very little room for error in planning a schedule of courses that permits breadth while requiring rigor.

Students should plan to fulfill some of their requirements with courses taken during spring or summer terms.

Applications to the Honors Program in Biology should be made early in the second semester of the sophomore year after completing the prerequisites. Procedures for application to this program can be obtained from the biology honors advisor.

Prerequisites. For admission into the program students must have completed the following coursework and obtained an agreement from a faculty member to mentor them in preparation for their off campus experience and their honors thesis.

- A. Honors requirements as prescribed by the University Honors Scholar Program (Phase One) in this Catalog.
- B. BIO 111, 113, 326, 327, 328. Two of these courses should be elected as honors elections. See definition of honors elections under University Honors Scholar Program in this *Catalog*.
- C. CHM 260, 261, 262, 265.
- D. MTH 121.

Requirements.

- A. All requirements of the Bachelor of Science degree of the College of Arts and Sciences, including general education requirements.
- B. Completion of the requirements for one of the Biology Bachelor of Science degrees: General Biology, Molecular Biology and Biotechnology, Teacher's Certificate Program, or Wildlife Biology.
- C. Completion of all requirements of the University Honors Scholar Program.
- D. BIO 301 in preparation for off-campus research project. (May count toward required elective biology credits).
- E. BIO 491, 493, 494. (To be completed by the end of the junior year under supervision of biology faculty mentor in preparation for off-campus experience. May count toward required elective biology credits).
- F. BIO 495, 496.

For further information see the section entitled "University Honors Scholar Program" in this *Catalog*.

Program in Human Biology (Bachelor of Arts)

Faculty Advisors: Liz Malinowski and Dr. Steve Myers

The Bachelor of Arts Program in Human Biology is designed to provide students with a background in human-related biology courses as the focus of a broad and liberal education and in preparation for entrance into physical therapy, physician assistant, or pathology assistant programs. Before selecting this program students are cautioned to carefully consider their educational goals and to review the requirements for their future health professional program. It is strongly advised that students considering the program in human biology seek the counsel of a faculty advisor during their first year as critical decisions concerning the election of a chemistry sequence must be made at this time. Bachelor of Science biology students are required to take the two-semester freshman chemistry sequence (CHM 260/261 and 262/263), whereas Human Biology Program students may alternatively choose a one-semester survey of Chemistry (CHM 150/151). Students who choose CHM 150/151 and later decide to switch to a Bachelor of Science program may not be able to complete their degree within four years.

The Program in Human Biology is not designed for students planning professional or graduate studies in the medical or biological sciences. Such students should complete one of the Bachelor of Science degree programs. The principle differences between the Human Biology Program and the Bachelor of Science programs are that the Bachelor of Science programs require more math and chemistry courses, whereas the Human Biology Program requires a course in public speaking, a foreign language requirement, and a different set of core-biology courses.

Requirements.

A. All requirements of the College of Arts and Sciences Bachelor of Arts degree, including general education requirements and a foreign language requirement.

- B. Thirty-two (minimum) to forty (maximum) credits in biology (no more than 16 biology credits below 300-level courses), including a core sequence of BIO 111, 113, 167, 168, 326 and 432. (BIO 407 or 434 may be substituted for BIO 167 and 168.)
- C. Additional courses selected from: BIO 300, 319, 328, 409/410, 412, 425, 430, 435, 438, 450, 467, 468, 472, 475, 482, 485.
- D. Communication/writing courses to include COM 210 and two biology writing courses with grades of C or better. COM 225 or COM/ENG 338 (recommended) with a grade of C or better may be substituted for one biology writing course.
- E. Non-biological natural sciences and mathematics to include the following (or higher-level courses): CHM 150, 151, 220, 350; MTH 111; PHY 143, 145.
- F. Electives to complete a minimum of 120 credits.
- G. At least 33 credits taken in upper division courses (300-level or above).
- H. A cumulative grade point average of 2.0 or better in biology and in all work at the University of Michigan-Flint.
- Grades of C- or better in all 100- and 300-level core BIO courses used as prerequisites.

Program in Natural History (Bachelor of Arts)

Faculty Advisors: Dr. Bruce Parfitt, Ernest Szuch and Nanette Kelly

The Bachelor of Arts Program in Natural History is designed for students with a naturalist's interest in biology. Potential careers exist as naturalists with parks, nature centers or organizations such as the Nature Conservancy and the Sierra Club. Generally, this program is not intended for students planning graduate studies in the life sciences (in such cases, students are advised to select a Bachelor of Science program with electives suitable to their goals). In the Bachelor of Arts program there are three core biology courses: Organismal Biology (BIO 111); Principles of Biology (BIO 113) and Ecology (BIO 327). To provide students in this program with enhanced communication skills, the program also requires three communication/writing courses to include: Introduction to Public Speaking (COM 210), and two courses designated as biology writing courses with a grade of C or better. Possible course substitutions for one of the biology writing courses are News and Feature Writing (COM 225) or Communications in Business (COM/ENG 338, recommended) with a grade of C or better. Advanced biology course requirements for this program are a minimum of five additional 400-level courses in field or organismal biology that list Ecology (BIO 327) as a prerequisite. The mission of this program is to provide students with a program of naturalist-oriented courses in biology, as the focus of a broad and liberal education.

Requirements.

A. Completion of an oral examination during senior year (>92

- *credit hours)* as part of the department's assessment of the Program in Natural History.
- B. All requirements of the College of Arts and Sciences Bachelor of Arts degree, including general education requirements and a foreign language requirement.
- C. Thirty-two (minimum) to forty (maximum) credits in biology including a core sequence of BIO 111, 113, 327; five additional courses with BIO 327 as a prerequisite.
- D. Communication/writing courses to include COM 210 and two biology writing courses with grades of C or better. COM 225 or COM/ENG 338 (recommended) with a grade of C or better may be substituted for one biology writing course.
- E. Courses in non-biological natural sciences and mathematics to include the following or their equivalent (or higher): CHM 150, 151; MTH 111; PHY 143.
- F. Electives to complete a minimum of 120 credits.
- G. At least 33 credits of upper division courses (courses numbered 300 or above).
- H. A cumulative grade point average of 2.0 or better in biology and in all work at the University of Michigan-Flint.
- I. Grades of C- or better in all core courses used as prerequisites.

Minor in General Biology

Requirements. BIO 111, 113, 326, 327, 328, plus four additional credits in biology lab or field courses numbered 300-level or above (excluding BIO 490, 491).

Minor in Field Biology

Requirements. BIO 111, 113, 327, plus twelve additional credits in biology with BIO 327 as a prerequisite.

Teacher's Certificate Minor

Requirements. BIO 111, 113, 326, 327, 328, plus at least four additional credits in human anatomy and physiology (BIO 104; or 167 and 168; or 407 and 432; or 434 and 432).

Medical Technology

See School of Health Professions and Studies.

Pre-Dental

See Dental Studies Information.

Pre-Medicine

See Medical Studies Information.

Pre-Physical Therapy

See Physical Therapy.

Graduate Program in Biology

A Master of Science in Biology (MS) program is available. See Graduate Study.

Courses in Biology (BIO)

BIO 103 and 104 are specifically intended to fulfill the general education requirement in natural science. They may be elected in either order. Students who plan to concentrate in biology are expected to begin taking the core courses (BIO 111, 113, 326, 327, 328) in the freshman year.

103. Biology: Its Human Implications I. (4)n.

Introductory presentation of scientific approaches to nutrition, genetics, and plant biology and their applications to human needs. Lecture and laboratory. *Intended for non-science majors.* BIO 103 and 104 may be taken in either order.

104. Biology: Its Human Implications II. (4)n.

Complementary to BIO 103. Study of human anatomy and physiology, reproduction, development, and evolution in relation to questions of human health and ecology. Lecture and laboratory. *Intended for non-science majors. BIO 103 and 104 may be taken in either order.*

105. Conservation Biology for Non-Science Majors. (4)n.

Terminology, basic concepts and processes, and applications of conservation biology. Human natural resource use and effects on natural populations, ecosystems, genetics, exotic species, extinction, social issues, management of ecosystems and populations. Lecture and laboratory. *Does not apply to programs in Biology.*

111. Organismal Biology. (4)n.

Introduction to basic principles of biology relating to biodiversity. Survey of microorganisms, fungi, plants and animals, including aspects of classification, development, structure (anatomy) and function (physiology). Lecture and laboratory emphasizing guided discovery and critical thinking.

113. Principles of Biology. CHM 140 or equivalent. (4)n.

Introduction to basic principles of biology relating to cell structure and function, cell reproduction and mechanisms underlying patterns of inheritance, ecology and evolution. Lecture and laboratory emphasizing guided discovery and critical thinking.

135. Microbiology Basics. (4)n.

Elementary treatment of basic microbiological principles. Lecture and laboratory.

167. Human Anatomy and Physiology I. *Non-science majors require consent of instructor.* (4)*n.*

Study of the structure and function of cells, tissues and four human body systems; emphasis on the integumentary, skeletal, muscular, and nervous systems. Lecture and laboratory.

168. Human Anatomy and Physiology II. BIO 167. Non-science majors require consent of instructor. (4)n.

Study of the structure and function of the human endocrine, cardiovascular, digestive, excretory, reproductive, and respiratory systems. Lecture and laboratory.

191. Supervised Study. Two lab courses in the natural sciences and consent of instructor. (1)n.

Work with a biology faculty member in a program of study designed to meet the needs of the student for an experience in the natural sciences. Intended for non-science majors needing only one additional credit in natural science.

299. Michigan Spring Flora. (4)n.

A field and laboratory course designed to acquaint students with the flowering plants of Michigan. Modern techniques of collecting, preserving, field and laboratory identifying, and determining local distribution. Lecture and laboratory. *Not recommended for science majors*.

300. Biological Illustration. Eight credits in biology or consent of instructor. (3).

Photomicrography, macrophotography, and telephoto techniques, along with the production of drawings and graphs of publishable quality. Biological subjects and specific illustrative techniques are selected based on student interest. Lecture and laboratory.

301. Biostatistics. Strong preparation in high school or college algebra and eight credits of biology. (4).

Analysis of quantitative data from biological sources, using basic statistical procedures to elucidate biological phenomena. Mathematical derivations and probabilistic theory not stressed; emphasis on the selection and interpretation of statistical tests commonly used by biologists. Prior knowledge of statistics not necessary. Lecture and discussion. *Also listed as HCR 302*.

305. History of Biology. Eight credits of biology with lab or consent of instructor. Course in world civilizations highly recommended. (3).

Survey of the growth of scientific knowledge in biology. Application of the scientific method; cultural perspectives on biology and medicine throughout history; future challenges and ethical dilemmas, both nationally and internationally. Lecture and discussion.

316. Anatomy and Morphology of Plants. BIO 111, 113; at least sophomore standing; or consent of instructor. (4).

Detailed survey of anatomical and morphological variation in the plant kingdom including ferns, fern allies, and seed plants. Stresses structure and function in the context of ecological adaptation. Lecture and laboratory.

319. Human Reproduction and Development. *Eight credits in biology or consent of instructor.* (3).

Human reproductive anatomy and physiology; nervous and hormonal control of sex cell production, coitus, and menstruation. Fertilization, embryonic development, and birth. Contraception, abortion, and venereal disease. Lectures, discussions, and reference readings.

323. Statistical Packages. A course or approved background in probability or statistics; admission to the professional program in physical therapy or consent of instructor. (2).

Introduction to collection and interpretation of data utilizing computer technology. Value and utility of statistical tools and computer technology as a technical adjunct for critical inquiry and decision making in research and practice. Lecture and Laboratory. Also listed as SOC 323.

326. Cell Biology. BIO 111, 113; CHM 140 or its equivalent; or consent of instructor. (4)n.

Biological systems from molecular to gross cell structure: such concepts as energy conversion, organization, growth, homeostasis, and cellular interactions. Examples from both animal and plant kingdoms. Lecture and laboratory.

327. Ecology. BIO 111, 113; or consent of instructor. (4)n.

Study of the ecological interactions that determine the distribution and abundance of organisms. Includes evolutionary principles, abiotic and biotic limiting factors, population growth and regulation, community structure and change, and energy flow and nutrient cycling. Lecture and laboratory.

328. Genetics. BIO 111, 113; CHM 140 or its equivalent; or consent of instructor. (4).

Principles of inheritance from molecular through population levels. Gene action, cytoplasmic inheritance, parthenogenesis, mutation, and homeostasis. Lecture and discussion.

373. Biogeography. GEO 150; BIO 111, 113; or consent of instructor. (3).

Geographic distribution of plants and animals, past and present, as influenced by geological, biological, geographical, human, and other factors. Mass extinctions, geographic diffusion, major biomes, human evolution, environmental issues, biogeographical mapping techniques. *Also listed as GEO 372 and INT 372*.

376. Economic Plants. *BIO* 103 or 111. (3).

Study of cultivated plants: economic, historical, and cultural perspectives. Plants used for ornamentals, dyes, perfumes, alcohol, and energy; emphasis on food and medicinal plants. Lecture and laboratory.

403. Introduction to Plant Pathology. BIO 111, 113, 326, 327; or consent of instructor. (4).

Identification of diseases of plants caused by viruses, bacteria, fungi, nematodes. Processes of disease development, resistance, environmental influences and methods of control. Laboratory and field work emphasizing techniques for identification. Students required to investigate a specific pathogen. Lecture and laboratory.

407. (302). Human Macroscopic Anatomy. BIO 111, 113; at least sophomore standing; or consent of instructor. (4).

Detailed study of the macroscopic structure of the human body, following a systems approach to the study of human anatomy. Laboratory involves the study of anatomical models and cadaver specimens. Lecture and laboratory.

408. Comparative Anatomy. *BIO* 111, 113, 327. (4).

Evolutionary and developmental aspects of the gross structure of representative chordate animals. Lecture and laboratory.

412. Developmental Biology. BIO 111, 113, 326, 328; or consent of instructor. (4).

Survey of the gross morphological, cellular, and molecular aspects of cellular differentiation and organismic development in multicellular eukaryotes. Emphasis on experimental approaches used to analyze eukaryotic development. Lecture and laboratory.

418. Lectures in Histology and Organology. BIO 111, 113, 326; concurrent election of BIO 419. (3).

Microscopic structure and function of mammalian cells, tissues, and organs. Lecture.

419. Histology and Organology Laboratory. *BIO* 111, 113, 326; concurrent election of BIO 418; or consent of instructor. (2).

Identification of mammalian cells, tissues and organs. Laboratory.

420. Invertebrate Biology. BIO 111, 113, 327; or consent of instructor. (4).

Functional morphology and biology of the major groups of invertebrate animals. Lecture and laboratory.

421. Mammalogy. *BIO* 111, 113, 327; or consent of instructor. (4)n.

Study of the major groups of mammals; natural history, physiology, anatomy, and systematics of all living orders; North American mammals classified to family. Students are responsible for species identification from field and skull characters of most Michigan mammals. Lecture and laboratory. Laboratories in the field encompassing techniques commonly used in mammalogy; required trip to Detroit Zoo.

422. Principles of Horticulture. BIO 111, 113, 326; or consent of instructor. (4).

Biology of horticultural plants including structure, metabolism, development, reproduction, and interaction with the horticultural environment. Includes identification, cultivation, propagation, and utilization of horticultural plants. Lecture and laboratory.

423. Wildlife Ecology and Management. *BIO* 111, 113, 327. (4).

Application of basic ecological knowledge to populations of animals and their plant and animal associates. Dynamics of animal and plant populations and communities; management of animal populations (including introduced, game, non-game and endangered species) and ecosystems that support these populations; the need to balance the welfare of managed populations with the needs of people. Lecture and discussion.

424. Wetlands Management. BIO 327. (5)n.

Applied course in biology covering applications of concepts, methods and techniques relating to wetlands. Relationships among soils, topography, vegetation and land use; environmental analysis and design of wetland mitigation sites. Lecture, laboratory, field trips.

425. Immunology. BIO 111, 113, 326, 328; or consent of instructor. (3).

Physiology and chemistry of resistance to infection and

responses to foreign biological substances of a potentially harmful nature. Includes natural immunity, antigen-antibody reactions, immunosuppression and tolerance, the complement system, hypersensitivity, immune deficiencies, autoimmunity, and tumor immunology. Applications include serology. Lecture. BIO 425 and BIO 485/PTP 414 cannot both be counted toward a Biology major.

426. Wildlife Policy and Law. BIO 111, 113, 327. RPL 312, GEO 372 recommended. (3).

Policy sciences approach to wildlife issues, such as ecology, "native" and introduced species, *ex situ* and *in situ* conservation, wildlife and ethnoscience, wildlife use and trade. Local policies; roles of parks, zoos, gardens and arboreta; state, federal and international laws and conventions. Lecture.

430. Endocrinology. *BIO* 111, 113, 326, 432. (3).

Extensive study of the vertebrate endocrine system and its role in homeostasis with emphasis on mammals. Neuroendocrinology, receptors, and the structure and function of all the major endocrine organs. Lecture.

431. Comparative Animal Physiology. BIO 111, 113, 326; or consent of instructor. (3).

Detailed comparative study of invertebrate and vertebrate physiology with special emphasis on environmental and energy interrelationships. Lecture.

432. Mammalian Physiology. BIO 111, 113, 326; or consent of instructor. (4).

Detailed study of organ and organ-system function in mammals; emphasis on human function. Lecture and laboratory.

434. Human Anatomy. BIO 432, or 167 and 168; or consent of instructor. (6).

Detailed study of the gross structure of the human body. Laboratory involves cadaver dissection. Lecture and laboratory.

435. Microbiology. *BIO* 111, 113, 326. *BIO* 328 highly recommended. (4).

Biology of microorganisms with emphasis on prokaryotes and viruses. Lecture includes microbial anatomy, physiology, growth, genetics, control and medical aspects of host-parasite relationships. Lab work includes basic culture and identification techniques, medical and sanitary microbiology. Lecture and laboratory.

436. Applied and Environmental Microbiology. *BIO* 111, 113, 326, 328, 435. (3).

Metabolic abilities of microorganisms as vital components of all ecosystems and their extreme economic importance to man. Includes environmental microbiology and elemental cycling; water and waste-water treatment; microbiodegradation and biotransformation of compounds; industrial fermentation of foods, chemicals, and antibiotics; and genetic engineering. Lecture.

438. Medical Bacteriology. *BIO* 111, 113, 326, 435; *CHM* 261, 262. (4).

Biology of medically significant prokaryotes. Morphology, growth characteristics, virulence factors, pathogenesis, and

clinical presentation of bacterial diseases of major medical importance, as well as emerging pathogens. Host immune response, treatment, and prevention stressed. Laboratory exercises emphasize diagnostic techniques as well as virulence mechanisms. Lecture and laboratory.

439. (437). Mycology Lecture. *BIO* 111, 113, 326; *BIO* 435 recommended. (3).

Fungal physiology, growth, classification, and genetics. Role of fungi in the environment and importance to man in causing some problems and solving others. Lecture. *May be taken with or without BIO 440*.

440. Mycology Laboratory. BIO 111, 113, 326; prior or concurrent election of BIO 439. BIO 435 recommended. (1).

Identification of fungi; experiments in physiology, nutrition, symbioses. Laboratory.

443. Limnology. BIO 111, 113, 327, and consent of instructor. (5).

Interactions of biotic communities with their physical and chemical environments examined in both natural and polluted lakes and streams. Lecture, lab, and field trips.

446. Animal Behavior. PSY 201 with a grade of C- (1.7) or better, PSY 301. (4)n*.

Animal behavior studies through the use of comparative and ethological methods. Discussion of species-specific behaviors, ontogeny of behavior, motivation, perceptual processes, learning, social behavior, communication, and evolution. Lecture and laboratory. *Applicable to the general education requirement in the Natural Sciences, except by some students whose concentration is in a psychology program. *Also listed as PSY 310.*

450. Parasitology. BIO 111, 113; or consent of instructor. (4).

Study of the major groups of parasitic protists and animals, with particular emphasis on those infecting humans and the higher vertebrates. Lecture and laboratory.

453. Evolution and Adaptation. BIO 111, 113, 327, 328; or consent of instructor. (3).

Fundamentals of plant and animal evolution. Includes genetics of populations, selection models, geographic variation, adaptation, population structure, mating systems, species concepts, and molecular evolution. Emphasis on evolutionary mechanisms in populations. Lecture.

454. Laboratory Genetics. *BIO* 111, 113, 326, 328. (1).

Sampling of laboratory techniques for Mendelian genetics, population genetics, and molecular genetics in both plant and animal systems. Laboratory.

460. Conservation Biology. BIO 111, 113, 327. (4).

Examination of the principles underlying attempts to conserve biodiversity. Conservation values and ethics, global biodiversity, species conservation, community level conservation, and management and design of reserves. Lecture. **461.** Plant Community Ecology. BIO 111, 113, 327; or consent of instructor. (4).

Field course considering the community ecology and composition of the Michigan flora. Quantitative analysis and description of representative communities, succession and community dynamics, environmental factors affecting communities, and biogeographic affinities. Field trips include an overnight trip. Lecture and laboratory.

462. (**466**). Molecular Biology of Plants. BIO 111, 113, 326, 328; or consent of instructor. BIO 464 recommended. (3).

Survey of the molecular biology of plants. Gene regulation in response to environmental conditions, coordinated regulation of nuclear and plasmid genes, transposons, control of plant development. Applications to agriculture and biotechnology, including the production and use of genetically modified crops. Lecture. May be taken with or without BIO 463.

463. Molecular Biology of Plants Laboratory. BIO 111, 113, 326, 328; prior or concurrent election of BIO 462; or consent of instructor. BIO 464 recommended. (1).

Cell and molecular biological techniques used to study gene expression in plants. May include isolation of chloroplasts, SDS-PAGE, PCR and various plant tissue culture techniques. Laboratory.

464. Plant Physiology Lecture. *BIO* 111, 113, 326. (3).

Growth, development, and maintenance of higher plants by the interaction of metabolic and physical processes. Emphasis on how changes in gene and enzyme interaction at the cellular level affect the physiology of plants at the organismal level. Lecture.

465. Plant Physiology Laboratory. BIO 111, 113, 326; prior or concurrent election of BIO 464; or consent of instructor. (1).

Experimental approach to understanding the physiology of plants at the molecular, cellular and organismal levels. Laboratory.

467. Molecular Biology of Procaryotes. BIO 111, 113, 326, 328; prior or concurrent enrollment in BIO 435; CHM 220 or 330; or consent of instructor. (4).

Survey of the molecular biology of procaryotic organisms. DNA replication, DNA repair and recombination, and mechanisms regulating gene expression at the transcriptional and post-transcriptional levels; the interaction of these processes in complex phenomena such as ribosome biosynthesis, cell division, and sporulation. Lecture and laboratory; laboratory focus on recombinant DNA methodologies.

468. Molecular Biology of Eucaryotes. BIO 111, 113, 326, 328, 435; CHM 220 or 330; or consent of instructor. BIO 467 recommended. (4).

Survey of the molecular biology of eucaryotic organisms. DNA replication, DNA repair and recombination, DNA rearrangements, and mechanisms regulating gene expression; the interaction of these processes in complex phenomena such as signal transductinn, cell cycle control, cell differentiation, and cancer. Lecture and laboratory; laboratory includes mammalian cell culture and expression of cloned genes in mammalian cells.

470. Clinical Embryology. BIO 111, BIO 434/PTP 410; admission to the professional program in physical therapy or consent of instructor. (1).

Human embryology with an emphasis on the causes of congenital malformations. Lecture. Also listed as PTP 361.

472. Topics in Human Genetics. *BIO* 111, 113, 328. (3).

Genetic aspects of human health and disease. Genetic counseling, pedigrees, quantitative traits, cytogenetics, immunogenetics, cancer genetics, and human evolution. Recent advances in the application of molecular methods to human genetic diseases. Lecture.

475. Biology of Aging. BIO 111, 113, 326; or consent of instructor. (3).

Biological changes associated with aging at the molecular, cellular, tissue, organ and individual level. Lecture.

480. Field Biology. *BIO* 111, 113, 327; consent of instructor. (5).

Studies of individuals, populations and communities of the Great Lakes area with emphasis on field identification of vascular plants, amphibians, reptiles and birds. Organismal adaptations, habitat preferences, behavior, life history and biotic interactions; introduction to the biology/ecology of amphibians and reptiles. Classes consist of day-long field trips, one evening field experience and a term-ending weeklong field excursion to Michigan's upper peninsula.

481. Field Studies in Biology. BIO 111, 113, 327; consent of instructor. (4).

Lectures on, and individual study of, the flora, fauna, and geology of a selected area of the country, culminating in a field trip to that region. Each student is given a special problem to investigate. Lecture and laboratory.

482. Neuroscience. BIO 434 or consent of instructor. (3).

Principles of neuroanatomy and neurophysiology from ion channels to functional systems, neurological pathways and cerebral vasculature.

483. Special Topics. *Consent of instructor.* (1-4).

In-depth examination of selected topics of special interest to biologists. Course content, format and prerequisites vary with the topic presented. Lecture.

484. Biology of Birds. BIO 111, 113, and 327 or equivalent, and consent of instructor. (5).

Introduction to ornithology with emphasis on field identification of the birds of southern Michigan. Field trips to a variety of habitats in the region. Laboratory study of

morphology; additional identification using 35 mm slides and recorded bird songs. Lectures and readings on aspects of the anatomy, physiology, evolution, ecology and behavior of birds.

485. Pathology. *BIO* 111, 113, 326, 432. (3).

Human structural and functional disorders, mechanisms by which they arise, and systemic effects. *BIO 425 and BIO 485 cannot both be counted toward a Biology major.*

488. Systematic Botany. BIO 111, 113, 327; or consent of instructor. (4).

Identification, classification, and phylogeny of vascular plants. Includes nomenclature, principles of systematics, contemporary methods, sources of systematic evidence, collection techniques, and historical review of plant classification systems. Field trips. Lecture and laboratory.

490. (390). Co-op Experience. *Two 300 or higher level BIO courses; consent of chair and one additional BIO faculty member.* **(2).**

Biology-oriented workplace experience. Each student must work with a faculty advisor to supervise the co-op experience. Written report and oral presentation or poster session of research activities. May be reelected to a maximum of 6 credit hours for different experiences. Credit in BIO 490 and 491 may not exceed a combined total of 6. Not open to students in the Honors Program in Biology.

491. Independent Study. *Consent of instructor.* (To be arranged). (1-4).

Individual work for qualified students involving search of original sources in the literature, preparation of abstracts, and examination of material. Problems may involve special techniques, field problems, and morphological or physiological studies. May be reelected to a maximum of 4 credits. Graded ABCDE/Y.

492. Teaching Practicum in Biology. Completion of biology core curriculum (BIO 111, 113, 326, 327, 328), and consent of supervising instructor. (1-2).

Teaching experience in a supervised college laboratory or field setting. Students are assigned to a specific course, based on interest and experience. Involves supervision of one or two lab sections per week, lab preparation, and participation in weekly discussion sessions. *May be repeated to a maximum of 2 credits.*

493. Honors Research Methods. Consent of Department Chair. Open only to Honors Program students in biology. (1).

Specific field and/or laboratory methods selected for study with student's University of Michigan-Flint faculty supervisor. Basis for selection determined by the student's proposed program of off-campus research. *Graded ABCDE/Y*.

494. Honors Independent Research. Prior or concurrent election of BIO 493; consent of Department Chair. Open only to Honors Program students in biology. (1).

Specific research to pilot the experiments to be performed

during student's program of off-campus research. *Graded ABCDE/Y*.

495. Honors Thesis I. *BIO* 494; consent of Department Chair. Open only to Honors Program students in biology. (4).

Credit and grade for BIO 495 are not given until successful completion of BIO 496. Also listed as HON 495. Graded ABCDE/Y.

496. Honors Thesis II. *Prior or concurrent election of BIO* 495; consent of Department Chair. Open only to Honors Program students in biology. (4).

Also listed as HON 496. Graded ABCDE/Y.

College of Arts and Sciences (CAS)

Courses in College of Arts and Sciences

101. Introduction to the University of Michigan-Flint. (1).

Introduction to programs, services and resources available at the University of Michigan-Flint. Presentations and activities foster appreciation and understanding of the General Education requirements of the institution and help students develop skills necessary for academic success. *Graded Pass/Fail*.

Chemistry and Biochemistry (CHM)

556 William R. Murchie Science Building

(810) 762-3275 Fax: (810) 766-6693

Webpage: http://www.umflint.edu/departments/chemistry

Chair: Dr. Robert W. Stach

Principal Secretary: Karol Scheitler

Supervisor of Equipment and Chemical Stores: Todd J. Toulouse Laboratory Demonstrator: Monique Wilhelm

Professors Robert W. Stach; Assistant Professors Brian Buffin, Jie Song, Anselm Omoike, Jessica Tischler; Lecturers Pamela J. Coffin, Michael D. Gebler, Marina Ionina-Prasov.

Professors Emeriti: Dr. Harry H. Blecker, Dr. Virgil W. Cope, Dr. Robert M. Kren

Chemistry is unique among the natural sciences, because it has its own special viewpoint for examining matter and the changes that matter undergoes. The study of chemistry or biochemistry can prepare you for a career in chemistry or biochemistry or for further work in chemistry-related areas, such as materials science, one of the biomedical sciences, bioengineering, chemical engineering, food science, pharmacology, toxicology, oceanography or marine science. You may also use an education in chemistry or biochemistry to pursue admission to law, medical, dental, osteopathic or veterinary school or professional studies in other health-related areas. If you have a specific career goal, you should carefully read our offerings and choose the one that is right for you.

The American Chemical Society through its Committee on

Professional Training has certified three of our programs or options: Chemistry, Biochemistry, and Environmental Chemistry. The address for the American Chemical Society is 1155 Sixteenth Street, N.W., Washington, DC 20036; phone (202) 872-4589.

The Department adheres to the use of letter grades and their descriptions as set forth in the College of Arts and Sciences section of the *Catalog*. It should, however, be understood that the Department attaches the following advisory meanings to grades: "A," approved without reservation for further work in the subject; "B," approved for further work; "C," or "P," capable of further work; "D," unready for further work; "E" or "N," not accepted for further work. Students should be advised that two grades of "C-" or worse in the progression of prerequisite courses leading to a particular course at the 300+ level will result in a Departmental review and possible refusal of admission to that course.

Department Mission and Program Assessment

It is the mission of the Department of Chemistry and Biochemistry to provide its graduates, and all its students, with a core of chemistry-related knowledge and cognitive and material tool skills, on the basis of which they may make valid judgments, make reasonable predictions, and take actions as professionals. Another aspect of the Departmental mission is to develop the ability of students to work/study independently and to solve original problems through involvement in research projects with faculty. This is done through close interaction with students and a laboratory program that requires students to be intimately involved with experimentation. The Department participates in the University-wide effort to assess its academic programs. Information on assessment plans, including goals, methods and outcomes is available at http://assessment.umflint.edu.

Programs in Chemistry and Biochemistry

Five concentration programs are offered: the General Program in Chemistry with options in Chemistry and Environmental Chemistry (Bachelor of Science), the Program in Biochemistry (Bachelor of Science), the Honors Program in Chemistry (Bachelor of Science), the General Program in Chemistry (Bachelor of Arts), and the Teacher's Certificate Program in Chemistry (Bachelor of Arts). A Minor in Chemistry is also available.

The department also offers two-year programs in Pre-Pharmacy, Pre-Medicinal Chemistry, and Pre-Pharmaceutical Sciences. (See "Pharmaceutical Studies Information.")

General Program in Chemistry (Bachelor of Science)

Two options are available. Selection of an option should be made to correspond with the student's future plans. Each option is designed to meet particular career and/or graduate study needs. In addition, the student who plans to seek American Chemical Society certification should examine those requirements, listed after the Chemistry and Environmental Chemistry Options below.

Requirements.*

- A. CHM 260, 261, 262, 263 or 265, 310, 330, 331, 332, 333, 340, 341, 366, 367 (2 credits), 410, 499 (1 credit).
- B. MTH 121, 122, 222.
- C. CSC 121, CSC 175 or 271.

- D. PHY 243, 245.
- E. Completion of one of the options described below.
- F. Additional coursework to satisfy UM-Flint graduation requirements and to bring the total to a minimum of 124 credits with 33 or more credits in courses numbered 300 or above.
- G. All requirements of the College of Arts and Sciences Bachelor of Science degree, including general education requirements.

Chemistry Option

The student who plans to continue the study of analytical, inorganic, organic or physical chemistry at the graduate level or prepare for professional work as a chemist in industry or government should consider selecting the Chemistry option.

Requirements, Chemistry.

- A. CHM 350, 440, 443, 460, 461, 472, 473; two of the following for a minimum of five credits: CHM 430, 432, 492.
- B. One from: CSC 275; MTH 305, 357, 372, 374.

American Chemical Society Certification, Chemistry

The student who wishes to be recommended for certification by the American Chemical Society in Option A, as having met the minimum standards set forth by the Committee on Professional Training, must complete the following courses:

- A. All requirements of the Chemistry option.
- B. CHM 390.

Environmental Chemistry Option

For the student who anticipates a career in environmental analysis or environmental quality monitoring or who plans graduate study in such areas as geochemistry, chemical oceanography, environmental chemistry, environmental or wildlife toxicology, or atmospheric chemistry, the Environmental Chemistry Option would be a good choice.

Requirements, Environmental Chemistry.

- A. CHM 350, 380, 381, 382, 444, 460, 472, 485.
- B. BIO 111, 113; GEO 150 or 151.
- C. A course, chosen in consultation with the advisor, from: BIO 326, 327; GEO 282, 331, 340, 365.

American Chemical Society Certification, Environmental Chemistry.

The student who wishes to be recommended for certification by the American Chemical Society in Environmental Chemistry, as having met the minimum standards set forth by the Committee on Professional Training, must complete the following.

- A. All requirements of the Environmental Chemistry option.
- B. CHM 473.
- *At the time of printing, some of these requirements had not gone

through final CAS approval. Please contact the Department to verify programmatic requirements.

Program in Biochemistry (Bachelor of Science)

The student who expects to accept an entry-level position in any area requiring knowledge of biological chemistry, or to do graduate study in biochemistry, other areas of biomedical science (pharmacology/toxicology, physiology, cell and/or molecular biology, molecular genetics, immunology, microbial physiology, agricultural (bio)chemistry/plant science, food science, or human nutrition) may be best served by completing the Program in Biochemistry Option. The student who intends to do professional study in medicine (human, osteopathic, veterinary) or dentistry may elect to complete either the Program in Biochemistry Option or the Bachelor of Arts degree in Chemistry.

Requirements.*

- A. CHM 260, 261, 262, 263 or 265, 310, 330, 331, 332, 333, 340, 341, 366, 367 (2 credits), 410, 442, 443, 450, 451, 452, 453, 472, 473, 499 (1 credit).
- B. BIO 113, 326, 435, 467, 468.
- C. MTH 121, 122, 222.
- D. CSC 122, 171, 175 or 275 or other course in an appropriate programming language.
- E. PHY 243, 245.
- F. Additional coursework to satisfy UM-Flint graduation requirements and to bring the total to a minimum of 124 credits with 33 or more credits in courses numbered 300 or above.
- G. All requirements of the College of Arts and Sciences Bachelor of Science degree, including general education requirements.

American Chemical Society Certification, Biochemistry.

The student who wishes to be recommended for certification by the American Chemical Society in Biochemistry, as having met the minimum standards set forth by the Committee on Professional Training, must complete the following:

- A. All requirements of the Biochemistry option.
- B. CHM 455 or 458.

*At the time of printing, some of these requirements had not gone through final CAS approval. Please contact the Department to verify programmatic requirements.

Honors Program in Chemistry and Biochemistry (Bachelor of Science)

Requirements.

- A. All requirements of the General Program in Chemistry or Program in Biochemistry (Bachelor of Science).
- B. In the year prior to the off-campus research experience,

- completion of CHM 299 (3 credits) with the student's departmental research advisor.
- C. During the year after the off-campus research experience, CHM 495 and 496.
- D. All requirements of the University Honors Scholar Program.

Prospective Honors Concentration Program students are urged to acquaint themselves as early as possible with the requirements above as well as with the particular procedures for acceptance into the Department's Honors Concentration Program. See the departmental honors advisor or the Honors Program Director for this information.

General Program in Chemistry (Bachelor of Arts)

The Bachelor of Arts in Chemistry is designed for students who want to gain a general background in chemistry, prepare themselves for entry into medical, dental, osteopathic or veterinary school, or make use of the science of chemistry in their careers. It is not intended for students preparing to be professional scientists or planning to enter graduate study in any of the chemical sciences. Typical career tracks for someone with a B.A. degree in Chemistry might involve health care, scientific writing, library science/chemical literature, journalism, patent law, sales for a technical corporation, or industrial marketing/management, or the pursuit of an advanced degree in fields such as business administration, library science or law.

Requirements.*

- A. Core courses (16 credits). CHM 260, 261, 262, 263 or 265, 330, 331, 332, 333.
- B. Advanced courses (10 credits). CHM 310, 340, 341, 366, 367 (1 credit), 410.
- C. Advanced electives (7-10 credits). One of the following four groups:
 - 1. CHM 367 (1 additional credit), 380, 381, 382.
 - 2. CHM 440 or 442 or 444, 441, 460, 461 or 485.
 - 3. CHM 430, 432, 499 (1 credit).
 - 4. CHM 450, 451, 452, 453.
- D. Mathematics (12 credits). MTH 121, 122, 222.
- E. Cognate science courses (24-32 credits). Two of the four sequences below; plus three additional courses, for a minimum total of 8 credits, in one or more of the areas and with the chosen courses as prerequisites.
 - 1. BIO 111, 327; or BIO 111, 113, 326.
 - 2. GEO 150, 151.
 - 3. PHY 243, 245; or PHY 143, 145.
 - 4. CSC 121, 175, 275.
- F. All requirements of the College of Arts and Sciences Bachelor of Arts degree, including general education requirements and a foreign language requirement.

*At the time of printing, some of these requirements had not gone through final CAS approval. Please contact the Department to verify programmatic requirements.

Teacher's Certificate Program (Bachelor of Arts)

This program is designed for the student who plans to teach chemistry in a secondary school.

Requirements.*

- A. Core courses (16 credits). CHM 260, 261, 262, 263 or 265, 330, 331, 332, 333.
- B. Advanced courses (25-29 credits). CHM 310, 340, 341, 350*, 366, 367 (1 credit), 410, 472, 473. Completion of one of the following groups of courses, chosen in consultation with the advisor: CHM 441, and 440 or 442 or 444; CHM 430, 432; CHM 450*, 451, 452, 453; CHM 460, 461.
 - *The student who chooses the CHM 450 series of courses will not enroll in CHM 350.
- C. Mathematics (12 credits). MTH 121, 122, 222.
- D. Cognate science courses (8-10 credits). PHY 243, 245 or PHY 143, 145.
- E. PHL 312, or equivalent.
- F. EDS 344. EDE 344 strongly recommended.
- G. Three additional courses, for a minimum of 8 credits, in chemistry, computer science, physics or mathematics with appropriate courses from above or elsewhere as prerequisites, chosen in consultation with the advisor. Courses from H, below, may be used to satisfy this requirement.
- H. One or more of the following: BIO 301, CSC 175, MTH 375, PSY 301, SOC 215.
- I. Involvement in the teaching of chemistry at UM-Flint, for at least three semesters. Such involvement may take the form of enrollment in a directed readings course (CHM 390, one credit per election, and a maximum of one election) approved for this purpose, participation in a teaching internship/practicum (CHM 364, one credit per election, and a maximum of three elections), or employment as a student assistant (CHM 364, zero credits per election, and a maximum of two enrollments) depending on departmental availability.
- J. A grade point average of at least 2.75 in all chemistry courses taken at UM-Flint.
- K. All requirements of the College of Arts and Sciences Bachelor of Arts degree, including general education requirements and a foreign language requirement.

Prospective candidates should also study the sections entitled "General Requirements for Teacher Certification" and "Secondary Education Teacher's Certificate Programs" printed in the Department of Education section of this *Catalog*.

*At the time of printing, some of these requirements had not gone through final CAS approval. Please contact the Department to verify programmatic requirements.

Minor in Chemistry

Requirements.*

- Completion of the general and organic chemistry sequences, with laboratories.
- B. Completion of one of the following groups: CHM 340, 341; CHM 350, 451; CHM 366, 367 (1 credit); CHM 380, 381; CHM 430, 432; CHM 450, 451, 452.
- C. A minimum of eight credits of chemistry at the 200 level or above taken at UM-Flint.
- D. A minimum 2.5 GPA in all UM-Flint chemistry courses.

*At the time of printing, some of these requirements had not gone through final CAS approval. Please contact the Department to verify programmatic requirements.

Courses in Chemistry

130. Chemistry and Society. $(3)n^*$.

Introductory course designed for the non-science concentrator, providing basic understanding of the principles of chemistry and how these relate to such diverse topics as energy, natural resources and nutrition. *CHM 130 and 131, together, are applicable to the natural science general education requirement. Applies neither as a CHM 260 prerequisite nor toward a concentration in chemistry; students who continue in chemistry are required to pass placement test. Graded ABCD>N.

131. Basic Chemistry Laboratory. Prior or concurrent election of CHM 130. (1)n*.

Laboratory experiments to accompany CHM 130. Three hours of discussion and laboratory weekly. *CHM 130 and 131, together, are applicable to the natural science general education requirement. Graded ABCDD->N.

140. Fundamentals of Chemistry. MTH 111 with a grade of C (2.0) or better. Not open to students having credit for CHM 260 (160). (3).

Introduction to basic theories and methods of chemistry. Three hours lecture weekly. For students in fields not requiring CHM 260-262, and to prepare for CHM 260. Does not apply to a concentration in chemistry.

150. General Chemistry for Health Sciences. MTH 111 with a grade of C (2.0) or better. (3)n*.

Introduction to chemical principles with an emphasis on application to health sciences. Topics include bonding, molecular structure, reactions, gases and solutions. *CHM 150 and 151, together, are applicable to the natural science distribution requirement.

151. Chemistry Laboratory for Health Sciences. Prior or concurrent enrollment in CHM 150. (1)n*.

Laboratory experiments to demonstrate chemical principles and scientific reasoning with emphasis on application to health sciences. *CHM 150 and 151, together, are applicable to the natural science distribution requirement.

220. Fundamentals of Organic Chemistry. CHM 150 with a grade of C (2.0) or better or CHM 262 with a grade of C (2.0) or better. (3).

Fundamentals of organic chemistry with emphasis on nomenclature and class reactions. Minimal use of organic reaction theory. Does not meet the organic chemistry requirements of any chemistry concentration option or of medical, dental, and pharmacy schools, graduate and other programs. Three hours lecture weekly.

252. Biological Chemistry for Nursing. CHM 150, 151 with a grade of C (2.0) or better or CHM 262 with a grade of C (2.0) or better. (3).

Integrated organic chemistry and biochemistry with emphasis on health and disease applications. Designed specifically for students in nursing programs. Does not meet requirements for chemistry programs, professional schools such as medical, dental, pharmacy, veterinary science, nor other chemistry related graduate programs.

260. (160). Principles of Chemistry I. CHM 140 with a grade of C (2.0) or better, MTH 120 with a grade of C (2.0) or better or math placement into MTH 121 or higher. (3)n*.

Selected principles and theories, including atomic and molecular structure, stoichiometry, thermochemistry, gas laws, and solid state. Three hours lecture, plus one hour additional instruction weekly. *CHM 260 and 261, together, are applicable to the natural science general education requirement.

261. (161). General Chemistry Laboratory. Prior or concurrent election of CHM 260. (1)n*.

Experiments and procedures to illustrate principles of chemistry. Four hours lecture and laboratory weekly. *CHM 260 and 261, together, are applicable to the natural science general education requirement.

262. (162). Principles of Chemistry II. *CHM* 260 with a grade of *C* (2.0) or better. (3)n*.

Selected principles and theories, including chemical kinetics, equilibria, acid-base theories, thermodynamics, electrochemistry, and organic structures. Three hours lecture weekly. *CHM 262 and either 263 or 265, together, are applicable to the natural science general education requirement.

263. (163). Introductory Quantitative Analysis Laboratory. CHM 261; prior or concurrent election of CHM 262. (1)n*.

Gravimetric, titrimetric and introductory instrumental methods of analysis. One hour lecture and three hours laboratory weekly. *CHM 262 and 263, together, are applicable to the natural science general education requirement.

265. (165). Introductory Quantitative Analysis Laboratory-Honors. *CHM* 261, 262; consent of instructor. (1)n*.

Honors intermediate quantitative analysis. Introduction to instrumental analysis. Spectrophotometry; electrochemical

methods; synthesis; kinetics measurements. One hour lecture and three hours laboratory weekly. *CHM 262 and 265, together, are applicable to the natural science general education requirement.

299. Supervised Chemical Research. CHM 262, CHM 263 or 265, consent of instructor. (1-3).

Original chemical research problems for sophomore and junior level students. Problems are pursued in consultation with the directing faculty member. *May be reelected to a maximum of four credits. Graded ABCDE/Y*.

310. Introduction to Professionalism in Chemistry. *At least junior standing, declared concentration in chemistry.* (1).

Introduction to research. Documentation, technical writing and oral presentation. History of chemistry. Searching the literature of chemistry. Professionalism and ethical behavior in the chemical sciences. Students will present a brief seminar. One 90-minute lecture/discussion meeting weekly.

330. (230). Organic Chemistry I. CHM 262. (3).

Preparation and reactions of aliphatic and alicyclic compounds; stereochemistry; structure and reactivity of major functional groups. Appropriate for chemistry majors, students concentrating in the natural sciences, and pre-medical, predental, pre-veterinary and pre-pharmacy students. Three hours lecture weekly.

331. (231). Organic Chemistry Laboratory I. *CHM 263 or 265, prior or concurrent election of CHM 220 or 330. (1).*

Elementary organic synthetic methods; introduction to separation and analysis by thin layer, column and gas-liquid chromatography. For chemistry majors, students concentrating in the natural sciences, and pre-medical, pre-dental, pre-veterinary and pre-pharmacy students. Four hours recitation/laboratory weekly.

332. (232). Organic Chemistry II. CHM 330. (3).

Preparation and reactions of aromatic compounds; spectroscopy; structure and reactivity of major functional groups; heterocyclic compounds. Appropriate for chemistry majors, students concentrating in the natural sciences, and premedical, pre-dental, pre-veterinary and pre-pharmacy students. Three hours lecture weekly.

333. (233). Organic Chemistry Laboratory II. CHM 331, prior or concurrent election of CHM 332. (1).

Intermediate organic synthesis methods; introduction to spectroscopy. For chemistry majors, students concentrating in the natural sciences, and pre-medical, pre-dental, pre-veterinary and pre-pharmacy students. *Four hours laboratory weekly*.

340. Physical Chemistry I. CHM 262, MTH 222, PHY 145 or 245. (3).

First of two-term sequence CHM 340/440 building on CHM 260/262. Rigorous mathematical theory of classical thermodynamics; applications to non-electrolyte and electrolyte solutions, phase equlibria, and chemical equilibria; introduction to modern statistical thermodynamics.

341. Physical Chemistry Laboratory. CHM 263 or 265, prior or concurrent election of CHM 340. (1).

Measurements of physical properties of solids, liquids, gases; phase equilibria; molecular spectra; intermediate kinetic measurement; calorimetry. One hour lecture and three hours laboratory weekly.

350. Fundamentals of Biochemistry. Prior or concurrent election of CHM 220 or 330. (3).

Biomolecules - proteins, lipids, carbohydates, nucleic acids structure and function; sturcture, properties and forces in aqueous solutions, buffers; enzyme kinetics, regulation, mechanisms; energetics - thermodynamics, electron transport, oxidative phosphorylation; metabolism. Three hours lecture weekly. Intended for science or engineering students who need an introduction to biochemistry. This course, alone or in combination with CHM 220 or 230, does not meet the requirements of any chemistry concentration option nor of medical, dental and pharmacy schools, graduate and other programs that specify one year of organic chemistry.

364. Teaching Practicum in Chemistry. Consent of Department Chair. (0-1).

Teaching experience in supervised college chemistry laboratory. Students are assigned to specific course, based on experience and interest, and participate in pre-laboratory preparations, supervision of experimentation, revision of experiments, and pre-laboratory lectures. Students preferring employment should enroll for 0 credits for a maximum of 2 enrollments. May be repeated for a maximum of three credits.

366. Analytical Chemistry. CHM 332. (3).

Ionic equilibria, electrochemistry, and their application to chemical analysis. Advanced separation techniques, including GLC and HPLC, electrochemical analysis and spectroscopic analysis.

 Analytical Chemistry Laboratory. CHM 333, prior or concurrent election of CHM 366. (1-2).

Advanced quantitative volumetric analysis; electrochemical methods of end point determination; atomic absorption analysis; intermediate level use of chromatographic and spectroscopic methods of analysis. One or two four-hour laboratories weekly. *May be reelected to a total of two credits.*

380. Environmental Chemistry. CHM 262; a course in organic chemistry. (3).

Chemistry of air and natural water systems. Atmospheric origin and reactions; photochemical reactions of small molecules; solubility in natural water; pH of natural water; oxidation-reduction reactions. *Also listed as ENV 380*.

381. Environmental Analytical Chemistry Laboratory. CHM 263, prior or concurrent election of CHM 380. (1).

Analysis of environmentally important substances including DO, BOD, COD, metals, organics, and air pollutants.

382. Environmental Toxicology. CHM 350 or 450. (3).

Strategies used to assess chemical toxicity. Assessment of

toxicity. Common test systems. Factors influencing the fate of chemicals in the environment, including chemical and physical factors, partitioning and metabolism by organisms.

390. Independent Study. Consent of instructor. (1-4).

Directed study of a topic in chemistry under the supervision of a faculty member. May be reelected to a maximum of four credits. Graded ABCDE/Y.

391. Co-op Experience. *Acceptance into Chemistry Department's Co-op Program; CHM 332, 333.* (0-4).

Project-oriented workplace experience, designed by both the company and the department to further the education of the student. Written report of activities required at the end of each semester of enrollment. May be reelected to a maximum of eight credits. Graded ABCDE/Y.

394. Clinical Chemistry. CHM 262. (3).

Introduction to analytes, pathophysiology, assay methodologies, and interpretation of clinical chemistry diagnostic data. Case study approach demonstrates correlation of diagnostic data to disease states. *Also listed as MTP 394*.

410. Senior Seminar in Chemistry. *CHM 310, senior standing, declared concentration in chemistry.* (1).

Each student makes an in-depth presentation of a topic of current activity in chemistry, presents a poster of the seminar, attends presentations made by other speakers, and takes a test covering general chemistry, organic chemistry, analytical chemistry, physical chemistry, and the particular option of concentration at the end of the semester. One 90 minute presentation/discussion meeting weekly.

430. Advanced Organic Chemistry. CHM 332, 340. (3).

Advanced topics in organic chemistry, including reactive intermediates, heterocycles, advanced stereochemistry, organometallic chemistry, and the investigation of reaction mechanisms. Structure and reactivity discussed in terms of molecular orbital theory. Three hours lecture weekly.

432. Polymer Chemistry. CHM 332; prior or concurrent election of CHM 440 or 442. (3).

Classes of polymers; their preparation, structure, uses, and chemical and physical properties. Three hours lecture weekly.

440. Physical Chemistry II. MTH 222, PHY 245. (3).

Second of two-term sequence CHM 340/440, building on CHM 260/262. Use of the Schrodinger Equation to solve exactly a series of important chemical problems including the hydrogen atom, the rigid rotor, and the harmonic oscillator. Valence-bond and molecular orbital theories of chemical bonding; introduction to group theory. Advanced spectroscopy, including transition probabilities, normal vibrational modes, and photoelectron spectroscopies introduced and used to deduce molecular structure; modern theories of fundamental reaction rates. Three hours lecture weekly.

442. Biophysical Chemistry. *MTH* 222; *PHY* 245. (3).

Chemical kinetics, including gas and solution phases, enzyme

and surface reaction kinetics. Principles of quantum mechanics and spectroscopy. Biochemical spectroscopy and physical chemistry of macromolecules. Three hours lecture weekly.

443. Introduction to Computational Chemistry. Prior or concurrent election of CHM 440 or 442 or 444. (1).

Introduction to use of computational chemistry software Topics include the introduction to common mechanics/molecular mechanics methods, elementary computational procedures, graphical methods, basic molecular modeling. No computer programming experience is required.

444. Physical Chemistry II, Environmental. CHM 380, MTH 222, PHY 245. (3).

Chemical kinetics, including gas and solution phases, enzyme and surface reaction kinetics. Principles of quantum mechanics and spectroscopy. Environmental modeling and structure/toxicity relationships. Three hours lecture weekly.

450. Biochemistry I. CHM 332, BIO 326 or 328. (3).

Kinetics and thermodynamics of biochemical processes. Structure and function of biomolecules. Metabolism (catabolic) of carbohydrates, proteins and lipids. Three hours lecture and discussion weekly.

451. Biochemistry Laboratory I. CHM 333; prior or concurrent election of CHM 450/350. (2).

Project-oriented laboratory in which students select their own procedures from standard biochemical techniques to purify an enzyme from a bacterial source and characterize its molecular weight and kinetic parameters. Eight hours recitation/laboratory weekly.

452. Biochemistry II. CHM 450. (3)n.

Continuation of CHM 450. Biosynthesis of carbohydrates, lipids, proteins and nucleic acids. Expression and transmission of genetic information. Three hours lecture and discussion weekly.

453. Biochemistry Laboratory II. CHM 451. (2).

Project-oriented laboratory in which students attempt to do a site-directed mutagenesis of a gene that codes for an enzyme, compare the physical and kinetic parameters of the mutated and wild type enzymes, and propose and test a hypothesis about how the mutation will affect the rate of enzymatic catalysis. Eight hours recitation/laboratory weekly.

455. Enzymology. CHM 340, 450, 452. (3).

An in-depth study of the physical and chemical attributes of chemical and enzymatic reactions. This will involve discussions of chemical and enzymatic kinetics, derivation of kinetic equations, how enzymes function to catalyze reactions, as well as how enzymes are regulated (i.e inhibited). Three hours lecture weekly.

458. Proteomics-Structure/Function of Proteins. CHM 340, 450, 452. (3).

Study of proteins an organism makes and how they function. In-depth discussion of physical and chemical attributes of proteins and how these relate to their function; techniques to analyze proteins. Three hours lecture weekly.

460. Advanced Analytical Chemistry. CHM 340, 366 with grades of C(2.0) or better. (3).

Advanced electrochemical analysis, including pH measurements, polarography, and conductance methods. Theory of spectroscopic analyses, including NMR, electron paramagnetic resonance, ultraviolet, visible, infrared, and Raman. Three hours lecture and discussion weekly.

461. Advanced Analytical Chemistry Laboratory. CHM 367; prior or concurrent election of CHM 460. (1).

Advanced methods of instrumental, spectroscopic, and chromatographic methods of analysis. One four-hour laboratory weekly per credit. May be reelected for a total of two credits.

472. Inorganic Chemistry. *CHM 340 or consent of instructor.*

Comprehensive overview of chemistry of the elements. Descriptive chemistry of the 18 chemical groups, models of chemical bonding including metallic bonding, solid state crystal structures, application of thermodynamic and electrochemical principles to inorganic systems, symmetry considerations of molecular structure and reaction.

473. Inorganic Chemistry Laboratory. Prior or concurrent election of CHM 472. (1).

Modern series of chemical experiments involving syntheses and characterization of inorganic materials. Experimental procedures may include instruction in maintaining anaerobic environments and use of nonaqueous solvent systems..

485. Advanced Environmental Analysis. Prior or concurrent election of CHM 460. (1).

Advanced experiments in environmental analysis which require sampling, sample preparation, and chemical analysis.

492. Advanced Topics in Chemistry. (1-3).

Topic selected for each offering, based on recent advances in chemistry. One hour of lecture and discussion weekly for each credit. May be reelected to a total of eight credits.

495. Honors Thesis I. Consent of Department Chair. Open only to Honors Program students in chemistry. (4).

Credit and grade for CHM 495 is not given until successful completion of CHM 496. Also listed as HON 495. Graded ABCDE/Y.

496. Honors Thesis II. Prior or concurrent election of CHM 495 and consent of Department Chair. Open only to Honors Program students in chemistry. (4).

Also listed as HON 496. Graded ABCDE/Y.

499. Chemical Research. Minimum GPA of 2.5 in all chemistry courses taken at UM-Flint; consent of instructor. (1-4).

Original chemical research problems chosen and pursued in consultation with the directing faculty member. Written report required. Graded ABCDE/Y.

Graduate Courses in Chemistry

551. Biochemistry for Anesthetists. A semester of sophomore level organic chemistry (e.g. CHM 220), admission to the graduate program in anesthesia. (2).

Relationships involving basic biochemical principles and anesthetic agents used in a clinical setting. Focus on the biological effects of anesthetic agents at the molecular level. Also listed as ANE 551.

Communication and Visual Arts

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http://www.umflint.edu/departments/communication http://www.umflint.edu/departments/art

Chair: Christine Waters

Principal Secretary: Sharon Beam

Professor Jack Kay, Associate Professors Charles Apple, Darryl Baird, Christine Waters, Marcia Watkins; Assistant Professors Giovanna Costantini, Heither Seipke, Sarah Rosaen, Mike Sevick; Lecturers Jjenna Andrews, James Bakken, Stanley Blood, Traci Currie, Dorothy Filak, Joe Ghattas, James Gilbert, William Kenner, Janet Lorch, Tony McGill, Marcia Polenberg-Ramsay, James Shurter, Holly Stevens, Phyllis Sykes, Fred Wagonlander, Christopher Young, Rebecca Zeiss.

The Department of Communication and Visual Arts offers a wide range of exciting opportunities to assist students in reaching their career, intellectual and personal goals. The general program in communication offers three emphasis areas: Media Studies, Organizational Communication, and Relational Communication. Studio Art and Art Education are the general programs of study in the Visual Arts. Studio Art concentrations include ceramics, graphic design, painting, printmaking/drawing, photography, and sculpture. Both Communication and Visual Arts offer minors and honors study.

Communication and Visual Art programs offer students a level of personal attention that enhances the learning process. A high degree of hands-on experience and opportunities for internships also exist within the department. The department has numerous studio spaces, including space for painting, drawinf, ceramics, and sculpture. In addition, the department has highly specialized facilities for graphics design, photography, and audio/video production.

Communication

The objectives of the Communication Program are: Increase public understanding and of and appreciation for the value of effective communication in a democratic society; provide professional preparation for persons seeking careers in the practice of communication; provide leadership for professionals now engaged in the practice of communication; and provide pre-professional programs and supporting coursework for students completing programs in other disciplines. Contact the department for additional information about the program.

Mission and Assessment

The goals of the Communication program are to offer intensive study into the process by which people create, exchange and interpret symbolic messages, and to be conscious of variables that make human communication rich, diverse and complex. Students of communication learn about and appreciate the breadth and depth of the discipline from its roots in classical antiquity to the changing roles of electronic media. The program participates in the University-wide effort to assess its academic programs. Information on assessment plans, including goals, methods and outcomes is available at http://assessment.umflint.edu.

Programs in Communication

Three concentration programs are offered, all leading to the Bachelor of Arts degree: the General Program in Communication, the Honors Program in Communication, and the Teacher's Certificate Program in Speech. Within the concentration, students elect courses from areas of emphasis in general communication, organizational communication, or media studies. A Minor in Communication and a Teacher's Certificate Minor in Speech are also available.

General Program in Communication

The General Program in Communication offers students liberal arts coursework as a supporting program for careers in communication, including but not limited to communication training and development, broadcasting, and public relations.

Prerequisites. Students wishing to elect Communication as their major must first demonstrate a rudimentary understanding of and proficiency in the discipline. Students must successfully complete one of the following courses before acceptance in the program: COM 200, COM/THE 204, COM 210.

Requirements. Forty credit hours in COM courses and a 12-hour cognate, minor or second major. At least 25 hours of coursework toward the major must be taken at UM-Flint.

- A. Core Courses. COM 200, 210, 300, 301, 428 (16 credits).
- B. Emphasis Area (15 credits). Completion of one of the following groups: Relational Communication. COM 281, 284, 363, 381, 382. Organizational Communication. COM 261, 361, 362, 371, 382. Media Studies. COM 241, 331, 332, 343, 344.
- C. Electives (9 credits). Additional credits selected from COM courses not in the student's emphasis area.
- D. Cognate. To increase the student's ability to understand and apply Communication and to see its interdisciplinary nature, a block of courses outside the Communication program, fulfilled in any of the following ways:
 - 1. Four courses (12 credits), chosen with the approval of the student's advisor, in one or more disciplines.
 - A minor.
 - 3. A second major.
- E. All requirements of the College of Arts and Sciences Bachelor of Arts degree, including general education requirements and a foreign language requirement.

Honors Program in Communication

The Honors Program in Communication is designed for the student who has completed the Freshman/Sophomore Honors Program and wishes to continue that program in the field of communication.

Prerequisites.

- A. COM 200; COM/THE 204 or 210.
- B. Two courses from COM 241, 261, 281.

Requirements.

- A. All requirements of the General Program in Communication, to include COM 300 and 428.
- B. COM 390, Independent Research (3 credits).
- C. HON 495 and 496, Honors Thesis I and II (4 credits each).
- D. All requirements of the University Honors Scholar Program.
- E. Completion of a minimum of 120 credits including the general education requirements.
- F. An overall University of Michigan-Flint grade point average of at least 3.5.

Prospective Honors Program students are urged to acquaint themselves as early as possible with the requirements above as well as with the particular procedures for acceptance into the Communication Program's Honors Program. See the advisor of the Honors Program in Communication or the Honors Program Director for this information.

Teacher's Certificate Program in Speech

See the Theatre section of this Catalog for the Teacher's Certificate Program in Speech.

Minor in Communication

Requirements. At least 21 credit hours in Communication, to include:

- 1. COM 200, 210, 301 (9 credits).
- 2. Twelve credit hours selected in consultation with advisor.

Teacher's Certificate Minor in Speech

See the Theatre section of this Catalog for the Teacher's Certificate Minor in Speech.

Courses in Communication

113. Drawing for Design I. Concentration in Visual Communication or consent of instructor. (3)f.

Basic drawing techniques with emphasis on the fundamentals of observation and basic composition. Exploration and analysis of spatial relationships, representational drawing, form and concept using black and white media. Also listed as ART 113.

114. Drawing for Design II. Concentration in Visual Communication, ART/COM 113; or consent of instructoror. (3)f.

Advanced drawing techniques with emphasis on conceptual sketching and rendering using color media. Exploration of perspective, storyboarding, visualization and presentation techniques. Also listed as ART 114.

140. History of Graphic Design. (3)h.

Chronological survey of graphic design through slide lectures. How graphic design responded to (and affected) international, social, political and technological developments since 1450. Emphasis on printed work from 1880 to present and its relationship to other visual arts and design disciplines. Also listed as ARH 140.

152. Color and Design. Concentration in Visual Communication or consent of instructor. (3)f.

Exploration of design principles of organization, utilizing such elements as line, shape, color, texture and scale to create and evaluate compositions. Emphasis on aesthetic and technical aspects of color theory within the field of visual communication. Also listed as ART 152.

160. Visual Communications Theory and Process. (3)f.

Introduction to contemporary graphic design. professional practices, creative workflow, career paths, digital graphics hardware and software usage, copyright, ethics. Also listed as ART 160 and THE 160.

163. Rhetoric of Hate and Fear. (3)h.

Examination of appeals to hate, fear, and related emotions and the place of such appeals in moral, political and ideological reasoning and persuasion. Critical analyses of assertions and arguments of individuals and groups active in contemporary American society, including paramilitary groups, radical religious movements and cults, anti-Semitic organizations, and extremist black and white supremacy groups. Theoretical analyses of the thinking of such groups and the place of such thinking in modernism and postmodernism. Emphasis on conspiracy theories, religious fanaticism, racism, misogyny and extreme anti-homosexuality. Also listed as PHL 163.

200. Survey of Communication Theory. (3)s.

Introduction to major theories of communication as applied to the interpersonal, organizational, and mass communication processes. Emphasis on the variety of disciplinary approaches to the study of communication, including psychological, sociological, and rhetorical.

204. Fundamentals of Debate and Forensics. (3).

Theories, structure and skills of debate and forensics. Emphasis on research, library and notetaking skills. Practice of competitive speaking skills and of research and oratorical skills as applied to national Competitive Intercollegiate Debate and Forensics. National debate topics and Michigan Intercollegiate Speech League activities. Students demonstrate abilities in classroom debates and in forensics activities. Also listed as THE 204.

210. Introduction to Public Speaking. (3)h.

Practical introduction to public speaking, exploring its basic

tenets through speeches given in the classroom. Also listed as THE 210.

213. Oral Interpretation of Literature. (3)f.

Oral communication of prose and poetry. Analysis of texts, methods of meeting problems inherent in their presentation, group and individual reading before the class, criticism, and possible public performance. *Also listed as THE 213*.

215. Photography Survey. ENG 112. (3)h.

Discussion of the history, aesthetics, and uses of photography. Introduction to black and white photographic processes. *Also listed as ARH 215*.

225. Principles of News and Feature Writing. ENG 112. (3).

Fundamentals of writing news and feature stories. Techniques of newspaper writing, principles of objective reporting, interviewing style, copy-editing, and journalistic responsibility.

226. Advertising. (3).

Principles of effective advertising strategy and design. Emphasis on developing and coordinating messages for a variety of media including newspapers, radio, and television.

231. Language and Law. (3).

Language in the American judicial process; legal language reform, the role of the linguist as expert witness, comprehension of jury instructions, effects of language variation on witness credibility, legal rights of linguistic minorities. *Also listed as LIN 231*.

232. Typography I. (3)f.

Introduction to the history and use of typography within the filed of visual communication. Exploration of type, from individual letterforms to words and pages and integration of image and text. *Also listed as ART 232*.

241. History and Criticism of Mass Communication. (3)s.

Analysis and history of mass media/communication and the development of critical theories.

242. Telecommunication Performance. (3).

Introduction to performance principles and techniques in the electronic media. Examination of a variety of performance genres such as announcing, interviewing, reporting, and editorial argument. *Also listed as THE 243*.

Introducation to Digital Design. ART 160 or consent of instructor. (3)f.

Introduction to two-dimensional art fundamentals and use of computer software in studio practice. Exploration of visual problem solving and the creative process. *Also listed as ART 252 and THE 252*.

261. Foundations of Organizational Communication. (3).

Analysis of the forms and functions of communication within organizations. Examines basic theories of the management of communication processes in organizations.

262. Interviewing. (3).

Principles and practices of interviewing. Survey of information interviews with an emphasis on broadcast journalism, employment interviewing, counseling/helping interviews.

272. Film Genre. (3)f.

Examination of a selected film genre (the gangster film, the western, science fiction, war films, Film Noir, etc.) or selected topical focus. Viewing, discussion and writing about film. Class time may be extended to accommodate screenings. *Also listed as THE 272*.

281. Principles of Interpersonal Communication. (3).

Intensive analysis of the dimensions of intrapersonal and interpersonal communication, designed to identify the philosophy, theories and strategies which underlie effective human communication.

284. Gender and Communication. At least sophomore standing. (3)s.

Analysis of gender/communication issues, including how women and men use language differently, how women and men are portrayed in language, and how language reflects and recreates social reality. Also listed as LIN 284 and WGS 284.

300. Introduction to Research Methods in Communication. At least junior standing and two 200-level courses in communication or consent of instructor. (4).

Case study introduction to qualitative and quantitative methods of research in communication. Historical, critical, experimental, and survey methodology in research in communication.

301. Ethical Issues in Communication. At least junior standing, COM 200, an additional 200-level course in communication, a course in philosophy; or consent of instructor. (3)h.

Examination of ethical principles involved in interpersonal and public communication. Analysis of individual and institutional responsibilities in all forms of communication. *Does not count as a prerequisite for any philosophy course, nor toward any philosophy major or minor.*

304. Advanced Public Speaking and Forensics. COM/THE 204 or 210; or consent of instructor. (3)f.

Advanced communication theory related to public speaking with a special emphasis on advanced delivery and presentation techniques applied to a variety of settings. Theories, structure and skills of public speaking and forensics. Practice of competitive speaking skills and of research and oratorical skills as applied to national Competitive Intercollegiate Forensics. Also listed as THE 304. Offered Winter semesters.

316. Advanced Advertising. COM 226. (3).

How agency teams create competitive proposals for clients. Examination of various media, cost comparisons, and techniques of utilization. Guidelines and practice in setting creative and advertising objectives for meeting client-established marketing objectives, developing a complete advertising proposal, and presenting it to board of industry representatives. Mirrors agency life in small to medium sized markets.

320. Rhetorical Theory and Criticism. At least junior standing, COM 200, an additional 200-level course in communication. (3)h.

Historical approaches to rhetorical theory from Aristotle to the present. Particular emphasis on contemporary theories and critical methods such as Burke, feminist, cultural, historicalcritical. Students are expected to select and apply a specific critical method to a specific communication artifact: speech, film, television, news.

329. Introduction to Digital Imaging. ART/COM 152, *ART/COM/THE 252. (3)f.*

Introduction to technical and creative use of computer aided pixel based imagery. Utilization of desktop computers and sophisticated professional imaging software as a tool for individual expression. Also listed as ART 329.

331. Communication Law. COM 241 or consent of instructor. (3).

Analysis of legal limitations and privileges of speech, publication, and broadcasting. Critical examination of major court decisions on free speech, fair comment, libel and slander, rights to privacy and to knowledge, fairness doctrine, licensing of media and deregulation.

332. Theories of Mass Communication. COM 241 or consent of instructor. (3).

Critical survey of theoretical literature on processes and effect of mass communication. Emphasis on political, social, economic and technological structures; functions of the media in contemporary society.

333. Print Production Techniques. Junior standing and ART/COM/THE 252. (3).

Exploration of publication design, focusing on aesthetic and technical issues of page layout and document design in relation to commercial printing. Font usage, image and file formats, efficient planning and production techniques. Also listed as ART 333.

334. Business of Visual Communications. At least junior standing. (3).

Introduction to business practices in the graphic design field. Negotiation, pricing, proposals and contracts, ethical standards, professional relationships. Also listed as ART 334.

335. Introduction to Web Graphics and Design. ART 145 (MCC) or ART/COM/THE 252. (3)f.

Introduction to aesthetic and technical concerns of creating and designing with graphics on the World Wide Web (WWW). Web pages, graphic formats, digital capture, color management, browser and computer platform choice, and interactivity. Students execute and maintain a personal WWW site as part of coursework. Also listed as ART 335.

338. Communications in Business. ENG 112; at least junior standing. (3).

Theory and practice of business communications. Audience; content and tone; collection and arrangement of data; selection of form, strategy, and medium. Practical applications to management, including oral, written and audio-visual presentations. Also listed as ENG 338.

340. Graphic Design in Communication. At least junior standing, two 200-level courses in communication; or consent of instructor. (3)f.

Theory and application of concepts, materials and tools utilized in the creation of organizational printed materials. Introduction to the techniques of page design, layout, and illustration. Projects include brochures, newsletters, and in-house publications. Speakers and tours. Also listed as ART 340.

341. Audio Production. COM 200 or 204 or 210; or consent of instructor. (3).

> Fundamental theories of audio and audio program production, including basics of digital audio, studio and remote recording; demonstration of the importance of sound in electronic media and how its use affects media productions. Through application of audio concepts in the radio laboratory and critiques of radio projects and programs, students gain requisite skills to successfully design and execute audio strategies for media.

342. Video Production. COM 200 or 204 or 210; consent of instructor. (3).

Principles and practices of planning, producing and directing video productions, including the basics of digital video, studio and remote and filming. Focus on how video production and its use influence media productions.

344. Media Management and Programming. COM 241 or consent of instructor. (3).

Understanding management in broadcast media, with particular attention to radio, television and cable. Examination of format types of broadcast programming; analysis of special problems of managing talent; sales and marketing of air time promotion; program evaluation.

346. Animation. COM 342 or ART 131 (MCC) or consent of instructor. (3)f.

Introduction to animation techniques and concepts through lecture, film and video examples and practical application of various forms and styles. May be elected four times for credit. Also listed as ART 346.

347. Motion Graphics. ART 252 and 335 or consent of instructor. (3)f.

Introduction to motion graphics for broadcast, web-based and interactive technologies. Practical application of various software and file formats. Also listed as ART 347.

361. Public Relations. ENG 112, COM 200; or consent of instructor. (3).

Theory, philosophy, and function of agency, business, and institutional relations with the public through newspaper, radio, television, and other media. Procedures for researching, planning, implementing and evaluating public relations campaigns, with special emphasis on writing and publicity problem solving.

362. Communication Behavior in Organizations. *COM 261 or consent of instructor.* (3).

Investigation of theories and models of communication in organizational settings. Emphasis on analysis and diagnosis of communication patterns and consideration of methods for implementing appropriate and effective communication practices in organizations.

363. Conflict Management. COM 200 or consent of instructor. (3).

Intensive theoretical investigation of communication barriers and breakdowns in interpersonal and public settings. Focus on the management of conflict through effective communication.

368. Teaching Speech in Middle and Secondary Schools. Prior or concurrent election of EDE 360 or EDS 360. (3).

Methods, materials and objectives of speech education in middle and secondary schools; modern trends in instruction; problems and procedures in teaching and directing theatre, debate, discussion, and other speech activities. Scheduled for the winter of odd-numbered years. Also listed as EDS 348 and THE 368.

 Advanced Public Relations. COM 361 or consent of instructor. (3).

Advanced theory with emphasis on management of the public relations function as a purposive, goal-directed activity. Practical applications in development of a comprehensive public relations program; production of program materials and activities; and evaluation of programs conducted by companies, non-profit institutions, and government agencies. Advanced writing techniques for specialized and mass speechwriting.

381. Intercultural Communication. COM 200 or consent of instructor. (3)s.

Critical investigation of the complexities of communication between cultures. Centers on communication not only between nations, but between groups distinguished by race, gender, religion and class.

382. Small Group Communication. COM 200 or consent of instructor. (3).

Theories of small group communication in problem solving and decision making situations. Focus on the relationship of leadership to group interaction strategies and communication styles.

390. Independent Research. Consent of instructor. (1-3).

Research study by qualified students under the supervision of the instructor. Research may use a variety of methodological approaches in communication (i.e., critical, historical, quantitative). *Graded ABCDE/Y*.

391. Directed Readings in Communication. COM 300, consent of instructor. (1-2).

Designed to allow students to explore facets of communication studies that may not be presented in regular course offerings.

392. Cooperative Education Experience in Communication.

At least junior standing, consent of the program advisor

and the Director of Cooperative Education. Previous election of BUS 290 recommended. (3).

Job assignment planned jointly by student, program advisor, supervisor, and a representative of the Cooperative Education Program. Duties involved should relate to the student's academic program and progress, and increase in responsibility and difficulty during the period of assignment. A paper describing problems encountered and methods of handling them is required. Supervisor submits a written evaluation of student's progress. *Graded ABCDE/Y*.

398. Internship in Art and Communication. Consent of instructor. (1-6).

Hands-on work experience and exploration of career opportunities in the art and communications fields. Selected placement of qualified students in commercial or non-profit organizations. May be repeated for credit to a total of 9 credits. Also listed as ART 398. Graded ABCDE/Y.

399. (299). Topics in Communication Theory and Criticism. *At least junior standing or consent of instructor. (3).*

Special areas of communication theory and approaches to communication criticism. Possible offerings: the rhetoric of social movements; film genres and social change; persuasion and propaganda; studies of specific figures in the history of public address. May be elected twice. Only three credits may apply toward the concentration in Communication.

404. Studio Photography I. ART 302, 304. (3)f.

Exploration of studio practice, including lighting, set construction, props, and tabletop still life photography. *Also listed as ART 404*.

405. Studio Photography II. ART/COM 404. (3)f.

Advanced exploration of studio practice, including digital capture, workflows, and special effects. *Also listed as ART 405*.

406. Corporate Identity/Business Graphics. ART/COM 232 or consent of instructor. (3)f.

Exploration of the logo and logotype as visual representation, including application to collateral business materials. Emphasis on the creative process, research, and branding techniques. *Also listed as ART 406*.

407. Seminar in Oral Interpretation. *Consent of instructor and a lower level course appropriate to the area elected.* (1-3)f.

Also listed as THE 407.

416. Special Projects in Oral and Media Presentation. COM 200, 210, 241; or consent of instructor. (1-3)f.

Students apply organization, management, public relations and creative performance skills in media projects for the University or community. *Graded ABCD>N*.

422. Image and Text. ART 325, 330; or consent of instructor. (3)f.

Exploration of two major elements of graphic designphotography and typography. Students design and produce a variety of printed materials using these elements to communicate specific messages in a manner both effective and artistic. *Also listed as ART 422*.

428. Senior Seminar in Communication. COM 200, 210, 300; or consent of instructor. (3)

Focus on understanding and application of advanced communication theory. Students' knowledge of theory, writing skills and presentation skills developed and assessed.

450. Media, Propaganda, and Social Change. Senior standing; COM 301, 304, 320; or consent of instructor. (3).

The role of mass communication in social movements, propaganda, and social change. The nature and rhetorical strategies of propaganda in historical and current events. Social movements and propaganda campaigns including the Crusades, Reformation, Antislavery, WW I, WW II, Cold War, Hipsters, Anti War, Civil Rights, Advertising, Northern Ireland, the War on Terror; sociological propaganda.

495. Honors Thesis I. *Permission of the Honors Council or its designate. Consent of the Communication Program Director. Open only to Honors Program students.* (4).

Credit and grade will not be given until successful completion of COM/HON 496. Also listed as HON 495. Graded ABCDE/Y.

496. Honors Thesis II. Permission of the Honors Council or its designate. Consent of the Communication Program Director. Prior or concurrent election of COM/HON 495. Open only to Honors Program students. (4). Also listed as HON 496. Graded ABCDE/Y.

Graduate Courses in Communication

507. Topics in Communication and Visual Art. Graduate standing. (3).

Focus on various topics involving intensive study in areas related to communication, graphic design, or studio art. The title for each section varies based on the topic of study. May be re-elected for different topics. *Also listed as ART 507*.

550. Media, Propaganda, and Social Change. Graduate standing. (3).

See COM 450 for description. Not open to students with credit for COM 450.

Visual Arts

Mission and Program Assessment

The Visual Arts program offers a curriculum that emphasizes analytical processes and competency in art techniques. Students are trained as viewers, creators, communicators, theorists, and historians of art. In addition, the curriculum provides students with the necessary knowledge and skills to serve as artists in related fields, such as art education, exhibition coordinating/curating and criticism. The program participates in the University-wide effort to assess its academic programs. Information on assessment plans, including goals, methods and outcomes is available at http://assessment.umflint.edu.

Relationship with Mott Community College (MCC) Art Department

The Visual Arts Program at the University of Michigan-Flint (UM-F) benefits from a dynamic partnership with MCC. Art students take a core of foundation classes in Art and Art History at MCC and then complete requirements for graduation at UM-Flint. The purpose of the partnership is to offer students the best possible education in art by taking advantage of the quality foundation program at Mott Community College and the more advanced course offerings at UM-Flint. Degrees in Art granted by UM-Flint require that students attend both schools. It is also possible to complete the foundation work required at schools other than MCC, and present a portfolio to gain admission into the University of Michigan-Flint Visual Arts Program.

Programs in Visual Art

Four concentration programs are offered: the General Program in Studio Art (Bachelor of Fine Arts), the Honors Program in Studio Art (Bachelor of Fine Arts), the General Program in Visual Communication (Bachelor of Fine Arts), and the Program in Visual Arts Education (Bachelor of Science). Minors in Art and Art History are also available.

Visual Art also participates in the Bachelor of Applied Science (BAS) degree program by offering coursework in photography and graphic design.

Guest Status and Consortium Requirements

Students with declared Studio Art Concentrations, Visual Arts Education Concentrations, Art Minors, or Teacher's Certificate Minors in Art are required to take a number of courses in art that are offered at Mott Community College and not at the University of Michigan-Flint. Students with declared Studio Art Concentrations, Visual Art Education Concentrations, Art Minors, or Teacher's Certificate Minors in Art must submit a guest application to take any art or photography course at Mott Community College.

Students with declared Studio Art Concentrations, Visual Arts Education Concentrations, Art Minors, or Teacher's Certificate Minors in Art who receive **financial aid and/or scholarships** must submit a specially identified Guest Student Application in order to be considered part of the **Consortium** between Mott Community College and the University of Michigan-Flint. This form is only available through the Associate Dean, College of Arts and Sciences. Failure to submit this specially identified guest application **each term** will result in the student receiving financial aid only for the University of Michigan-Flint portion of their scheduled courses.

Students with declared Studio Art Concentrations, Visual Arts Education Concentrations, Art Minors, or Teacher's Certificate Minors in Art need only the signatures of the academic advisor and Art Program Director on the guest application for the Mott Community College art and photography courses. Furthermore, such students may take two or more art and photography courses in addition to other courses permitted to be taken by guest application in a single semester.

Certain College of Arts and Sciences rules are automatically waived for students with declared Studio Art Concentrations, Visual Arts Education Concentrations, Art Minors, or Teacher's Certificate Minors in Art:

A. Students with declared Studio Art and Visual Art Education Concentrations may attend Mott Community College as guest students and receive up to 15 art credits toward their concentration, and those with declared Art Minors or Teacher's Certificate Minors in Visual Art may receive up to 12 credits toward their minor, even if they have completed 62 or more credits.

- B. Students with declared Studio Art and Visual Arts Education Concentrations may transfer up to 15 art credits in courses for the concentration, and those with declared Art Minors or Teacher's Certificate Minors may transfer up to 12 art credits for the minor, in addition to the normal 62 credits from a twoyear institution, 75 credits from a four-year institution, and 90 credits from a branch campus of the University of Michigan. Additional credits beyond the 62, 75, or 90 count toward graduation only if the student completes the Art Concentration or Minor.
- C. Students with declared Studio Art and Visual Arts Education Concentrations may take up to 15 art credits in courses for the concentration, and those with declared Art Minors or Teacher's Certificate Minors in Visual Art may take up to 12 art credits for the minor, as long as they are enrolled in the College of Arts and Sciences. In particular, such credits may be taken at Mott Community College and counted among the last 30 credits taken before graduation.

The guest student must arrange for Mott Community College to send transcripts showing all courses that are to transfer to the Visual Art Concentration or Minor. Mott courses taken as a consortium student will transfer to the University of Michigan-Flint automatically.

Decisions concerning curriculum, admissions, standards, and procedures for this program are the responsibility of the Cooperative College Art Committee. Members of this committee represent the art areas of both Mott Community College and the University of Michigan-Flint and are appointed by the appropriate Dean of each institution.

General Program in Studio Art (Bachelor of Fine Arts)

See "Guest Status Requirements" at the beginning of this section for information necessary for Studio Art Concentrations.

The Bachelor of Fine Arts in Studio Art endeavors to prepare students for innovative roles in the contemporary world of art. The program begins with a series of foundation courses that stress the traditional development of technical and intellectual skills. The growth and development of each student are accelerated through exposure to several media and conclude with the choice of an area specialization.

Requirements. Completion of 124 credit hours distributed as follows:

- A. Completion of the College of Arts and Sciences general education requirements.
- B. Art History (15-19 credits).
 - 1. Survey courses (9-12 credits). ART 111 and 112 (MCC) or equivalent transfer course(s); ART 411.
 - Courses beyond survey (9-12 credits). From ART 214, 215 (MCC); ART 115, 140, 299, 308, 310, 311, 315, 331, 409, 410 (UM-F).
- C. Studio Art (63 credits), not to include ART 100 (UM-F).
 - 1. Two-dimensional design (3 credits). ART 141 (MCC).

- 2. Three-dimensional design (3 credits). ART 142 (MCC).
- 3. Beginning drawing (6 credits). ART 131, 132 (MCC).
- Life drawing (3 credits). ART 135 (MCC) or ART 361 (UM-F).
- 5. Computer Graphics. ART 145 (MCC) or ART 252 (UM-F)
- 24 credits in one areas of specialization selected from: ceramics, graphic design, design/photography, painting, printmaking/drawing, sculpture. Specific courses in the selected specialization should be chosen in consultation with the art advisor.

Ceramics.

ART 281, 282, 283, 284, 295 (MCC); ART 381, 382, 396, 496 (UM-F). (UM-F) may be repeated to total 12 credits each.

Painting.

ART 261, 262, 263, 264, 295, (MCC); ART 298, 360, 364, 365, 366, 395, 495 (UM-F). (UM-F) may be repeated to total 12 credits each.

Printmaking/Drawing.

ART 231, 235, 236, 237, 238, 295 (MCC); ART 298, 301, 361, 362, 395, 495 (UM-F). (UM-F) may be repeated to total 12 credits each.

Sculpture.

ART 271, 272, 273, 274, 295 (MCC); ART 298, 371, 396, 496 (UM-F). (UM-F) may be repeated to total 12 credits each.

Graphic Design.

ART 122, 145, 146, 242, 244, 245 (MCC); ART 160, 252, 298, 322, 324, 325, 326, 330, 335, 342, 395, 400, 401, 495 (UM-F).

Design/Photography.

ART 180, 184, 188 (MCC); ART 115, 116, 214, 216, 218, 298, 302, 304, 325, 326, 327, 395, 401, 495 (UM-F).

- 7. Nine credits above the 100 level in two-dimensional art chosen from areas outside the area of specialization.
- 8. Nine credits of three-dimensional art chosen from areas outside the area of specialization.
- 9. Additional elective courses to bring total credits in art to 63. At least 15 credits of studio art must be taken at the University of Michigan-Flint.
- D. Additional elective courses to bring total credits to 124, at least 50 of which are outside the studio art area.
- E. A minimum grade point average of 3.0 in studio art classes.
- F. ART 399 (UM-F), Senior Seminar (3 credits).
- G. Presentation of a senior exhibition. Passage or failure of this exhibition will be included in the senior seminar grade.

Honors Program in Studio Art (Bachelor of Fine Arts)

Requirements

- A. All requirements for the Bachelor of Fine Arts in Studio Art.
- B. Completion of the general education requirements of the College of Arts and Sciences, to include HON 155, 156, 251, 252

- C. ART/HON 494 (1-3 cr.). Work in preparation for the offcampus study project, generally taken during the junior years. (May count toward required 66 elective credits of studio art; may be repeated to a total of 6 credits.)
- D. ART 497 (4 cr.) Three to 12 weeks of off-campus study, generally during the summer after the junior or senior year. (May count toward required 66 elective credits of studio art.)
- E. ART 498 (4 cr.) Honors thesis, project or exhibition. (May count toward required 66 elective credits of studio art.)
- F. HON 498 (390).

General Program in Visual Communication (Bachelor of Fine Arts)

The Bachelor of Fine Arts in Visual Communication undertakes the preparation of students for careers in the world of communication arts. The program encompasses a series of art foundation and history courses that emphasize technical, theoretical, and intellectual skills. The development and maturation of the student progresses through an acquisition of skills focused within contemporary media practice and concludes with a choice of area concentrations in either graphic design or photography.

Requirements. Completion of 124 credit hours as follows:

- A. Completion of the College of Arts and Sciences general education requirements.
- B. Art History and Theory (13 credits).ARH 112, 411; ART 160; COM 241.
- C. Visual Communication Studio Art (15 credits). ART 113, 114, 126, 152, 252.
- D. Studio Art Concentrations (33 credits). One of the following:

Graphic Design Concentration ARH 140; ART 230, 324, 325, 330, 335, 342, 347, 401, 406; CSC 263.

Photography Concentration ARH 116; ART 214, 215, 216, 218, 302, 304, 401, 402, 404; CSC 263.

E. Electives (12 credits).

Graphic Design Concentration Electives ART 115, 322, 323, 328, 398, 400, 407, 422; COM 210, 226, 301, 338, 361, 381; CSC 293.

Photography Concentration Electives ART 323, 325, 327, 328, 335, 398, 405; COM 200, 210, 226, 301, 338, 361, 381; CSC 293.

- F. Additional elective courses outside Art or Communications (9 credits).
- G. At least 15 credits of Visual Communication classes in section D above (Studio Art Concentrations) taken at the University of Michigan-Flint.
- H. A minimum grade point average of 3.0 for the classes in

- sections B, C, D and E above taken at the University of Michigan-Flint.
- Presentation and review of a design portfolio. Passage or failure of this portfolio presentation and review will be included in the Design Portfolio (ART 401) grade (3 credits).

Program in Visual Art Education (Bachelor of Science)

See "Guest Status Requirements" at the beginning of this section for information necessary for Visual Art Education Concentrations.

Prerequisites.

- A. Admission into the Visual Art Education Program, which requires a UM-Flint grade point average of 2.75 overall and a GPA of 3.0 in all Art courses.
- B. Meeting all requirements for admission into the Education Program, including the Basic Skills Test portion of the Michigan Test for Teacher Certification. Students may apply when they have earned 55 credits. There are two admission periods each year. Deadlines for applying are January 15 and September 15.

Requirements. At least 126 credits, including completion of the University of Michigan-Flint general education requirements. Completion of specific Art, Education, and other requirements as follows:

- A. Art History (15 credits).
 - 1. ART 111 and 112 (MCC) or equivalent.
 - 2. One from ART 116 (MCĆ); ART 120, 140, 308, 331, 410 (UM-F).
 - 3. ART 411.
- B. Studio Art (42 credits).
 - 1. Two-Dimensional Design: ART 141 (MCC) (3).
 - 2. Three-Dimensional Design: ART 142 (MCC) (3).
 - 3. Beginning Drawing: ART 131, 132 (MCC) (6).
 - 4. Computer Graphics: ART 145 (MCC) or ART 252 (UM-F) (3).
 - 5. Life drawing: ART 135 (MCC) or ART 361 (UM-F) (3).
 - Six additional credits, chosen to include two of the following two-dimensional disciplines: drawing, painting, printmaking, photography, graphic design, costume design.
 - Six additional credits, chosen to include two of the following three-dimensional disciplines: sculpture, ceramics, scene design.
 - Nine credits beyond the 100 level in an area of concentration (i.e., painting and drawing, printmaking, sculpture, graphic design, photography, or ceramics).
- C. Visual Arts Education (12 credits).
 - 1. ART 101 (MCC) Elementary School Art Education (3).
 - 2. ART 102 (MCC) Secondary School Art Education (3).
 - 3. ART 300/EDE 342 (UMF) Methods and Materials (3).
 - 4. ART 303/EDS 342 Issues, Methods and Materials in K-12 Art (3).
- D. Education (24 credits), all UM-Flint courses.
 - 1. EDE or EDS 300, EDE or EDS 302, EDE or EDS 360 (9).
 - 2. EDE 469, Student Teaching in the Elementary School (5).

- 3. EDE or EDS 499, Elementary or Secondary Student Teaching Seminar (2).
- 4. EDS 469, Student Teaching in the Secondary School (5).
- 5. EDR 445/ENG 410, Improvement of Reading in the Middle and Secondary School (3).

E. Others

- Approved course in first aid including adult and child CPR.
- 2. PSY 100 (3).
- A course in the history or culture of an American ethnic minority from: AFA/SOC 270; EDE 403; AFA/HIS 334; EDE 432/PUB 438; ENG 213, 374.
- 4. A course in US history. HIS 220, 221 recommended.
- F. All requirements of the College of Arts and Sciences Bachelor of Science degree, including general education requirements.

Prospective candidates should also study the sections in this *Catalog* entitled "General Requirements for Teacher Certification," "Secondary Education Teacher's Certificate Programs," and "Bachelor of Science General Degree Requirements."

Minor in Art

The minor in Art provides a basic introduction to both Studio Art and Art History. This minor can be earned by taking foundation level courses at Mott Community College (or elsewhere) and advanced level courses at the University of Michigan-Flint.

See "Guest Status Requirements" at the beginning of this section for information necessary for the Art Minor.

Requirements. At least 21 credits as follows, with a grade of C (2.0) or better in each course, and including at least 9 credits completed at the UM-Flint.

- A. Core courses (9 credits).
 - 1. Drawing: ART 131, 132 (MCC).
 - 2. Two-dimensional *or* three-dimensional design: ART 141 *or* 142 (MCC).
- B. Art History courses (6-8 credits). From the following:
 - 1. ART 111, 112, 116, 214, 215 (MCC).
 - 2. ART 115, 120, 140, 299, 308, 310, 311, 315, 331, 409, 410, 411 (UM-F).
- C. Studio Art (6 credits). From courses beyond the 100 level.

To obtain this minor, a declaration of intent to pursue the Art Minor must be filed with the academic advisor and Director of the Art Program, who then forward the declaration to the University of Michigan-Flint Registrar.

Minor in Art History

The Minor in Art History provides a basic introduction to art history survey, contemporary art and a survey of non-Western art. Students will also explore a number of more specific periods and cultures. This minor can be earned by taking foundation level courses at Mott Community College (or elsewhere) and advanced level courses at the University of Michigan-Flint.

Requirements. At least 21 credits as follows, with a grade of C (2.0) or better in each course, and including a least 9 credits completed at UM-Flint.

- A. Core Courses (12-16 credits).
 - 1. A two semester art history survey sequence (MCC

ART 111 & 112 or equivalent).

- 2. A course in contemporary art history (ART 411 or equivalent).
- 3. A course in the art of a non-Western culture or cultures. (ART 308, 331).
- B. Additional Art History courses to bring the total to at least 21 credits, including at least 9 taken at UM-Flint, and including surveys of photography and graphic design.

Students are encouraged to work with an art advisor in the Art Program to determine courses for this minor.

Courses in Visual Art (ART)

100. Introduction to the Studio. (3)f.

Introductory course involving students in several areas of studio art including (but not limited to) drawing, two-dimensional design, three-dimensional design using a variety of drawing, painting, and sculpting materials. Designed for non-art majors who want a hands-on studio experience; does not replace the foundation courses required for those majoring in art.

101. Art Education-Elementary. (3).

How to organize creative art activities in an elementary (grades K-6) curriculum; the philosophy of art education; motivation, guidance and evaluation of child art; the normal growth pattern of child art; the functions of art in society. Design sensitivity and personal creativity stimulated through laboratory experiences. Taught at Mott Community College; follows its class schedule. In case of grievance, MCC policy followed.

102. Secondary Methods of Art Education. Art 101. (3).

How to organize creative art activities in junior or senior high school (grades 7-12); art and the exceptional child; characteristics of the adolescent learner; social and ethical issues in adolescent art; studio procedures to introduce specialized art careers. Taught at Mott Community College; follows its class schedule. In case of grievance, MCC policy followed.

111. Art History Survey: Ancient through Middle Ages. Prior or concurrent election of ENG 111. (4)h.

History of art from the earliest times through the Middle Ages in Europe, the Mid-East and Africa. Includes painting, sculpture and architecture.

112. Art Survey: Middle Ages to Present. Prior or concurrent election of ENG 111. (4)h.

History of art from the Middle Ages through the present. Includes painting, sculpture and architecture.

113. Drawing for Design I. (3)f.

Basic drawing techniques with emphasis on the fundamentals of observation and basic composition. Exploration and analysis of spatial relationships, representational drawing, form and concept using black and white media. Also listed as COM 113.

114. Drawing for Design II. ART/COM 113 or consent of instructor. (3)f.

Advanced drawing techniques with emphasis on conceptual sketching and rendering using color media. Exploration of perspective, storyboarding, visualization and presentation techniques. Also listed as COM 114.

116. Introduction to Black & White Photography. (3)f.

Introduction to material and techniques of traditional B&W photography. Utilization of the 35mm camera format; introduction to mechanical and aesthetic aspects of the photographic process.

120. Introduction to the Visual Arts. (3)f.

Examination of the essential characteristics of the visual arts, intended to develop in the student a discriminating appreciation of these arts. Lectures, tapes, slides, reading, and gallery tours.

131. Drawing. (3)f.

Freehand drawing using basic drawing materials. Exploration of the figure, still life, other traditional and non-traditional sources for visual imagery. Emphasis on the visual concept and its relationship to techniques and materials. Taught at Mott Community College; follows its class schedule. In case of grievance, MCC policy followed.

132. Drawing II. ART 131 or consent of department. (3).

Continuation of ART 131 with emphasis on more advanced training. Color as a means of creative expression; development of personal imagery through a variety of approaches. Taught at Mott Community College; follows its class schedule. In case of grievance, MCC policy followed.

141. Basic Two-Dimensional Design. (3).

Introduction to underlying concepts for making and analyzing two-dimensional art. Use of design elements and principles with basic color theory to achieve specific goals for visual communication. Taught at Mott Community College; follows its class schedule. In case of grievance, MCC policy followed.

142. Basic Three-Dimensional Design. ART 141. (3)f.

Visual fundamentals of three-dimensional design. experience in expression of personal ideas in form, using a variety of techniques and methods. Taught at Mott Community College; follows its class schedule. In case of grievance, MCC policy followed.

145. Introduction to Computer-Based Art. Prior or concurrent election of ART 141. (3).

Introduction to creation of computer-based art using the Mac OS environment. Introduction to the Macintosh Operating System interface, with graphic design, photo manipulation, and illustration industry standard software dealing with Vector Graphics and Bitmapped Graphics. Students work in Art Area Computer lab for development and completion of their projects, and are required to use the internet and e-mail for various class activities. One of several first-year art courses used to assess the Supplemental Application for continuing in the Graphic Design Degree Program.

152. Color and Design. (3)f.

Exploration of design principles of organization, utilizing such elements as line, shape, color, texture and scale to create and evaluate compositions. Emphasis on aesthetic and technical aspects of color theory within the field of visual communication. Also listed as COM 152.

160. Visual Communications Theory and Process. (3)f.

Introduction to contemporary graphic design. Theory, professional practices, creative workflow, career paths, digital graphics hardware and software usage, copyright, ethics. Also listed as COM 160 and THE 160.

199. Special Topics & Workshops. Consent of Communication & Visual Arts chair. (3)f.

Special topics of interest and concern to studio artists and students in a workshop or seminar format. Focus on topics not usually considered in depth in the other studio courses and/or on special approaches of techniques intended to expand the students' bases of expression in the visual arts. Taught at Mott Community College; follows its class schedule. In case of grievance, MCC policy followed.

214. Color Photography. ART 116. (3)f.

Introduction to the history, aesthetics, and technique of color photography; emphasis on critical method and practical exercises.

216. Advanced Black and White Photography. ART 116. (3)f.

Continuation of the materials and techniques of ART 116. Introduction to new film development and printing techniques, and advanced aesthetic aspects of the photographic medium. Color photography introduced as an additional aesthetic element.

218. Alternative Photo Processes. (3)f.

Introduction to non-silver and non-traditional imagemaking. Exploration of experimental techniques involving historical processes, Polaroid materials, computer-generated negatives, mixed media combinations.

232. Typography I. (3)f.

Introduction to the history and use of typography within the filed of visual communication. Exploration of type, from individual letterforms to words and pages and integration of image and text. Also listed as COM 232.

251. Fundamentals of Stage Makeup. (2)f.

Theory and practice of both two-and-three dimensional character makeup for the theatre. Lecture and laboratory. Also listed as THE 251.

252. Introduction to Digital Design. ART 160 or consent of instructor. (3)f.

Introduction to two-dimensional art fundamentals and use of computer software in studio practice. Exploration of visual problem solving and the creative process. Also listed as COM 252 and THE 252.

271. Introduction to Theatre Design. (3)f.

Introduction to basic elements of design and application of these elements to theatrical design. Emphasis on interpreting dramatic text and communicating ideas visually. *Also listed as THE 271*.

298. Topics in Art Studio. (3)f.

Undertaking of special art projects and/or an exploration of a unique medium to develop additional artistic skills and competence. May be elected three times for credit.

300. Methods and Materials. ART 101 (MCC). (3).

Application of skills and information learned in studio classes to teaching. Development of sequential art curriculum for elementary, middle and secondary teaching, production of instructional resource files, assessment of artwork, current issues in art education. Clinical experiences in elementary, middle and secondary classrooms. *Also listed as EDE 342*.

301. Advanced Drawing. ART 132 or consent of department. (3)f.

Explores the possibilities of using drawing as a medium in the making of art. Various materials and techniques are explored. Emphasis on individual development in aesthetic response and technique. *May be taken four times for credit.*

Photographic Lighting Techniques. ART 116 or consent of instructor. (3)f.

Demonstration and hands-on experience exploring basic and technical use of ambient, tungsten and electronic flash illumination with color and black and white film. Students work with a variety of lighting equipment and accessories to make images with predictable creative results.

303. Issues, Methods and Materials in K-12 Art. ART 300 or EDE 342 or consent of instructor(3).

Student participation in art educational experiences and teaching of seminars in a real classroom setting, based on study of course texts and resources addressing K-12 contemporary issues in art education, the history of art education, issues of "special needs" students, classroom management skills, and instructional practices for elementary, middle and high school level courses. Offered in Winter semesters. Also listed as EDS 342.

304. Medium and Large Format Photography. ART 116 or consent of instructor. (3)f.

Exploration of large format view camera capabilities, including technical and aesthetic possibilities afforded by this original camera style. Special attention to large negative and larger print production.

306. Art of Collage. ART 141 (MCC) or ART 131. (3)f.

Exploration of abstract, representational, semi-abstract and non-objective imagery through the manipulation of a variety of materials, media and collage techniques. Exploration of two-dimensional and three-dimensional forms to facilitate expression of personal interests.

323. Scene Painting. A University-level drawing class; THE/ART 271.(3).

Scene painting techniques including color theory, heightened perspective, stenciling, dimensioning, landscape and architectural styles. Applied work on realized sets. *Also listed as THE 322*.

324. Introduction to Computer Illustration. ART 252. (3)f.

Techniques of interpreting and visualizing verbal information focusing on design, composition and color theory and exploring a wide variety of imagery. Focus on the development of a personal visual vocabulary through critical analysis.

326. Introduction to Digital Photography. ART 216 or consent of instructor. (3)f.

Introduction to technical and creative use of digital cameras and computer-aided imagery. Utilization of digital cameras, computers and sophisticated imaging software as a tool for individual expression.

327. Photographic Printmaking. ART 116 or 218 or 325; or consent of instructor. (3)f.

Exploration of photographic image making using traditional darkroom, digital, and alternative process techniques and materials. Emphasis ion development of a stylistic body of work based on concepts combined with appropriate materials.

328. Artist Bookmaking. Consent of instructor. (3)f.

Methods of preparing images and text to be expressed as a bound book. Artists' books, journals, electronic bookworks.

329. (325). Introduction to Digital Imaging. ART/COM 152, ART/COM/THE 252; or consent of instructor. (3)f.

Introduction to technical and creative use of computer aided pixel based imagery. Utilization of desktop computers and sophisticated professional imaging software as a tool for individual expression. *Also listed as COM 329*.

330. Typography II. ART/COM 232. (3)f.

Examination of the impact of typography on the world of visual communication through symbolic, cultural, aesthetic and personal typography.

333. Print Production Techniques. Junior standing and ART/COM/THE 252. (3).

Exploration of publication design, focusing on aesthetic and technical issues of page layout and document design in relation to commercial printing. Font usage, image and file formats, efficient planning and production techniques. *Also listed as COM 333*.

334. Business of Visual Communications. At least junior standing. (3).

Introduction to business practices in the graphic design field. Negotiation, pricing, proposals and contracts, ethical standards, professional relationships. *Also listed as COM 334*.

335. Introduction to Web Graphics and Design. ART 145 (MCC) or ART/COM/THE 252. (3)f.

Introduction to aesthetic and technical concerns of creating and designing with graphics on the World Wide Web (WWW). Web pages, graphic formats, digital capture, color management, browser and computer platform choice, and interactivity. Students execute and maintain a personal WWW site as part of coursework. *Also listed as COM 335*.

336. Creative Learning Experiences. Prior or concurrent election of EDE 360. (3).

Creative activities for early childhood, elementary, and middle school children through the integration of art, music, play and drama. Techniques of planning, presenting, and evaluating creative learning experiences for the classroom. *Also listed as EDE 340, MUS 336 and THE 336.*

340. Graphic Design in Communication. At least junior standing and two 200-level courses in Communication; or consent of instructor. (3)f.

Theory and application of concepts, materials and tools utilized in the creation of organizational printed materials. Introduction to the techniques of page design, layout, and illustration. Projects include brochures, newsletters, and in-house publications. Speakers and tours. *Also listed as COM 340*.

342. Editorial Design. ART 146. (3)f.

Examination of historical traditions of graphic design expression in the book form and its modern descendants such as magazines, newspapers, and other print media. Concepts and designs as expressed through editorial concept, content, format, image and audience.

346. Animation. COM 342 or ART 131 (MCC) or consent of instructor. (3)f.

Introduction to animation techniques and concepts through lecture, film and video examples and practical application of various forms and styles. May be elected four times for credit. *Also listed as COM 346.*

347. Motion Graphics. ART 252 and 335 or consent of instructor. (3)f.

Introduction to motion graphics for broadcast, web-based and interactive technologies. Practical application of various software and file formats. *Also listed as COM 347*.

350. Mixed Media. At least junior standing or consent of instructor. (3)f.

Intermediate course exploring a variety of media using assorted techniques including collage and assemblage. Readymade objects as well as newly formed objects used to make innovative art in a sculptural direction. May be elected four times for credit.

351. Choreography I: Composition. (3)f.

Exploration of choreographic structure, dramatic and stylistic components involved in the study and creation of movement in the studio and on computer. *Also listed as DAN 351*.

352. Choreography II: Form and Motion. (3)f.

Continuation of ART/DAN 351. Also listed as DAN 352.

360. Watercolor. ART 131 (MCC); or consent of instructor. (3)f.

Exploration of painting techniques are explored using the medium of watercolor. Stress on composition, concept, and other formal concerns. *May be taken up to four times for credit.*

361. Drawing and Painting from Life. ART 131 (MCC) or consent of instructor. (3)f.

Focus on the human figure as a source of imagery. Traditional drawing materials and water media.

362. Drawing and Painting from Life II. *ART 361 or a course in life drawing.* (3)f.

Continuation of the methods and concerns developed and considered in ART 261. Focus on the human figure as a source of imagery. Traditional drawing materials and watercolor. Emphasis on development of individual methods, working in series, expanded knowledge and use of media, and increased understanding of anatomy.

364. Painting. ART 131 (MCC) or consent of instructor. (3)f.

Fundamentals of painting and exploration of painting media, techniques, and processes. Studio experiences in developing representational and conceptual experimentation as well as visual imagery. Designed to help establish and develop basic technical skills and understanding of pictorial concepts.

365. Advanced Painting. ART 364 or consent of instructor. (3)f.

Painting methods using oil and acrylic paint, with students choosing to work in one or both of the media. Emphasis on the development of individual methods and increasing one's knowledge of the techniques and materials chosen. May be taken four times for credit.

366. Mural Painting. ART 131 (MCC) or consent of instructor. (3)f.

History and techniques of mural painting. Students paint 1-2 murals after a design is selected by clients from those presented by class members. May be repeated twice for credit.

370. Costume Design for the Theatre. THE 271 or consent of instructor. (3).

Application of theories and techniques of costume design to specific problems of the play. The student produces renderings for costume designs using various media. Lecture and laboratory. *Also listed as THE 370*.

371. Sculpture. ART 142 (MCC) or consent of instructor. (3)f.

Explores individual expressive possibilities in a sculptural direction. Broadening of both technical and design experience. *May be repeated up to three times for credit.*

380. Scene Design for the Theatre. THE 271 or consent of instructor. (3)f.

Three dimensional design for the stage. Design and execution of three dimensional scale models, scenic renderings

appropriate to the play. Use of various media. Lecture and laboratory. Also listed as THE 380.

381. Ceramics. ART 142 (MCC) or consent of instructor. (3)f.

Creation and execution of designs in clay for both functional and non-functional pieces. Making glazes, stacking and firing a kiln. Emphasis on individual development in aesthetic response and technique. May be taken four times for credit.

382. Advanced Ceramics. ART 381 or ART 281 (MCC) or consent of instructor. (3)f.

Advanced studio course. Continued exploration of hand building techniques and work on the potter's wheel to execute designs in clay for functional and non-functional purposes. Formulating glazes, stacking and firing a kiln. Advanced students encouraged to research and develop personal styles in aesthetic response and technique. May be repeated to total 12 credits.

395. Advanced Studio Problems, Two-Dimensional. Consent of instructor. Open only to upper-level students in art. (1-6)f.

Advanced level studio course, intended to encourage individual development in a selected medium. Oil paint, acrylic, mixed media, watercolor or drawing materials may be selected. *May be repeated to total 12 credits*.

396. Advanced Studio Problems, Three-Dimensional. Consent of instructor. Open only to upper-level students in art. (1-6)f.

Pursuit of individual projects in three-dimensional media; limited to students with previous advanced work in sculpture, ceramics, or another three-dimensional area. *May be repeated to total 12 credits*.

398. Internship in Art and Communication. Consent of instructor. (1-6).

Hands-on work experience and exploration of career opportunities in the art and communications fields. Selected placement of qualified students in commercial or non-profit organizations. May be repeated for credit to a total of 9 credits. Also listed as COM 398. Graded ABCDE/Y.

399. Senior Seminar. Completion of at least 85 credit hours and consent of instructor. (3)f.

Necessary and practical information related to artists entering the art world. Technical items such as matting, framing, photographing and displaying art; writing contracts; and dealing with commissions. Senior BFA exhibition included as part of the course grade. *Graded ABCDE/Y*.

400. Advanced Computer Illustration. ART 324 or consent of instructor. (3)f.

Extension of ART 324. Emphasis on production of advanced illustration techniques and execution of a professional portfolio of images.

401. Senior Design Portfolio. Graphic design or photography concentration; senior standing; consent of instructor. (3)f.

Rigorous directed study designed to produce a professional portfolio of personal work capable of producing commissioned assignments or professional employment.

402. Project Photography. ART 302, 304. (3)f.

Photographic study devoted to a single, semester-long photography project. Exploration of theories and techniques of creating sustained visual content. Emphasis on identifying projects capable of execution within a planned concept, time-frame, budget, and use of the medium.

404. Studio Photography I. ART 302, 304. (3)f.

Exploration of studio practice, including lighting, set construction, props, and tabletop still life photography. *Also listed as COM 404*.

405. Studio Photography II. ART/COM 404. (3)f.

Advanced exploration of studio practice, including digital capture, workflows, and special effects. *Also listed as COM 405*.

406. Corporate Identity/Business Graphics. ART/COM 232 or consent of instructor. (3)f.

Exploration of the logo and logotype as visual representation, including application to collateral business materials. Emphasis on the creative process, research, and branding techniques. *Also listed as COM 406*.

422. (322). Image and Text. ART 325, 330; or consent of instructor. (3)f.

Exploration of two major elements of graphic designphotography and typography. Students design and produce a variety of printed materials using these elements to communicate specific messages in a manner both effective and artistic. *Also* listed as COM 422.

495. Independent Studio Projects, Two-Dimensional. *Consent of instructor. Open only to upper-level students in art.* (1-6)f.

Advanced independent studio course, intended for students who have repeated ART 395 to total 12 credits and post-graduate art students who wish to continue their studio work in a university studio setting. Students should have a project or series of works in mind and be able to work independently. Oil paint, acrylic, watercolor, or other 2-D media may be selected. *May be repeated to total 12 credits*.

496. Independent Studio Projects, Three-Dimensional. Consent of instructor. Open only to upper-level students in art. (1-6)f.

Advanced independent studio course, intended for students who have repeated ART 396 to total 12 credits and post-graduate art students who wish to continue their studio work in a university studio setting. Students should have a project or series of works in mind and be able to work independently. Clay, metal, wood, mixed media, or other 3-D media may be selected. *May be repeated to total 12 credits*.

Courses in Art History (ARH)

140. History of Graphic Design. (3)h.

Chronological survey of graphic design through slide lectures. The course will study how graphic design responded to international, social, political, and technological developments since 1450. Emphasis will be on printed work from 1880 to present and the relationship of that work to other visual arts and design disciplines. *Also listed as COM 140*.

215. (115). Photography Survey. *ENG* 112. (3)h.

Discussion of the history, aesthetics, and uses of photography. Introduction to black and white photographic processes. *Also listed as COM 215*.

241. Modernism. At least sophomore standing. (3)h.

Emergence of the modern movement in theatre and art from the end of the 19th century to the present and the aesthetic characteristics shared by each. *Also listed as THE 241*.

299. Topics in Art History. Prior or concurrent election of ENG 112. (3)h.

Examination of the art done during specific historic periods or artistic movements or by individual artists or groups of artists. *May be elected three times for credit.*

308. African and African-American Art. At least sophomore standing. (3)h.

Survey of Africa's art history, from Stone Age to early 20th century; introduction to select group of African-American artists. Lectures, museum visits, hands-on projects, short research paper. *Also listed as AFA 308*.

310. Classical Greek and Roman Art. At least sophomore standing or consent of instructor. (3)h.

History of painting, sculpture, and architecture of ancient Greece from the Bronze Age through the Hellenistic period, and ancient Rome from the Republic through the 4th century. History of archaeological excavations of selected sites included.

311. Renaissance Art. At least junior standing or consent of instructor. Previous coursework in art history recommended. (3)h.

Survey of the art and architecture of Europe from the 14th through the 16th centuries. Early Renaissance, high Renaissance and Mannarist styles considered in relation to their respective intellectual, social and economic milieus.

312. Northern Renaissance Art. Sophomore standing. Previous study in art history or European history recommended. (3).

Art of northern Europe from the end of the middle ages through the High Renaissance of the 16th century; oil painting, manuscript illumination, prints, sculpture. Topics include the Humanistic study of classical antiquity; the Protestant doctrine against the Catholic Church; peasant revolts against the nobility, conflict between town and country; the artist as individual; the new role of art patrons.

315. Impressionism and French Culture. At least sophomore standing. (3)h.

The Impressionist spirit in French painting and life, 1860-

1910, and its influence on painting in other countries.

331. Artistic Traditions of China and Japan. At least junior standing or consent of instructor. (3)h.

Beginning with archaeological tomb excavations dating to the 11th century B.C., this course examines Chinese painting, sculptural and architectural traditions as well as the philosophical and religious beliefs that are inextricably bound up with Chinese culture. The second half of the semester focuses on Japanese painting, prints, architecture, garden design and decorative arts.

397. Directed Research: Art History. *Consent of department chair and instructor.* (1-3)h.

Independent research experience in art history under the direction of an art faculty member. *Designed for students studying away from the Flint campus*.

409. History of American Art. *At least junior standing.* (3)*h.*

Survey of American art from the colonial days of the early 17th century to the watershed Armory show of 1913. Chronological approach; developments of an American tradition of painting, sculpture, and architecture in the context of social, ideological, and political forces of each period. Primary themes include the nation's search for self-definition and formation of national identity.

410. Women as Artists. At least junior standing. (3)h.

History of the art produced by women artists, from 1550 to the present. Topics include the historical slighting of women artists, feminist imagery, politics and contemporary feminist criticism. Figures include Gentileschi, Vigee-Lebrun, Kauffman, O'Keefe, Cassatt, Chicago, and Nevelson. *Also listed as WGS 410.*

411. Contemporary Global Art. (3)h.

Exploration of the conceptual development of contemparory making of art, comparing and contrasting Western and non-Western art traditions. Why art is made, the function of art, the development of imagery, technical aspects of the making of art. Influences of colonization, tradition, gender, materials, global communications, and the economy. Art of the trained and untrained, art during times of peace and times of turmoil.

Graduate Course in Art (ART)

507. Topics in Communication and Visual Art. *Graduate standing.* (3).

Focus on various topics involving intensive study in areas related to communication, graphic design, or studio art. The title for each section varies based on the topic of study. *This course may be re-elected for different topics. Also listed as COM 507.*

Graduate Course in Art History (ARH)

509. History of American Art. *Graduate standing.* (3).

See ART 409 for description.

Comparative and General Literature (CPL)

344 David M. French Hall (810) 762-3370 Fax: (810) 762-3066

Coordinator and Faculty Advisor: Dr. Jamile Lawand (Foreign Languages and Literatures Department)

Courses in comparative and general literature are intended for students whose interest in literature is too broad to be met in the curriculum of any single department. Courses are centered, not on national literatures, but on the study of a period, movement, theme, genre, or problem of criticism common to several literatures.

While enabling the student concentrating in literature to profit by the increased awareness and understanding to be derived from a knowledge of more than one national literature, courses in comparative literature also give the curious student an opportunity to become familiar with important works and movements of world literature in a comparative context as well as to relate literature to other fields of knowledge. All courses in comparative literature may be taken to meet the general education requirement in humanities. Certain courses, as indicated, are cross-listed with other departments.

Courses in Comparative and General Literature

204. Literature of Greece and Rome. Prior or concurrent election of ENG 112. (3)h.

Contribution of classic myth to European and American literary culture. Selected masterpieces of ancient literature read in English translation. *Also listed as ENG 204*.

205. The Bible in English: Old Testament and Apocrypha. Prior or concurrent election of ENG 112. (3)h.

The Old Testament, in contemporary English translation, considered as a humanistic document of central importance to Western Civilization; emphasis on the literary values and cultural backgrounds of selected books from the Torah, History Books, Wisdom Literature, Prophets, Poetry and Apocrypha. *Also listed as ENG 205*.

206. (319). Survey of African Literature. (3)h.

Introduction to works of representative writers from all parts of the African continent. Also listed as AFA 206 and ENG 209.

207. Modern African Drama and Poetry. (3)h.

Introduction to contemporary African drama and poetry, whose themes reflect socio-cultural, political and religious events prevalent in the societies from which they emanate. The relationship between traditional and modern drama and poetry. Analysis of language in selected poems and plays, including works by Wole Soyinka, Ama Ata Aidoo, Tess Onwueme, Athol Fugard, Dennis Brutus, and Niyi Ozundare. *Also listed as AFA 207 and THE 207*.

208. Survey of Greek and Roman Classical Literature. *Prior or concurrent enrollment in ENG 112. (3)h.*

Survey of literature of the Greek and Roman classical age in

English translation, with focus on styles of writing, including the epic, tragedy and comedy, lyrics, eclogues, epistles and satires, with emphasis on the contribution these works have made to western civilization. *Also listed as ENG 207*.

209. The Bible in English: Old Testament Prophets, Apocalyptic and New Testament. Prior or concurrent election of ENG 112. (3)h.

The New Testament and Old Testament materials relevant to the formation of the New Testament, in contemporary English translation, considered as a humanistic document of central importance to Western civilization; emphasis on the literary values and cultural backgrounds of selected books from the Old and New Testaments, OT Prophets, and the Apocrypha. *Also listed as ENG 206.*

246. Saxons, Magicians, and Triangles. At least sophomore standing. (3)h.

Study of the later Middle Ages with a unifying theme: the development of the Arthurian legend. Literature is the primary concern, but medieval philosophy, life, and arts are given considerable attention. *Also listed as ENG 246*.

257. Protest in African Literature. At least sophomore standing. (3)h.

Reading and discussion of poets, novelists and essayists from West, East and South Africa who have written in protest of French, English, Portuguese, and neocolonial oppression. Gender struggles and inequalities in indigenous systems. Analysis of cultural differences between African peoples and colonizing powers, as they are represented in literature and as they intersect with political and social realities; efforts to change them. *Also listed as AFA 257*.

301. Introduction to Francophone African Literature. *ENG* 112. (3)h.

Introduction to Francophone African Literature. The Negritude (Movement) School and its impact on African Literature. Readings from the works of Leon-Gontran Damas, Birago Diop, Aime Cesaire, Leopold Sedar Senghor, and others. *Graded ABCD>N. Also listed as AFA 300.*

- [303. Masterpieces of World Literature in Translation: III.

 Not open to freshmen except with permission of the instructor. (3)h]
- [304. Masterpieces of World Literature in Translation: IV. Not open to freshmen except with permission of the instructor. (3)h.]
- [305. Twentieth Century World Literature in Translation: I. Not open to freshmen except with permission of the instructor. (3)h.]
- [306. Twentieth Century World Literature in Translation: II.

 Not open to freshmen except with permission of the instructor. (3)h.]
- **318. (218). Women Writers of the African World.** *Sophomore standing or consent of instructor.* **(3)***h.*

Survey of literature by women from Africa, the Caribbean, North America, and Europe. Focus on the works and experiences of writers and the genres that shaped their experiences. Selected works from genres such as the Buildungsroman, the mature novel, drama, and/or nonfictional prose. Also listed as AFA 318 and WGS 318.

358. Major Authors. At least sophomore standing or consent of instructor. (3)h.

Intensive comparative study of two or three major authors writing in different languages. Selections may be read in the original language or in translation. May be repeated to a total of six credits provided no duplication of authors occurs. Graded ABCD>N.

364. Twentieth Century Spanish-American Literature in **Translation.** At least sophomore standing. (3)h.

Selected prose and poetry from representative Spanish-American writers including Nobel Prize winners Miguel Angel Asturias, Pablo Neruda, and Gabriel Garcia Marquez. The "boom" in the Spanish-American novel. Selections may be read in the original language or in translation. Discussion, lecture, films and papers.

- [387. Continental European Fiction. A sophomore course in literature or consent of instructor. (3)h. Also listed as ENG 387. Graded ABCD>N.]
- 391. Directed Readings in Comparative Literature. Consent of instructor. (1-2)h.
- 400. 20th Century Major African Authors. At least junior standing, a course in literature, a course in African literature; or consent of instructor. (3)h.

Intensive study of works by important 20th century authors from different African countries, including Wole Soyinka, Chinua Achebe, Ngugi Wa Thiong'o, Leepold Sedar Senghor, Nawal El Saadawi, Naguib Mahfouz, Dennis Brutus, Mariama Baa, Nadine Gordimer. Focus on evolution of the author's canon, impact on the literary context, relationship between imaginative creativity and biography, historical and cultural contexts. Also listed as AFA 400.

480. Africa in 20th Century Anglophone World Literature. At least junior standing, a 300-level course in literature, a course in African literature; or consent of instructor. (3)h.

Depictions of Africa in multiple world literary traditions, by renowned writers including Joseph Conrad, Joyce Cary, Toni Morrison, V.S. Naipaul, Derek Walcott, Nawal El Sadaawi, Wole Soyinka, Chinua Achebe, Nadine Gordimer, Dennis Brutus, and Ngugi Wa Thiong'o. Analysis of changing perspectives, from Africa as "other world" to contemporary visions of acceptance and identification; connections between literary works and their socio-political/ideological contexts. Also listed as AFA 480.

Computer Science (CSC)

213 William R. Murchie Science Building (810) 762-3121 FAX (810) 766-6780 www.umflint.edu/csesp

Chair (Computer Science, Engineering Science, and Physics): Dr. Loretta J. Dauwe Administrative Assistant: Patricia A. Slackta

Secretary: Kathleen Leist

Systems Administrator III: James C. Norcross

Associate Professors R. Shantaram, Stephen W. Turner, Mudasser Wyne; Assistant Professors Michael Farmer, Suleyman Uludag; Lecturers Quentin J. Galerneau, Linda M. Hicks.

Professor Emeritus: Harry K. Edwards Associate Professor Emeritus: L. C. Wu

Computer science programs provide students with an understanding of the science of computation. The computer is a potent and omnipresent force in our society that can be used responsibly only by those who have a clear understanding of the principles of correct and reliable computation. Students completing a concentration in computer science are prepared to enter the computing profession or to continue in graduate studies.

Department Mission and Program Assessment

The mission of the Computer Science program is to provide a solid understanding of the principles of computers and computing not only in the context of problem solving, but also in technical support, education and training and software/hardware management. The program participates in the University-wide effort to assess its academic programs. Information on assessment plans, including goals, methods and outcomes is available at http://assessment.umflint.edu.

Programs in Computer Science

Three concentration programs are offered, all leading to the Bachelor of Science degree: the General Program in Computer Science, the Honors Program in Computer Science and the General Program in Computer Information Systems. Minors in Computer Science and Computer Information Systems are also available.

General Program in Computer Science (Bachelor of Science)

Requirements.

- A. All requirements of the College of Arts and Sciences Bachelor of Science degree, including general education requirements.
- B. MTH 121, 122, 220, 370; CSC/CIS/MTH 230 (17 credits).
- C. PHY 243, 245 (10 credits).
- D. An additional natural science course beyond general education requirements to bring the number of natural science credits to at least 12.
- E. CSC 150, 175, 265, 266, 275, 277, 335, 365, 375, 377, 381, 382, 384 (37 credits).
- F. A grade of C (2.0) or better in at least four from: CSC 335, 365, 375, 377, 381, 382, 384.
- G. One of the following track options (18 credits).
 - 1. **Software Engineering Track.** CSC 383, 483; twelve additional credits in computer science in courses numbered 300 or above, excluding CSC 301, 395, 491(may include CSC 336, 436, 477).
 - 2. Systems/Networking Track. CSC 336, 436; twelve

additional credits in computer science in courses numbered 300 or above, excluding CSC 301, 395, 491(may include CSC 383, 483).

Honors Program in Computer Science

Requirements.

- A. Requirements A through F of the General Program in Computer Science, and 12 credits in one of the following track options (78 credits):
 - 1. **Software Engineering Track.** CSC 383, 483; six additional credits in computer science in courses numbered 300 or above, excluding CSC 301, 395, 491(may include CSC 336, 436, 477).
 - Systems/Networking Track. CSC 336, 436; six additional credits in computer science in courses numbered 300 or above, excluding CSC 301, 395, 491(may include CSC 383, 483).
- B. All requirements of the University Honors Scholar program.
- C. CSC 491, Advanced Directed Study, in the junior year (3 credits).
- D. CSC 495, 496 (8 credits).

Prospective Honors Program students are urged to acquaint themselves as early as possible with the requirements above as well as with the particular procedures for acceptance into the Computer Science Honors Program. See the departmental honors advisor or the Honors Program Director for this information.

General Program in Computer Information Systems (Bachelor of Science)

Requirements.

- A. All requirements of the College of Arts and Sciences Bachelor of Science degree, including general education requirements.
- B. MTH 118, 130 (7 credits).
- C. ECN 201, 202 (6 credits).
- D. BUS 201, 202, 211, 313, 371, 381 (18 credits).
- E. One from: BUS 330, 341, 361 (3 credits).
- F. CIS 127, 128, 150, 151, 152, 170, 173, 175, 230, 263, 275, 335, 363, 365, 375, 384, 410, 420 (50 credits).
- G. CIS 283 or 313 (3 credits).

Minor in Computer Science

Requirements. Twenty-one credits, distributed as follows:

- A. CSC 127, 175, 275 (9 credits).
- B. Four from: CSC 173, 265, 277, 313, 363 (12 credits).

Minor in Computer Information Systems

Requirements. Twenty-two credits distributed as follows: CIS 173, 175, 263, 283, 363, 365; BUS 381.

Courses in Computer Science (CSC)

121. Using a Computer System I. (1).

Introduction to use of computing facilities of the University of Michigan-Flint. Components of computer systems; text editors; Windows. *Does not include programming*.

122. Introduction to Programming in the BASIC Language. Prior or concurrent election of CSC 121 or CSC/CIS 127 or consent of instructor. (2).

Elements of programming in BASIC. Data entry, algorithm understanding, and program construction from an algorithm. Students learn to prepare input, interpret output, and translate into BASIC existing and designed algorithmic solutions to problems.

123. Word Processing. CSC 121 or CSC/CIS 127. (1).

Introduction to a Windows-based word processing program.

127. Using a Unix Computer System. Familiarity with a computer system. (1).

Introduction to the use of the Unix operating system on computing facilities at the University of Michigan–Flint. Textual and graphical user interfaces with the Unix computer operating system. *Does not include programming. Also listed as CIS 127.*

150. Computer Ethics (1).

Topics include computer crimes, reducing risks, privacy, freedom and ethics, security and reliability. *Also listed as CIS 150*.

151. Spreadsheet Software. CSC 121 or CSC/CIS 127 or CIS 128. (2).

Introductory and advanced features of a spreadsheet package such as Lotus 1-2-3, MS-Excel, or Borland Quattro. *Also listed as CIS 151*.

152. Database Management Software. CSC 121 or CSC/CIS 127 or CIS 128. (2).

Introductory and advanced features of a microcomputer-based database management package such as dBase IV, MS Access or Borland Paradox. *Also listed as CIS 152*.

153. Office Automation Software. CSC 121, 123; CSC/CIS 151, 152; or consent of instructor. (3).

Advanced features of an integrated office suite package. Document preparation using imported graphical images, tables and charts. Multimedia concepts and presentation managers.

170. (270). COBOL Programming. CSC 121 or CIS 128 competency. (3).

Computer solutions to business problems. Use of a high-level language such as COBOL. Understanding algorithms, program construction, documentation, file processing, input-output systems, applications. *Also listed as CIS 170*.

173. (273). Visual BASIC for Windows. CSC 122 or prior programming experience; or consent of instructor. (3).

Introduction to Visual BASIC for the Windows environment,

including communication and/or sharing data with other Windows applications. Also listed as CIS 173.

175. Problem Solving and Programming I. CSC 122 or CSC/CIS 173 or equivalent. (4).

Introduction to problem solving and programming principles appropriate for scientific and technical applications. Development of step-wise refinement and program decomposition methods. Programming language concepts including iteration, selection, input-output protocols, arrays, structures and subprograms. Programming language used is C++. Also listed as CIS 175.

230. Introduction to Discrete Structures. MTH 121 or 130. (3).

Sets, integers and modular arithmetic, propositional logic, induction, recurrence relations, permutations and combinations, relations and equivalence relations, functions and order of growth, trees and graphs. Also listed as CIS 230 and MTH 230.

263. Introduction to Web Design. CSC 121 competency or consent of instructor. (3).

Creation of web pages using HTML, including formatting text, lists, tables, frames, forms, hyperlinks, pictures and image maps. Students create simple image objects to embed in a web page and learn to log onto a UNIX account, create files, directories and publish web pages to the Internet. *Graded Pass/Fail. Also listed as CIS 263*.

265. Computer Logic Design. CSC/CIS 175 with a grade of C (2.0) or better; prior or concurrent election of CSC 266; PHL 202 recommended. (3).

Digital logical concepts and principles of digital design. Number systems, Boolean algebra, small and medium scale integrated circuits such as logic gates, multiplexers, decoders. Combinational and sequential circuit design, circuit simplification.

266. Computer Logic Design Laboratory. Concurrent election of CSC 265 or consent of instructor. (1).

Laboratory experiments in digital logic design, using small and medium scale integrated circuits such as logic gates, multiplexers, decoders. Design, simplification and construction of combinational and sequential circuits using simulation software. One two-hour laboratory period weekly.

275. Problem Solving and Programming II. *CSC/CIS 175* with a grade of C (2.0) or better; prior or concurrent election of MTH 118 or 121. (4).

Intermediate problem solving and programming principles for scientific and technical applications. Emphasis on data abstraction and object-oriented program design, including design and implementation of classes, inheritance, polymorphism, and inter-object communication. Use of templates and operator overloading; use of data structures such as stacks, queues, and pointers in the implementation of algorithmic techniques including recursion, divide and conquer, and dynamic storage management. Also listed as CIS 275.

277. Introduction to Computer Organization and Assembly Languages. CSC 265. CSC/CIS 275 recommended. (3).

High-level computer structure and machine language format.

Low-level data and program representation and storage. Design and testing of assembly language programs.

283. Advanced Visual BASIC for Windows. CSC/CIS 173; MTH 115 or 117 or equivalent; or consent of instructor. (3).

Emphasis on component programming and connecting client applications to databases. Topics from: windows API programming, creating COM component servers and clients, writing multithreaded COM servers, creating activeX controls, creating components for MTS, IIS, developing database desktop clients, and network and internet programming. *Also listed as CIS 283*.

286. Computer Language Laboratory. CSC/CIS 175 with a grade of C (2.0) or better or consent of instructor. (1).

Emphasis on the unique features of announced languages. Languages change with sectional offerings; including but not limited to COBOL, FORTRAN, LISP, Prolog. Course may be reelected; each election must emphasize a different language. See course schedule for languages.

291. Supervised Study in Computer Science. Consent of instructor. (1-3).

Laboratory work or study of the literature on designated problems chosen by the student in consultation with a faculty supervisor. May be reelected to a total of 3 credits. Graded ABCDE/Y.

293. Intermediate Web Design. CSC/CIS 263. (3).

Study of HTML 4.0, XHTML, Cascading Style Sheets (CSS), Dynamic HTML, embedded multimedia in web pages, and introductory JavaScript. *Graded ABCD>N. Also listed as CIS 293*.

301. Problem Solving for Programming Competition. *Consent of instructor.* (1).

Forum for students interested in taking part in the ACM annual programming competition(s); team effort emphasized. Qualifying students expected to represent the Department and the University in the competition(s). *Graded Pass/Fail*.

303. Data Acquisition & Control. PHY 145 or 245 with a grade of C (2.0) or better, familiarity with a computer system; or consent of instructor.

Introduction to basic structures that make up LabVIEW programs. Building of applications for communications and control of instruments using GPIB and plug-in data acquisition boards. *Also listed as EGR 303 and PHY 303*.

313. Object Oriented Programming in Java. *CSC/CIS* 275 with a grade of *C* (2.0) or better. (3).

Advanced programming concepts using the Java programming language. Topics include: object oriented programming using Java, with classes, interfaces, packages, inheritance, etc.; exceptions; GUI and applets; multi-threading. *Also listed as CIS 313*.

335. Computer Networks I. CSC/CIS 175 with a grade of C (2.0) or better; MTH 122. (3).

Theoretical concepts necessary to understand the complex problem of computer networking. Computer network architectures and models, bandwidth limitations of physical media, analog and digital signaling methods, data link protocols, error detection and correction, medium access control in broadcast networks, routing algorithms, internetworking, the Internet Protocol, connection management, transport services including TCP/UDP, network applications, local-area and wide-area networks.

336. Computer Networks II. CSC 335. (3).

Practical, advanced concepts in computer networking that extend the theoretical knowledge gained in CSC 335. The common gateway interface, network security and network monitoring, scripting and programming languages for computer networks, electronic commerce techniques, web graphics, virtual private networks, construction and administration of internet servers, and the interface to network-connected databases.

363. Commercial Applications of Web Programming. *CSC/CIS 175 with a grade of C (2.0) or better; CSC/CIS 263. (3).*

Web programming using languages such as JavaScript, Perl, PHP, MySQL and Java Applets in commercial applications. Consumer issues including shopping carts, human computer interface designs, and interactions with payment processing mechanisms. Consumer privacy, ethical and security issues also addressed. *Also listed as CIS 363*.

365. Computer Architecture. CSC 277. (3).

Large-scale computer system organization. Input-output subsystems, instruction sets, memory hierarchies. Emphasis on physical devices, and lowest level software, microcode and firmware.

375. Data Structures and Algorithms. CSC/CIS 275 with a grade of C (2.0) or better; CSC/CIS/MTH 230. (3).

The data structure as an abstract data type, including fundamental data structures such as lists, stacks, queues, trees, graphs, and hashes. Algorithmic design techniques and their relationship to the choice of data structure. Development of mathematical analysis and proof techniques in the context of complexity analysis of algorithms.

377. Operating Systems. CSC375. CSC/CIS 127 recommended. (3).

Study of design and implementation of traditional and distributed operating systems. History of operating system development, processes, system calls and interprocess communication, memory management, file system implementations, I/O, deadlocks, distributed systems, synchronization, distributed file systems, case studies.

381. Introduction to the Theory of Computation. *CSC/CIS/MTH 230. (3).*

Introduction to abstract notions encountered in machine computation. Finite automata, regular expressions and formal languages, with emphasis on regular and context-free grammars. Introduction to models of computation including Turing machines, recursive functions and universal machines.

382. Software Engineering I. *CSC/CIS 275 with a grade of C* (2.0) *or better.* (3).

In-depth treatment of modeling techniques suitable for developing complex large-scale software systems. Key tasks that comprise the entire software lifecycle; structured and object-oriented modeling techniques for requirements analysis and software design. Use cases, CRC cards, data flow diagrams, activity diagrams, class diagrams, methods for software testing. Includes a semester-long engineering project for hands-on experience.

383. Software Engineering II. CSC 382. (3).

Software project management and a variety of process models for integrating these tasks, including the waterfall, incremental, and spiral models, as well as some of the current agile models. Software project cost and schedule estimation and planning, documentation, tracking, risk management, and quality assurance; tools and standards for supporting each of these tasks.

384. (480). Database Design. *CSC/CIS* 275 with a grade of *C* (2.0) or better; *CSC/CIS/MTH* 230. (3).

Introduction to data and database, DBMS; database system concepts and architecture. ER model for high level conceptual database design; design issues. Relational model concepts; relational constraints and violations; ER-to relational mapping. SQL*Plus environment; creation and modification of relations, DDL queries, data management and retrieval. PL/SQL overview. Functional dependencies; normal forms. ORACLE; basic structure, database structure and manipulation, storage organization. Also listed as CIS 384.

387. System Administration. CSC/CIS 275 with a grade of C (2.0) or better, junior standing. CSC/CIS 127 recommended. (3).

Administration of a programming-oriented Unix system, with emphasis on Unix security, network-oriented system software, day-to-day administration software, shell commands, and authoring of shell scripts for automation of day-to-day system administration tasks.

391. Independent Study. *Consent of instructor.* (1-3).

Laboratory study or study of current literature on a special problem. May be reelected to a total of 3 credits. Graded ABCDE/Y.

392. Topics in Computer Science. CSC 277. (3).

Topics of interest in computer science that are not offered on a regular basis, announced in the course schedule. Various offerings of the course may treat different topics. Course may be reelected; each election must emphasize a different topic.

395. Cooperative Practice in Computer Science. CSC 277 and consent of Department Chair. Prior election of BUS 290 recommended. (3).

Job assignment planned jointly by student, supervisor, and Department Chair at the beginning of the cooperative experience. Duties relate to student's academic maturity. Required paper describing problems encountered and handled. Evaluation submitted by the supervisor. May be elected twice. Graded Pass/Fail by Department Chair. Graded ABCDE/Y.

436. Systems/Networking Design Project. Senior standing: CSC 336, 375, 382. Prior or concurrent election of COM 210 recommended. (3).

Advanced studies in computer systems and networking with emphasis on oral and written presentation of completed projects. Semester-long project of high complexity emphasizing computer architecture and/or computer networks developed and presented in written and oral form. Topics include pipelined/superscalar processors, parallel processing, supercomputing, intelligent networks, wireless networks, personal communications systems. Graded ABCDE/Y.

444. Simulation and Modeling. CSC 375, MTH 370 or equivalent. (3).

Relations between simulation and models. Monte Carlo techniques. Use of a simulation language. Design of simulation models and experiments.

446. Artificial Intelligence. CSC 375. (3).

Heuristic and algorithmic techniques in problem solving, knowledge representation. Selected topics from natural language processing, vision processing, automatic theorem proving, game playing, pattern recognition, speech recognition, robots, and other current topics in artificial intelligence.

476. Networked Multimedia Programming. CSC 277, 335; CSC/CIS 313. (3).

Study of programming techniques used to exploit numerous enabling technologies for multimedia. Topics may include representations of text, images/graphics, audio, and motion video, network programming techniques, graphical Java, OpenGL and/or ActiveX, VRML, web programming techniques, multimedia-oriented application software packages, assembly-level multimedia instructions.

477. Distributed Operating Systems. *CSC* 377. (3).

History of operating system development; issues in communication. Processes and naming; synchronization and consensus; consistency and replication; fault tolerance. File systems; security; middleware; process and thread management. Examples of distributed operating system techniques.

478. Parallel Processing. CSC 377. (3).

Motivation for and applications of parallel processing. Parallel processing architecture, implementation of parallel algorithms, including design, analysis, and performance measurement. Emphasis on practical programming using message-passing and shared-memory paradigms, including well-known environments such as MPI and Pthreads.

483. Software Engineering Design Project. Senior standing; CSC 375, 383. Prior or concurrent election of COM 210 recommended. (3).

Advanced studies in software engineering techniques with an emphasis on the oral and written presentation of completed projects. Semester-long project of high complexity with emphasis on its formal specification and advanced modeling. May include object-oriented libraries, code and experience reuse, the use of UML in the design programming and testing of software. Graded ABCDE/Y.

484. Database Management Systems. CSC/CIS 384. (3).

System catalogs. Query processing and optimization: basic algorithms for executing query operations; implementing the SELECT, JOIN PROJECT and SET operations, using heuristics in query optimization. Transaction processing concepts. Concurrency control concepts and techniques; recovery system concepts and techniques. Database security and authorization. Also listed as CIS 484.

491. Advanced Directed Study. CSC 375 with a grade of C (2.0) or better and consent of instructor. (3).

Topics not usually treated in other courses, chosen in consultation between student and instructor. Designed to accommodate special advanced interests of the student. May be reelected. Graded ABCDE/Y.

492. Advanced Topics in Computer Science. See the course schedule for prerequisites. (3).

Topics of interest in computer science that are not offered on a regular basis, announced in the course schedule. Various offerings of the course may treat different topics. Course may be reelected. Each election must emphasize a different topic.

495. Honors Thesis I. Permission of the Honors Council or its designate. Consent of Department Chair. Open only to Honors Program students in computer science. (4).

Credit and grade are not given until successful completion of CSC 496. Also listed as HON 495. Graded ABCDE/Y.

496. Honors Thesis II. Permission of the Honors Council or its designate. Consent of Department Chair. Prior or concurrent election of CSC 495. Open only to Honors Program students in computer science. (4).

Also listed as HON 496. Graded ABCDE/Y.

Courses in Computer Information Systems (CIS)

127. Using a Unix Computer System. Familiarity with a computer system. (1).

See CSC 127 for description. Also listed as CSC 127.

128. Introduction to Computer Information Systems I. (3).

Introduction to the fundamentals of computer hardware and software, and end-user computing in the form of hands-on experience with e-mail, internet, networks, word processing (MS-Word), and presentation graphics (MS-PowerPoint).

150. Computer Ethics (1).

Topics include computer crimes, reducing risks, privacy, freedom and ethics, security and reliability. Also listed as CSC 150.

151. Spreadsheet Software. CSC 121 or CSC/CIS 127 or CIS 128. (2).

See CSC 151 for description. Also listed as CSC 151.

152. Database Management Software. CSC 121 or CSC/CIS 127 or CIS 128. (2).

See CSC 152 for description. Also listed as CSC 152.

170. (270). COBOL Programming. CSC 121 or CIS 128 competency. (3).

See CSC 170 for description. Also listed as CSC 170.

173. (273). Visual BASIC for Windows. CSC 122 or prior programming experience; or consent of instructor. (3).

See CSC 173 for description. Also listed as CSC 173.

175. Problem Solving and Programming I. CSC 122 or CSC/CIS 173 or equivalent. (4).

See CSC 175 for description. Also listed as CSC 175.

230. Introduction to Discrete Structures. MTH 121 or 130.

Sets, integers and modular arithmetic, propositional logic, induction, recurrence relations, permutations and combinations, relations and equivalence relations, functions and order of growth, trees and graphs. *Also listed as CSC 230 and MTH 230*.

263. Introduction to Web Design. CSC 121 competency or consent of instructor. (3).

See CSC 263 for description. Also listed as CSC 263.

275. Problem Solving and Programming II. CIS/CIS 175 with a grade of C (2.0) or better; prior or concurrent election of MTH 118 or 121. (4).

See CSC 275 for description. Also listed as CSC 275.

283. Advanced Visual BASIC for Windows. CSC/CIS 173; MTH 115 or 117 or equivalent; or consent of instructor.. (3).

See CSC 283 for description. Also listed as CSC 283.

 Supervised Study in Computer Information Systems. Consent of instructor. (1-3).

Laboratory work or study of the literature on designated problems chosen by the student in consultation with a faculty supervisor. May be reelected to a total of 3 credits. Graded ABCDE/Y.

293. Intermediate Web Design. CSC/CIS 263. (3).

See CSC 293 for description. *Graded ABCD>N. Also listed as CSC* 293.

313. Object Oriented Programming in Java. CSC/CIS 275 with a grade of C (2.0) or better. (3).

See CSC 313 for description. Also listed as CSC 313.

335. Telecommunication and Computer Networks. CSC/CIS 275 with a grade of C (2.0) or better. (3).

Practical introduction to concepts necessary for understanding of computer networking. Topics include routing/switching devices, distributed vs. centralized LANs and WANs, software protocols, network topologies, common standards for hardware and software, data encoding of multimedia, and cost/benefit analysis. Topics are presented within the context of the basic installation, configuration and management of computer networking equipment.

363. Commercial Applications of Web Programming. *CSC/CIS* 175 with a grade of C (2.0) or better; CSC/CIS 263. (3).

See CSC 363 for description. Also listed as CSC 363.

365. Information Technology Hardware and Software. *CSC/CIS* 275 with a grade of C (2.0) or better or CSC/CIS 283. (3).

Review of control and interaction of computer hardware and software within the context of a computer operating system. Topics include the CPU, memory architecture and addressing, instruction sets, peripheral devices, and their interaction and control within an operating system, including operating system modules, process management, memory and file system management, and interrupt processing. Concepts reinforced through multiple examples of uniprocessor and multiprocessor architectures and operating systems, as well as installation and configuration of basic multiuser operating systems.

375. File, Data, and Object Structures. CSC/CIS 275 with a grade of C (2.0) or better; CSC/CIS/MTH 230. (3).

Organization and representation of data and file structures presented through careful examination of their construction from top to bottom. Topics include basic data types and data precision, records, files, file and data structures, and organization and storage techniques. Topics further reinforced through discussion and application of software engineering techniques, including object-oriented programming, program correctness, verification, validation, and algorithm development.

384. (**480**). **Database Design.** *CSC/CIS* 275 with a grade of *C* (2.0) or better; *CSC/CIS/MTH* 230. (3).

See CSC 384 for description. Also listed as CSC 384.

391. Independent Study. *Consent of instructor.* (1-3).

Laboratory study or study of current literature on a special problem. *May be reelected to a total of 3 credits. Graded ABCDE/Y*.

410. System Design and Analysis. BUS 381, CIS 375 with a grade of C (2.0) or better. (3).

Introduction to basic concepts of system design and analysis. Topics include determination of system requirements and design constraints, software evaluation and acquisition, planning for implementation, testing, performance evaluation, and group-based large-scale project development.

420. System Design and Implementation. CSC/CIS 384; CIS 410. (3).

Large-scale software development in the context of the system development life cycle. Topics include application design and testing, quality assurance, software engineering and reverse engineering, and post-implementation activities such as user training, system maintenance, and post-implementation review. Course topics reinforced through projects involving client-server programming in a business environment. Graded ABCDE/Y.

484. Database Management Systems. CSC/CIS 384 or consent of instructor. (3).

See CSC 484 for description. Also listed as CSC 484.

Criminal Justice (CRJ)

522 David M. French Hall (810) 762-3340

Chair: Beverley Smith

Principal Secretary: Lynne McTiernan

Faculty Advisors: Associate Professors Roy Barnes, Larry W. Koch, Joan Mars, Kathryn Schellenberg, Charles B. Thomas, Jr.; Assistant Professors Kenneth Litwin, Diane Schaefer

Criminal justice is an academic field which examines the actions of the formal social control mechanisms we call the criminal justice system. This system is composed of three subsystems: law enforcement agencies, criminal courts, and correctional facilities. The study of criminal justice requires an examination of the structure and functioning of each of these subsystems, as well as knowledge about the role behavior of the participants. It also involves a critical evaluation of how the administration of justice actually operates in American society. This raises fundamental questions and provides perspectives from which solutions to problems might be drawn.

The content of criminal justice study is interdisciplinary, drawing on theory developed in sociology, law, political science, and other fields. From sociology are derived theories regarding the etiology of crime and delinquency. Law and political science provide information about the development of law and the application of sanctions within the legal process.

Program Mission and Assessment

The mission of the Criminal Justice program is three-fold: to provide students with a comprehensive understanding of the structure and operation of the criminal justice system; to provide students with a comprehensive understanding of how criminal justice relates to other social structures and institutions, and how those structures and institutions impact criminal justice; and to prepare students to employ critical thinking, social justice, and civic responsibility in their decision-making processes as they pursue their careers and encounter life situations. The program participates in the University-wide effort to assess its academic programs. Information on assessment plans, including goals, methods and outcomes is available at http://assessment.umflint.edu.

Programs in Criminal Justice

Two concentration programs, both leading to the Bachelor of Arts degree, are offered: the General Program in Criminal Justice, and the Honors Program in Criminal Justice. A Minor in Corrections is also available. (See Social Work.)

General Program in Criminal Justice

Prerequisites. (12 credits).

SOC 100, 210; SOC/AFA 270; POL 120.

Requirements. Completion of 33 credits as outlined below.

- A. Overall GPA of 2.5 in the concentration, with grades of C (2.0) or better in each course.
- B. Core courses (21 credits). CRJ 185, 430, 450; PSY 301 or SOC 215; SOC 380, 384, 485.
- C. Additional courses (12 credits). Four from: ANT 340; CRJ 380, 381, 384, 385, 386; CRJ/PUB 432; CRJ/SWK 388; POL 380; SAT 202; SOC 382.
- D. All requirements of the College of Arts and Sciences Bachelor of Arts degree, including general education requirements and a foreign language requirement.

Honors Program in Criminal Justice

Faculty Advisor: Dr. Koch.

Prerequisites. Grade point average of 3.5 for the first 55 hours. SOC 100, PSY 100, POL 120, SOC/AFA 270, plus one course in philosophy.

Requirements.

- A. All requirements for the General Program in Criminal Justice, including SOC 210. SOC 210 is ordinarily elected in the sophomore year.
- B. Statistics. SOC 215, PSY 301, or an equivalent course approved by the advisor, recommended for the sophomore year.
- C. SOC 384 and CRJ 391, taken in the junior year.
- D. CRJ 496 and 497. Honors Thesis I and II (4 credits each).
- E. All requirements of the CAS Honors Scholar Program.

Prospective Honors Program students are urged to acquaint themselves as early as possible with the particular procedures for acceptance into the Criminal Justice Program's Honors Concentration. See the departmental honors advisor or the Honors Program Director for this information.

Minor in Corrections

See Social Work.

Courses in Criminal Justice

185. Introduction to the Criminal Justice System. (3)s.

Overview of the criminal justice system, examining key roles, goals, and issues. Relationships among the administration of justice, police, and correctional services as organizations which express the will of society toward crime and delinquency. *Graded ABCDD->N*.

300. Gender, Crime and Justice. CRJ 185 or WGS 200. (3)s.

Exploration of the gendered structure of the legal and criminal justice systems. Examination of the differential impact of flaws and policies on women offenders, the experiences of women in prison, law enforcement and the legal profession, domestic/intimate partner violence, sexual assault, reproductive rights, child abuse, pornography and gender-related hate crimes. Also listed as WGS 300.

380. Criminal Law. CRJ 185. (3)s.

Nature and application of criminal law in the American criminal justice system. The laws of arrest, search and seizure, and other constitutional dilemmas in criminal law.

381. Youth Gangs in American Society. CRJ 185. (3)s.

The "evolution" of youth gangs from the pre-American Revolution period through today. Focus on theory and policy analysis; consideration of effects of race, gender, and social class. Critical analysis of theoretical explanations of youth gangs and their members; policies and legal intervention strategies used to control this social phenomenon.

384. Comparative Criminal Justice System. CRJ 185. (3)s.

Comparison of the U.S. criminal justice with selected criminal justice systems in other countries, in historical, economic, social and political context. Variations in criminal classifications, crime data collection and reporting, social control and punishment approaches, criminal courts, and globalization of crime and criminal justice; applicable international laws; human rights issues.

385. Elite Deviance. *CRJ 185.* (3)s.

Crimes of the rich and powerful, and the attempts of society to control these crimes. Fraud, employee theft, computer crime, crimes committed by corporations and by government, and attempts by citizens, the courts, and the criminal justice system to curtail crimes of the powerful.

386. Punishment and Social Control. CRJ 185. (3)s.

Characterization of different forms of punishment and types of social control, including penal punishment and therapeutic control. The development of punishment within the broader contexts of historical, social, and economic forces; the relationship between social disorder, political instability, and social control.

388. Introduction to Corrections. CRJ 185, SOC 382 or 384, at least junior standing; or consent of instructor. (3)s.

Historical development of correctional services including jails, detention, juvenile and adult probation, diversion, training schools, prisons, parole and aftercare. Analysis of roles, goals, organization and issues in each service. *Also listed as SWR 327*.

389. Correctional Practice. SWR 100, CRJ 388/SWR 327, at least junior standing; or consent of instructor. (3)s.

Analysis of social work skills and concepts in corrections. Emphasis on professional role, values, classification, assessment and treatment planning in correctional settings. *Also listed as SWR 342.*

391. Directed Reading/Research in Criminal Justice. Consent of instructor, at least junior standing. (1-3).

Directed reading or research study by qualified students under instructor's supervision. By special assignment only. *Graded ABCDE/Y*.

398. Special Topics in Criminal Justice. CRJ 185. (3)s.

Intensive examination of a special topic in the discipline of criminal justice. May be taken more than once if no topic is repeated.

430. Processing Offenders. CRJ 185. (3)s.

Processing of adult and juvenile offenders from the origin of laws through arrest, trial, and the carrying out of assigned punishments. Primary interest directed towards discussion of points of controversy in the processing of offenders.

432. Policing Contemporary Society. CRJ 185. (3)s.

Administrative and operational aspects of modern policing such as organization and development of police, recruitment practices, socialization processes, and community relations (including community policing). Political and economic nature of policing as the foundation for critical review of policy and societal issues related to policing. *Also listed as PUB 432*.

450. Senior Seminar in Criminal Justice. *Senior standing and consent of instructor. Open only to students with concentrations in criminal justice.* (3)s.

Intensive review of major theoretical and substantive debates within Criminal Justice, with the goal of demonstrating working knowledge of the discipline and relationships between theory, methods, and substantive areas of research. Students write a final paper integrating undergraduate educational experiences and solidifying foundations upon which to pursue graduate training in Criminal Justice or other social sciences.

496. Honors Thesis I. *Consent of program coordinator. Open only to Honors Program Students in criminal justice.* (4).

Credit and grade for CRJ 496 is not given until successful completion of CRJ 497. Also listed as HON 495. Graded ABCDE/Y.

497. Honors Thesis II. Prior or current election of CRJ 496 and consent of program coordinator. Open only to Honors Program students in criminal justice. (4).

Also listed as HON 496. Graded ABCDE/Y.

Dance (DAN)

See "Theatre and Dance."

Dental Studies Information

Pre-Dental

Science Faculty Advisors: Dr. Robert Stach and Dr. Steve Myers

The Council on Dental Education recommends that potential applicants for admission to dental schools seek a baccalaureate

degree, although a few well-qualified students have entered dental schools without completing such a degree. Detailed information should be sought early from the professional schools to which the student may wish to apply for admission. Recommended courses for the pre-dental student are similar to those for the pre-medical student. (See "Medical Studies Information," "Pre-Medicine.") Pre-dental students may major in any discipline so long as the requirements of the dental program to which they are applying are fulfilled. Dental schools are looking for well-rounded students with a broad, liberal arts background. Such a background can be demonstrated by pursuing a non-science major or minor, or focused sequences of courses in multiple disciplines.

Applicants for admission to dental school are evaluated on the basis of their academic performance and the reputation of the college they attended, as well as other available information. The Dental Admission Test is designed to assist prospective dental students, advisors, and dental schools in evaluating the probability of success of these students in dental school.

The dental schools of the University of Michigan-Ann Arbor and of the University of Detroit use the centralized application service of the American Association of Dental Schools. Each student who plans to apply for admission to dental school should seek the assistance and guidance of an advisor from the Biology or the Chemistry/Biochemistry Departments at the University of Michigan-Flint.

Earth and Resource Science (ERS)

516 William R. Murchie Science Building (810) 762-3355

Web Page: www.flint.umich.edu/ers

FAX: (810) 762-3153

Chair: Randall Repic

Supervisor of Science Laboratories: Keith King

Principal Secretary: Karol Ann Scheitler

Professors Martin M. Kaufman, Randall Repic; Associate Professor Richard Hill-Rowley; Assistant Professor T. Edwin Chow; Lecturers Frederick DeGroot, Marlos Scrimger.

Professor Emeritus: William M. Marsh

Earth and resource science is the study of earth environments. Several related fields, including geography, geology, planning, hydrology, and environmental science, are united by a common interest in the spatial nature of earth environments, how they are changed by natural and human forces, and how they can be planned and managed for the future.

Degree programs are designed to lead to careers in fields such as environmental management, planning, teaching, landscape architecture, resource management, remote sensing, GIS, computer mapping, and to prepare students for graduate study

Department Mission and Program Assessment

The mission of the Earth and Resource Science Department is to develop an environment for disseminating information, engaging in experimentation and research, and empowering student-based learning. As part of the larger mission of the College of Arts and Sciences, ERS offers courses and degree programs enabling graduates to make meaningful contributions to the research and resolution of environmental problems as citizens, teachers, and professionals. The Department participates in the Universitywide effort to assess its academic programs. Information on assessment plans, including goals, methods and outcomes is available at http://assessment.umflint.edu.

Scholarships

The Bill Marsh Fund offers the Michael Kulick Award and the Mary Sullivan Award to assist students in Earth and Resource Science. The Croner Scholarship Program provides assistance to qualified students in physical geography. A scholarship from the Flint Rock and Gem Club provides assistance to students with geological interests. Outstanding students may also be nominated for a Morris K. Udall Scholarship. Teaching assistantships are also available to students completing degree work in Earth and Resource Science programs.

Programs in Earth and Resource Science

Three concentration programs leading to the Bachelor of Science degree are offered: the Program in Environmental Science and Planning, The Honors Program in Environmental Science and Planning, and the Teacher's Certificate Program in Earth Science. Minors in Physical Geography and Geographic Information Science and a Teacher's Certificate Minor in Earth Science are also available. In addition, a certification program in Environmental Hazards/Risk Management is offered.

Program in Environmental Science and Planning (ESP)

The program in Environmental Science and Planning is designed to provide training in the analysis, planning and management of natural resources and land use in urban, rural and wilderness environments. Graduates of this program are prepared to compete for employment in both the private and public sectors or to go on to graduate school in various environmental fields, remote sensing, GIS, urban planning, regional planning, landscape architecture, law, public administration, or policy studies.

Prerequisites. GEO 115 or 116; BIO 111; MTH 120, CSC 121 (if needed), 122; RPL 260 (16-17 credits).

Requirements. Sixty-two to 63 credits, distributed as follows:

- A. Science Foundations. GEO 150, 151, 265, 272, 282, 331, 372 (23 credits).
- B. Techniques. GEO 203, 304; RPL 370, 371, 485 or 486 (17) credits).
- C. Planning Applications. GEO 285; RPL 311, 312, 411 or 472, 476 (15 credits).
- D. Research Methods. GEO 297, 490, 491 (7-8 credits).
- E. All requirements of the College of Arts and Sciences Bachelor of Science degree, including general education requirements.

Honors Program in Environmental Science and **Planning**

Requirements.

- A. All requirements for the Program in Environmental Science and Planning.
- B. GEO 370 or ENV 370; GEO 495, 496; GEO 498, 499.

C. All requirements of the CAS Honors Scholar Program.

Certification in Environmental Hazards/Risk Management

Requirements. Forty-seven to 48 credits as follows.

- A. A concentration in Environmental Science and Planning or Public Administration
- B. Earth and Resource Science courses (29-30 credits). GEO 272, 282, 285, 304, 498 (2-3 cr.); RPL 312, 370, 371, 476, 486.
- C. Courses outside Earth and Resource Science (9 credits). COM 362, ECN 20, PUB 309 or 316.
- D. Elective block (9 credits). Three from: ECN 376; HCR 420, 421; POL/PUB 420, 422; PUB 301, 480; PUB /ECN 470, 473.
- E. Professional Training.
 - 1. OSHA HAZWOPER (offered as RPL 485).
 - 2. One of the following:

Radiological monitoring.

National Fire Academy – Fire Prevention Curriculum - one course.

Emergency Management Institute – a course from the Response and Recovery or Mitigation courses.

Michigan Hazardous Materials Training Center – a course from Specialty Courses Section or Monitoring/Sampling Section.

Teacher's Certificate Program in Earth Science

Prerequisites.

GEO 115 or 116; BIO 314; CHM 160; MTH 120; PHY 143.

Requirements. Completion of 124 credits, at least 33 of which are in courses numbered 300 or above. A cumulative grade point average of at least 2.75 is required in earth science, and at least 2.5 overall; at least 18 hours completed in the major and 12 hours completed in the minor; passing score on the MTTC Basic Skills Test; PSY 100, 237; or equivalents with a C or better; CSC 123 with a grade of C or better; completion of at least 55 credit hours. A written recommendation from the Earth and Resource Science Department to the Education Department is necessary prior to application for student teaching.

- A. All requirements of the College of Arts and Sciences Bachelor of Science degree, including general education requirements.
- B. Earth science courses (*31 credits*). GEO 150, 151, 202, 265, 272, 282, 303, 304, 331.
- C. AST 131, 133.
- D. Two additional courses (at least 6 credits) in astronomy, biology, chemistry, physics, or physical geography, selected with the advisor's consent. These courses may not be used toward the TCP minor.
- E. A Teacher's Certificate Minor in biology, chemistry, general science, mathematics, or physics.
- F. Education Requirements

- 1. EDS 300, 302, 360 (9 credits).
- 2. Methods courses. EDS 341, 343, 344, 345, 347 or 348. (Hours/courses vary.)
- 3. EDR 445/ENG 410 (3 credits).
- 4 EDS 469, 499 (12 credits).

Prospective candidates should also study the sections entitled "General Requirements for Teacher Certification" and "Secondary Education Teacher's Certificate Programs" printed in the Department of Education section of this *Catalog*.

Minor in Physical Geography

This program provides a strong background in physical geography for those students who wish to add a technical component to their degree programs.

Requirements. (21 credits).

- A. GEO 150, 151.
- B. Geophysical Systems. GEO 331; one of: GEO 265, 272, 282, 471.
- C. Analysis and Graphics. GEO 304; one of: GEO 303, 404; RPL 370, 470, 476 (6-7 credits).

Minor in Geographic Information Science

Requirements. (24 credits).

- A. ENV 289; GEO 303, 304; RPL 370, 371; RPL 470 or GEO 404 (19-20 credits).
- B. Additional 4-5 credits selected from: CSC 152, 175; RPL 411, 472, 476, 486.

Teacher's Certificate Minor in Earth Science

Requirements. (22 credits).

- A. GEO 150, 151; 202, 331; ENV 289.
- B. AST 131, 133.

Courses in Environmental Studies (ENV)

100. Introduction to Environmental Science. (4)n.

Human impacts on the environment. Degradation of land, water, air and ecosystems related to population growth and the spread of agriculture, industry and cities. Survival issues facing humanity and other organisms such as global warming, hazardous waste disposal, rainforest destruction and sustainable agriculture. Lecture and laboratory.

102. Environmental Science II. (4)n.

Exploration of how increasing populations, application of technology, identification of renewable resources, support of diversity, monitoring of the environment, and minimization of waste can result in sustainable and even lucrative resource planning and management strategies.

289. Web Mapping. At least sophomore standing. (3).

Aspects of putting maps on the web and making them userfriendly. Copyright issues; basics of web interactivity and animation with respect to geographic data; critical thinking about the complicated choices involved in design and use of geographic data in the Internet environment.

291. Supervised Study of Environmental Issues. Consent of instructor. (1-3).

Laboratory work or study of the literature on designated problems chosen by the student in consultation with a faculty supervisor. May be reelected to a maximum of four credits.

370. Field Problems. Two courses in physical geography or consent of instructor. (3-4)n.

Problems, methodology, and field techniques of physical geography. Problem design and field and laboratory instrumentation. Topics and instructor announced. Also listed as GEO 370. Graded ABCD>N.

380. Environmental Chemistry. CHM 162 and a course in organic chemistry. (3).

Chemistry of air and natural water systems. Atmospheric origin and reactions; photochemical reactions of smaller molecules; solubility in natural water; pH of natural water; oxidation-reduction reactions. Also listed as CHM 380.

389. Directed Research in Environmental Studies. At least junior standing, consent of instructor. (1-3).

Courses in Physical Geography (GEO)

115. World Regional Geography. (3)s/cs2.

Global patterns of economic development, land use, population and human conflict. Where and how people live and interact with the environment in different parts of the world including problems of famine, trade, geopolitics and ethnic conflict. Also listed as INT 115.

116. Human Geography. (3)s.

Themes and concepts of human geography. Interplay of culture, population, land use and environment. Geographic patterns of language, religion, agriculture, settlements and related landscape features.

150. Physical Geography I. (4)n.

Forces, processes and systems of the landscape. Ground-level climatology, plant geography, and soils. Basic energy balance, moisture balance, soil and plant classification schemes; human influences on climate, vegetation and soils. Three hours lecture, two hours instructional laboratory.

151. Physical Geography II. (4)n.

Geophysical forces, processes and systems acting on or near the earth's surface. Physical geology, geomorphology, and hydrology including basic rocks and minerals, mountain building, flood frequency, and glaciation. Three hours lecture, two hours laboratory.

202. Environmental Geology. At least sophomore standing. (4)n.

Formation and classification of commonly occurring minerals, rocks and fossils. Geologic time scale, distributions in North America, economic uses, and environmental implications. Local field trips. Lecture and laboratory.

203. Introduction to Spatial Analysis. (3).

Introduction to the science of maps and spatial analysis. Basic concepts of map construction; data evaluation and design issues related to thematic map preparation. Relationship between basic cartographic concepts and new techniques of spatial analysis used in computer mapping, remote sensing, and geographic information systems.

215. Cultural Landscapes. (3)h.

Role of art, architecture and religion in environmental design. Influence of institutions and culture change on the landscape through classical times, Middle Ages, Renaissance, Romantic Rebellion, and modern times. Design concepts and theories and their expression in the landscape. Also listed as RPL 215.

216. Modern Geography. (3).

Examination of everyday events from a geographic perspective; emphasizes the logic of the geographic approach to social, economic, environmental, land use and health problems.

265. Geology of Michigan. GEO 151 or consent of instructor. (3).

Geologic history of Michigan and its relationship to the landscape and natural resources of the state. Ancient mountainbuilding and the growth of ore deposits, through Paleozoic sedimentation and basin development to Pleistocene glaciation and the history of the Great Lakes. Geologic maps, charts, and sections. Description and identification of typical minerals, rocks and fossils. Local field trips. Graded ABCD>N.

272. Principles of Hydrology. GEO 150, 151; MTH 120 with a grade of C(2.0) or better; or consent of instructor. (3).

Principles, processes and systems of terrestrial hydrology. Geographic and climatic contexts of global and regional water systems; water balance and exchange concepts; land use and water quality relations. Lecture and laboratory.

282. Weather, Climate, and Oceanography. ENV 100 or GEO 1510 or consent of instructor. (4).

Elements of weather and climate over land and water including atmospheric circulation, precipitation processes, climatic regimes, and climate change. Atmosphere - ocean interactions, ocean circulation, and relations to El Nino, monsoonal flow, and hurricanes. Lecture and laboratory.

285. Environmental Hazards and Natural Disasters. GEO 151 or consent of instructor. (3)s.

Survey of environmental hazards and resultant disasters, both natural and human. Floods, earthquakes, volcanic eruptions, oil spills and nuclear accidents. Impacts on society and human responses at local, national and international levels. Lecture and discussion.

297. Professional Development I. At least sophomore standing and declared concentration in earth science, physical geography, resource ecology or resource planning. (1).

Methods and techniques for data management, survey research, professional writing, report preparation, public presentations and other topics. A different topic taught each year.

298. Professional Development II. Sophomore standing. (1).

Methods and techniques for data management, survey research, professional writing, report preparation, public presentations and other topics. A different topic taught each year.

299. Professional Development III. Sophomore standing. (1).

Methods and techniques for data management, survey research, professional writing, report preparation, public presentations and other topics. A different topic taught each year.

303. Surveying and Mapping. Two GEO courses, MTH 120 with a grade of C (2.0) or better; or consent of instructor. (4).

Theory and practical application of surveying and mapping techniques with emphasis on fundamental field mapping methods. Techniques and instruments used to gather field data; surveying and mapping computations; analysis of measurements and errors. Lecture and required field work.

304. Remote Sensing of the Environment. GEO 203, MTH 120 with a grade of C (2.0) or better. (3).

Remote sensing techniques with emphasis on the techniques and procedures for extracting resource information from aerial photography. Application areas in land and water management, urban mapping, land use planning, and other resource areas. *Graded ABCD>N*.

330. Oceanography. GEO 150 or 151. Course(s) in geology and/or chemistry recommended. (3)n.

Basics of physical oceanography, including geology of ocean basins, physical and chemical properties of seawater, thermohaline circulation, and shore environments. Lecture only; for lecture/laboratory course, see GEO 430.

 Geomorphology and Soils. GEO 150 or 151, or consent of instructor. (3)n.

Study of landforms, surface deposits, and soils. Erosional and depositional processes including streams, wind, waves, currents and glaciers, and their influences on the landscape formation and land use. Development of thought and modern trends in geomorphology.

340. Wetlands, Lakes and Streams. Completion of natural science requirement in BIO, ENV, CHM or GEO and at least one additional natural science course at the 300 level, or consent of the instructor. (3).

Study of inland waters including their hydrology, ecology and land use relations. Lake and wetland origins, classification and protection. Review of regulatory policies and practices in Michigan.

370. Field Problems. Two courses in physical geography or consent of instructor. (3-4)n.

Problems, methodology, and field techniques of physical geography. Problem design and field and laboratory instrumentation. Topics and instructor announced. *Also listed as ENV 370. Graded ABCD>N*.

372. Biogeography. GEO 150; BIO 111, 113; or consent of instructor. (3).

Geographic distribution of plants and animals, past and

present, as influenced by geological, biological, geographical, human and other factors. Mass extinctions, geographic diffusion, major biomes, human evolution, environmental issues, biogeographical mapping techniques. *Also listed as BIO 373 and INT 372.*

404. Spatial Analysis Seminar. *GEO 304*; *RPL 370, 371.* (4).

Integration of spatial analysis techniques including remote sensing imagery, spatial databases acquired from public electronic files, or fieldwork; statistical analysis of data. *Graded ABCD>N*.

430. Oceanography. GEO 150 or 151. Course(s) in geology and/or chemistry recommended. (4)n.

Basics of physical oceanography, including geology of ocean basins, physical and chemical properties of seawater, thermohaline circulation, and shore environments. Lecture and laboratory. *Not open to students with credit for GEO 330*.

441. Geophysical Exploration. GEO 331 or consent of instructor. (3).

Techniques used in geophysical exploration of geological resources, mainly soils, bedrock and groundwater. Interpretation of data from soil borings, seismic studies, resistivity probes, gravity measurements, and remote sensing. Applications to engineering, environmental impact, and resource planning. Field experiments.

451. Applied Geomorphology. GEO 331 or 441 or GEO/PUB/RPL 476. (3).

Applications of concepts, methods and techniques from geomorphology to problems in landscape design, civil engineering, and environmental management. Includes slope stabilization, erosion control, shore protection and watershed management.

471. Groundwater Geology. GEO 151, 331, 441. (4).

Principles and processes of geohydrology. Theory and models of recharge, transmission and discharge. Groundwater systems, flow nets, chemistry, supplies, uses, contamination and protection. Lecture and laboratory.

476. Environmental Planning. GEO 203, 331; or consent of instructor. (3).

Environmental analysis for landscape planning and design. Data generation for land use plans, environmental inventories, impact statements. Sources of data, mapping techniques, graphic formatting, dissemination methods. *Also listed as PUB 476 and RPL 476*.

482. Seminar in Biogeography. *GEO 372 or 382; BIO 327. (3).*

Topics in biogeography including land use and biodiversity, global ecosystem management, global climatic change and geographic techniques for monitoring environmental change.

489. Geoscience Teaching Practicum. At least junior standing, three courses in GEO, consent of instructor. (2).

For science concentrators interested in teaching practices and communication in earth science. Work with instructors as tutors, teaching assistants and research assistants in lectures, laboratories, demonstrations and special projects aimed at improving lower division science courses. *May be elected twice*.

490. Resource Science Departmental Seminar I. Consent of instructor. (1-3).

Seminar on applied practice in resource science. *Graded ABCD>N*.

491. Resource Science Departmental Seminar II. Consent of instructor. (1-3).

Applied research in resource science, including supervised fieldwork. *Graded ABCD>N*.

495. Honors Thesis I. *Consent of Department Chair. Open only to Honors Program students in Physical Geography.* (4).

Credit and grade for GEO 495 is not given until successful completion of GEO 496. Also listed as HON 495. Graded ABCDE/Y.

496. Honors Thesis II. Prior or concurrent election of GEO 495 and consent of Department Chair. Open only to Honors Program students in Physical Geography. (4).

Also listed as HON 496. Graded ABCDE/Y.

498. Research in Geoscience. Consent of instructor; completion of majority of degree requirements in physical geography, resource ecology or resource planning. (1-3).

Research in physical geography, environmental science, and related fields, conducted independently or with faculty. Graded ABCDE/Y.

499. Independent Study. *GEO* 498 or consent of instructor. (1-3).

Field study and study of current literature on specific topics. Graded ABCDE/Y.

Courses in Resource Planning (RPL)

215. Cultural Landscapes. (3)h.

Role of art, architecture and religion in environmental design. Influence of institutions and culture change on the landscape through classical times, Middle Ages, Renaissance, Romantic Rebellion, and modern times. Design concepts and theories and their expression in the landscape. *Also listed as GEO 215*.

260. (360). Analytic Methods in Resource Planning. One college course in mathematics or consent of instructor. (3).

Examination of analytical methods used by planners, urban specialists, and natural resource professionals. Review of mathematical and statistical concepts and techniques and their applications to real problems.

311. Urban and Regional Land Use Planning. GEO 150, 151; junior standing; or consent of instructor. (3)s.

Introduction to problems and issues in land use planning. Examination of national land use trends, analysis of causes and

consequences of the low-density urbanization process known as urban sprawl. Skill development in land use problem identification and analysis.

312. Resource Planning and Management. Grade of C (2.0) or better in GEO 115 or 150 or 151 or ENV 100; at least sophomore standing; or consent of instructor. (3).

Principles and theories. Management problems associated with major ecosystems such as range land, rain forest and wetlands and geophysical systems such as watersheds. Practices of various professions including urban planning, landscape architecture, forestry, and wildlife biology.

370. Geographic Information Systems I. *GEO 203 or consent of instructor.* (3).

Introduction of Geographic Information Systems (GIS) concepts and systems. Instruction in raster-based GIS with emphasis on applications in resource and environmental planning.

371. Geographic Information Systems II. Grade of C (2.0) or better in RPL 370. (4).

Evaluation of intermediate and advanced concepts and techniques in Geographic Information Systems (GIS). Problem definition, data evaluation, and modeling using vector-based applications from resource and environmental planning.

411. Land Use Issues. RPL 311, 312; at least junior standing. (3)

Exploration of national and global land use and natural resource issues. Focus on integration of science, policy and planning in examination of these issues. Discussion and paper preparation. *Graded ABCD>N*.

470. Geographic Information Systems Practicum. RPL 371 or consent of instructor. (3).

Application of Geographic Information Systems (GIS) and remote sensing techniques to research and field problems. Emphasis on integration of these geographic technologies in practical problem solving, such as land use change, landscape ecology, and pollution detection.

472. Watershed Management. GEO 203 or consent of instructor. (3).

Introduction to watershed management. Focus on definition and structure of watersheds in Michigan, land use developments that influence the quality of watersheds, and the process of watershed management plan development. *Also listed as PUB 472*.

476. Environmental Planning. GEO 203, 331; or consent of instructor. (3).

Environmental analysis for landscape planning and design. Data generation for land use plans, environmental inventories, impact statements. Sources of data, mapping techniques, graphic formatting, dissemination methods. *Also listed as GEO 476 and PUB 476*.

485. Environmental Emergency Management. GEO 285 or consent of instructor. (3).

Planning and management for emergencies such as chemical

releases, hazardous waste mishaps, earthquakes, hurricanes, floods and tornadoes. Disaster relief, planning, response programs and remediation at local, regional, national and international levels. *Also listed as PUB 485*.

486. Environmental Site Assessment. At least two upperdivision RPL or GEO courses and at least junior standing; or consent of the instructor. (3).

Environmental analysis and evaluation of property parcels. Opportunities and constraints relative to environmental liability, legislative mandates, sources or risk and impacts of former uses. Site planning and management implications of local hydrologic, geomorphic, edaphic and geologic conditions. Fieldwork, report preparation, and discussion. *Graded ABCD>N*.

495. Resource Planning Workshop. *At least two courses in resource planning, at least junior standing.* (1-4).

Workshop in problems of resource planning and management. Topics vary with instructor but include hazardous waste management, watershed management, and energy program development. Participation with professionals outside the University. *Graded ABCD>N*.

Economics (ECN)

350 David M. French Hall (810) 762-3280 FAX (810) 762-3281

Chair: Tevfik F. Nas

Website: http://www.flint.umich.edu/econ Principal Secretary: Judy J. Bedore

Professors Tevfik F. Nas; Associate Professor Adam Lutzker; Assistant Professors Phoebe Chan, Christopher Douglas; Lecturers Scott Darragh, Paula L. Nas, William DeFrance. Professors Emeriti: Virgil M. Bett, Lubomyr M. Kowal, Nallapu

Associate Professor Emeritus: Charles T. Weber

Economics is a social science that deals with many of society's most difficult problems, such as inflation, unemployment, pollution and poverty. As a problem-based discipline, the study of economics enables students to acquire the analytical skills and methodology applicable to a variety of career options. Economics graduates are in demand in such fields as banking, finance, insurance, and in government and industry. In addition, training in economics provides an excellent background for professional education in law and in graduate schools of business and public administration.

Department Mission and Program Assessment

Deeply committed to academic excellence, the Economics Department is dedicated to a curriculum that has a heavy emphasis on theory, quantitative methods, and applied electives. The curriculum is designed to provide students with both the fundamental background and the specialized knowledge needed for analyzing and understanding major economic issues and achieving their goals, such as obtaining positions in business and government and gaining admission to graduate programs in economics, business, law, and related fields. The Department participates in the University-wide effort to assess its academic programs. Information on assessment plans, including goals, methods and outcomes is available at http://assessment.umflint.edu.

Programs in Economics

Two concentration programs are offered, both leading to the Bachelor of Arts degree: the General Program in Economics and the Honors Program in Economics. A Minor in Economics is also available.

General Program in Economics

Requirements.

- A. Thirty-three credits in economics including ECN 201, 202, 315, 354; no more than three credits in ECN 391, 394, and 395 may be included in these 33 credits.
- B. A course in statistics (BUS 211 preferred).
- C. An introductory course and at least nine credits in advanced (300 level) courses in social sciences other than economics.
- D. One of: MTH 117, 118, 120, or 121.
- E. All requirements of the College of Arts and Sciences Bachelor of Arts degree, including general education requirements and a foreign language requirement.

Honors Program in Economics

Faculty Advisor: Paula Nas

Prerequisite. MTH 121.

Requirements.

- A. All requirements of the General Program in Economics, to include ECN 391, Directed Reading in Economics-Research Methods (3 credits), and ECN 394, Directed Research in Economics (3 credits).
- B. ECN 495 and ECN 496, Honors Thesis I and II (4 credits each).
- C. All requirements of the CAS Honors Scholar Program.

Prospective Honors Program students are urged to acquaint themselves as early as possible with the requirements above as well as with the particular procedures for acceptance into the Economics Department Honors Program. See the departmental honors advisor or the Honors Program Director for this information.

Minor in Economics

Requirements. Eighteen credits in economics as follows:

- A. ECN 201, 202, 315, 354 (12 credits).
- B. Two additional courses at or above 300-level, including no more than three credits from ECN 391, 394, and 395, selected in consultation with an Economics Department advisor (6 credits).

The Minor in Economics is designed for students who wish to concentrate in another area but whose career goals require a strong background in economics. This minor is particularly well suited to students who wish to pursue careers in business, finance,

government, journalism, law, or related areas. Successful completion of the Minor in Economics is recorded on the official transcript.

Courses in Economics

201. Principles of Economics (Macroeconomics). (3)s.

Introduction to the principles of economic organization and national income determination and stabilization. Topics include inflation, unemployment, money and banking, and the economic role of government.

202. Principles of Economics (Microeconomics). (3)s.

Introduction to the economic theories of production, consumption and exchange. Topics include applications of supply and demand, production and cost analysis, market structure, market failure, resource markets, and regulation.

314. Money and Banking. *ECN* 201. (3)s.

Nature and functions of money. Commercial banking system and its role in the creation of money. Federal Reserve System as an agency of government control over the economy. Introduction to monetary theory.

315. Intermediate Microeconomic Theory. ECN 201, 202; MTH 117 or 118 or 120 or 121. (3)s.

Analysis of the behavior of decision makers in households, firms, and governments and the role of prices in resource allocation; market structure, economic welfare, regulation, externalities, public goods, and general equilibrium.

327. History of Economic Thought. ECN 201, 202; or consent of instructor. (3)s.

Development of economic thought from early times to the present. Particular attention to the ideas of Adam Smith, David Ricardo, John Stuart Mill, Karl Marx, Thorstein Veblen, and John Maynard Keynes.

330. Political Economy. ECN 201, 202; or consent of instructor. (3)s.

Comparison of competing schools of thought in political economy in historical perspective. Individual versus social explanations of inequality; alternative views of the market as a social phenomenon; the relationship between the political, social and economic systems; theories of long-term structural transformation of the economy.

332. Comparative Economic Systems. ECN 201, 202; or consent of instructor. (3)s.

Theories of capitalism, socialism, and mixed economies. The free market and planned economies. Application to existing economies.

342. Introduction to Econometrics. ECN 201, 202, a course in statistics; or consent of instructor. (3).

Statistical analysis of economic relationships. Emphasis on construction and use of economic models. Multiple regression, two-stage least squares, and other methods of estimating solutions to sets of simultaneous equations.

354. Intermediate Macroeconomic Theory. ECN 201; MTH 117 or 118 or 120 or 121. (3)s.

Theoretical and empirical literature in macroeconomics, including classical, Keynesian, and monetarist theories. Causes, consequences and cures of inflation and unemployment. Determination of equilibrium income, demand for and supply of money, the interest rate, and instability in the private economy.

360. International Economics. ECN 201, 202; or consent of instructor, (3)s.

Conduct of trade between nations. Problems of the balance of trade and of payments. Trade policies and their effects upon domestic and foreign economies. Development of agencies for stimulating and financing international trade.

364. Industrial Economics. ECN 201, 202; or consent of instructor. (3)s.

> Theories of competition and market power. Concentration, scale economies, product differentiation, entry barriers, collusion, mergers, price discrimination, and technological change. Problems in public utility rate-making, misallocation induced by regulation, and the role of competition in regulated industries.

366. The Global Economy. ECN 201, 202; or consent of instructor. (3)s.

> Consideration of the Global Economy, primarily since 1945. Theories of growth and technological change. Case studies of major countries and investigation of key sectors, including manufacturing, information technology, and financial services. Also listed as INT 366.

367. World Economic History. ECN 201, 202; or consent of instructor. (3)s.

Study of economic development from invention of agriculture to the present. Topics include technological change, evolution of economic institutions, the industrial revolution, colonialism and decolonization, and globalization. Theoretical focus on issues of growth and development. Also listed as INT 367.

370. Public Finance. ECN 201, 202; or consent of instructor. (3)s.

Analytical methods applied to the problems of government finance. Effects of revenue and expenditure proposals on the allocation of resources, distribution of income, and administration of government.

372. Urban Economics. ECN 201, 202; or consent of instructor. (3)s.

Analysis of urban and regional economic problems. Location theory, export-base analysis, housing, transportation, and local

374. Energy Economics and Policy. ECN 202 or consent of instructor. (3)s.

Analysis of energy resource development, utilization, and conservation. Long-term energy requirements; alternative

sources. Examination of public energy policies. Benefit-cost analysis.

375. Law and Economics. ECN 201, 202; or consent of instructor. (3)s.

Economic analysis of the legal system, emphasis on property, contract, tort, and criminal law. Public policy issues concerning reform of the legal system.

376. Environmental Economics. ECN 202 or consent of instructor. (3)s.

Application of economic theory to environmental problems. Examination of externalities. Economics of environmental preservation: benefit-cost approach. Governmental environmental policy alternatives. Economic growth and environmental quality.

380. Economics for Education. *ECN* 201, 202. (3)s.

Economic concepts and theories taught in the elementary and middle school grades. Emphasis on strengthening knowledge of applied economics with materials and techniques currently used in the classroom. Group projects aimed at providing practical experience in teaching economics.

391. Directed Reading in Economics. At least 18 credits in economics and consent of instructor. (1-3)s.

Assigned study of topics in economics beyond the scope of regular coursework. *Graded ABCDE/Y*.

394. Directed Research in Economics. At least 18 credits in economics and consent of instructor. (1-3).

Applied research under faculty supervision on an appropriate topic in economics. *Graded ABCDE/Y*.

395. Internship in Applied Economics. At least 18 credits in economics, consent of instructor. (3-6).

Provides the qualified student with on-the-job experience using economics skills. Internship in a selected organization under the supervision of organization personnel and a faculty advisor. Required attendance at periodic seminars and submission of a written report summarizing the internship experience. May be reelected to a maximum of six credits, no more than three of which are applicable to the concentration requirement. Graded Pass/Fail/Y.

421. American Economic History. ECN 201 or consent of instructor. (3)s.

Case study in economic development. Colonization, westward expansion, agriculture, transportation, industrial revolution, slavery. Special focus on rise and expansion of big business, mass production, mass consumption.

424. Labor Economics. ECN 201, 202; or consent of instructor. (3)s.

Examination of labor issues within the context of various theories. Exploration of questions about why people work, the conditions under which they work, how they are paid, and the structure of labor markets.

- [466. The Economy of Russia, Ukraine and CIS. ECN 201, 202. (3)s]
- **469.** Managerial Economics. ECN 201, 202; or consent of instructor. (3)s.

Application of economic theory to the analysis of business problems. Empirical demand and supply analysis, pricing practices, price regulation and antitrust policy, investment decisions, research and development policy, and forecasting. Problems and case studies.

475. Cost-Benefit Analysis. ECN 202 or consent of instructor. (3)s.

Comprehensive, theoretical overview of cost-benefit analysis. Emphasis on theoretical framework for identification and assessment of costs and benefits from society's perspective. Welfare economics and microeconomic foundation of cost benefit analysis; analytical tools and concepts to identify, measure, and compare all possible allocational outcomes in project evaluation; analysis of distributional effects; project evaluation under risk and uncertainty. Also listed as PUB 475.

479. Economics of Health Care. ECN 202; HCR 300; or consent of instructor. (3)s.

Economic analysis of the health care industry and governmental policies in health care. Economic tools to determine probable effects of proposals on the pattern of health care produced and on the allocation of resources both within the industry and in the economy generally. *Also listed as HCR* 479 and PUB 479.

480. Quantitative Methods for Public Administration. At least junior standing. (3)s.

Application of statistical techniques to problem-solving. Forecasting and time-series; regression; correlation; variance; cost-benefit analysis. Computer methods in solving problems of public policy and health care administration. *Also listed as PUB 480.*

495. Honors Thesis I. *Consent of Department Chair. Open only to Honors Program students in economics.* (4).

Credit and grade for ECN 495 is not given until successful completion of ECN 496. Also listed as HON 495. Graded ABCDE/Y.

496. Honors Thesis II. Prior or concurrent election of ECN 495 and consent of Department Chair. Open only to Honors Program students in economics. (4).

Also listed as HON 496. Graded ABCDE/Y.

Graduate Courses in Economics

521. American Economic History. *Graduate standing; ECN 201 or consent of instructor.* (3).

See ECN 421 for description. Not open to students with credit for ECN 421.

524. Labor Economics. Graduate standing; ECN 201, 202; or consent of instructor. (3).

See ECN 424 for description. Not open to students with credit for ECN 424.

527. History of Economic Thought. *Graduate standing; ECN* 201, 202; or consent of instructor. (3).

See ECN 327 for description. Not open to students with credit for ECN 327.

532. Comparative Economic Systems. Graduate standing; ECN 201, 202; or consent of instructor. (3).

See ECN 332 for description. Not open to students with credit for ECN 332.

566. The Global Economy. *Graduate standing; ECN 201, 202;* or consent of instructor. (3).

See ECN 366 for description. Not open to students with credit for ECN 366.

567. World Economic History. *Graduate standing; ECN 201,* 202; or consent of instructor. (3).

See ECN 367 for description. Not open to students with credit for ECN 367.

569. Managerial Economics. Graduate standing; ECN 201, 202; or consent of instructor. (3).

Application of economic theory to the analysis of business problems. Empirical demand and supply analysis, pricing practices, price regulation and antitrust policy, investment decisions, research and development policy, and forecasting. Problems and case studies. Not open to students with credit for ECN 469. Also listed as MGT 554.

571. Public Economics. *Graduate standing.* (3).

Application of economic tools to public decision-making; emphasis on welfare economics and microeconomic foundation of public expenditure analysis; issues and problems in project evaluation and application of cost-benefit techniques. Also listed as PUB 571.

573. Law and Economics. Graduate standing; ECN 201, 202; or consent of instructor. (3).

See ECN 375 for description. Not open to students with credit for ECN 375.

575. Cost-Benefit Analysis. Graduate standing; ECN 202 or consent of instructor. (3).

See ECN 475 for description. Not open to students with credit for ECN/PUB 475. Also listed as PUB 575.

579. Economics of Health Care. Graduate standing; ECN 202; HCR 300; or consent of instructor. (3).

See ECN 479 for description. Not open to students with credit for ECN/HCR/PUB 479. Also listed as HCR 579 and PUB 579.

580. Quantitative Methods for Public Administration. Graduate standing. (3).

See ECN 480 for description. Not open to students with credit for ECN/PUB 480. Also listed as PUB 580.

Engineering Science (EGR)

213 William R. Murchie Science Building (810) 762-3131 Fax: (810) 766-6780 www.umflint.edu/csesp

Chair (Computer Science, Engineering Science, and Physics): Loretta J. Dauwe

Administrative Assistant: Patricia A. Slackta

Secretary: Kathleen Leist

Supervisor of Science Laboratories: Daniel A. Mitchell

Assistant Professor: Quamrul Mazumder Professor Emeritus: Mary E. Cox

Engineers require education and experience in a broad range of topics from materials to manufacturing, from facilities to machine element design, and from circuits to dynamics. Problem solving in engineering is based in fundamental science and mathematics, and utilizes current technology and industrial practice. The Engineering Science programs are designed to help a student enter the engineering profession as an experienced problem solver. Engineers in industry are expected to manage products, materials and processes. They are expected to be able to cost a product, determine the rate of return on an investment, find the break-even point in manufacturing, and price the marketing of a product. Some engineers do more management than others; however, every engineer needs the fundamental engineering concepts and knowledge that form the basis for the profession.

The program in Engineering Science provides coursework experience for students wishing to enter industry as engineers. In addition to technical content, these courses provide practice in forming and working in teams, preparing and presenting oral and written technical reports, and developing advanced computer skills. Engineering design caps the program with students designing and constructing engineering projects.

Department Mission and Program Assessment

The mission of the Engineering Science program is to produce cross-functional, hybrid, multifunctional engineers. The B.S. programs in engineering are designed to produce engineers with related information and knowledge, who will be able to effectively transfer these to industry and society without the need for extensive retraining. The program vision is to be the best engineering education program in Michigan while providing students, staff and faculty with rewarding and satisfying experiences. The program participates in the University-wide effort to assess its academic programs. Information on assessment plans, including goals, methods and outcomes, is available at http://assessment.umflint.edu.

Programs in Engineering Science

Two concentration programs are offered, both leading to the Bachelor of Science degree: the General Program in Engineering Science and the Honors Program in Engineering Science.

A student who plans to transfer to a traditional program, e.g. in mechanical, chemical, or electrical engineering, after attending UM-Flint, should elect the courses prerequisite to the General Program in Engineering Science. Early consultation with an engineering advisor is strongly recommended.

General Program in Engineering Science

Prerequisites. (57 credits).

- A. ENG 112 (3 credits).
- B. MTH 121, 122, 220, 222, 305 (18 credits).
- C. CSC/CIS 175. (4 credits).
- D. CHM 260, 261, 262 (7 credits).
- E. PHY 243, 245 (10 credits).
- F. EGR 102, 165, 230, 260, 280 (15 credits).

Students planning to follow the Managerial Engineering Track should elect ECN 201, 202 and a course in statistics (e.g., BUS 211).

Requirements. (47 credits).

- A. EGR 310, 315, 321, 330, 370, 380, 466 (21 credits).
- B. Two Engineering Science laboratory courses for students following Option A, or the Computer Engineering or Managerial Engineering track, one for students following the Engineering Physics track. (1-2 credits).
- C. Completion of Option A or B below (24 credits).

Option A

Twenty-four (24) additional credits in Engineering Science courses at the 200 level or above.

Option B

Twenty-four (24) additional credits in one of the following tracks:

Computer Engineering. CSC 265, 275, 277; at least 14 additional credits in Computer Science or Computer Information Systems courses at the 300 level or above Managerial Engineering. Completion of the Minor in General Business.

Engineering Physics. PHY 333, 343, 354, 367, 433; elective credits in Engineering Science, Physics, Mathematics or Computer Science courses at the 200 level or above to bring the total track credits to 24.

- D. All requirements of the College of Arts and Sciences Bachelor of Science degree, including general education requirements.
- E. Elective credits to bring the total to 128 credits.

Honors Program in Engineering Science

Prerequisites. EGR 260, 280; MTH 222.

Requirements.

- A. All requirements of the General Program in Engineering Science.
- B EGR 291, Supervised Study in Engineering (2); EGR 391, Independent Study (3).

- C. EGR 495 and 496, Honors Thesis I and II (4 each).
- D. All requirements of the University Honors Scholar Program.

Prospective Honors Program students are urged to acquaint themselves as early as possible with the requirements stated above as well as with the particular procedure for acceptance in the Physics and Engineering Science Department's Honors Program. See the departmental honors advisor or the Honors Program Director for this information.

Courses in Engineering Science

102. Introduction to Engineering and Engineering Problem Solving. (3).

Introduction to engineering practices, various engineering disciplines, common engineering science foundations of all branches, teaming, ethics, and communication, including CAD. *Graded ABC>N*.

165. Computer-Assisted Drafting. (2).

Review of basic drafting principles, orthographic projection, line and plane relationships, dimensioning, and conventional representations. Introduction to the operation of a computer graphics system. System orientation; graphics generation, editing, and manipulation; basic detailing, dimensions, library development; database management.

230. Statics. PHY 243 with a grade C(2.0) or better. (3).

Understanding of the principles of mechanics and their application to the solution of engineering problems, especially in equilibrium state. Free-body diagrams introduced; equilibrium problems and resultants of general force systems stressed.

260. Mechanics of Deformable Solids. *EGR* 230 and MTH 220, each with a grade of C (2.0) or better. (3).

Deformable solids, stress and strain, principal axes, material behavior (elastic, plastic, viscoelastic, temperature dependent). Boundary value problems, torsion, beams. Instability, columns.

265. Computer Aided Engineering Analysis. EGR 165 with a grade of C (2.0) or better. (3).

Introduction to geometric element analysis, deformation, stresses, strains, buckling, von Mises stresses, steady state and transient thermal analysis, and design optimization using Pro/Mechanica.

280. Science of Engineering Materials. MTH 122, PHY 245, each with a grade of C (2.0) or better. CHM 262 with a grade of C (2.0) or better or concurrent election. Concurrent election of EGR 281 recommended. (3).

Introduction to the science of engineering materials. Emphasis on the correlation between material properties and internal structure; examination of metals, alloys, ceramics, polymers, and composite materials for engineering applications.

281. (305). Engineering Materials Laboratory. Prior election with a grade of C (2.0) or better, or concurrent election, of EGR 280. (1).

Laboratory practice in fabrication, preparation, testing and evaluation of materials, including metals, alloys, ceramics, glasses, polymers and composites. *Concurrent election of EGR 280 recommended*.

291. Supervised Study in Engineering. Consent of instructor. (1-4).

Laboratory work or study of the literature on designated problems chosen by the student in consultation with a faculty supervisor. May be reelected to a total of four credits. Graded ABCDE/Y.

301. Facilities Design. EGR 230, 280; MTH 220. (3).

Synthesizing components, processes, and systems into an overall manufacturing facility design. Product, project process, techniques of evaluation. Strongly recommended for students involved in Industrial Engineering Experience projects.

303. Data Acquisition and Control. PHY 145 or 245 with a grade of C (2.0) or better, familiarity with a computer system; or consent of instructor. (3).

Introduction to basic structures that make up LabVIEW programs. Building of applications for communications and control of instruments using GPIB and plug-in data acquisition boards. *Also listed as CSC 303 and PHY 303*.

310. Engineering Economics. EGR 102; prior or concurrent election of MTH 121; or consent of instructor. (3).

Decision-making process in engineering with economic analysis; the role of quality and cost considerations in manufacturing; economies of scale; cash flow analysis; decisions involving capital expenditures, incremental analysis of multiple options, make or buy, rate of return, and present/future value analysis; income tax and interest considerations.

312. Kinematics and Mechanisms. *MTH 220 and EGR 230, each with a grade of C (2.0) or better. (3).*

Introduction to the relationships between geometry and motions of a machine or mechanism and the forces which produce these motions. Emphasis on graphical, analytical methods of analysis and synthesis.

315. Machine Element Design. *EGR* 260 and CSC 175 or 271, each with a grade of C (2.0) or better; or consent of instructor. (3).

Applications of the principles of mechanics of materials and other engineering sciences to the design of such machine elements as fasteners, gears, springs, bearings, clutches, chain and belt drives; analysis of functional and performance requirements; failure theories and their design criteria. Impact loading, stress concentration, and fatigue.

321. Analog and Digital Electronics. *PHY 145 or 245 with a grade of C (2.0) or better; or consent of instructor. (3).*

Properties of semiconductors; diodes, transistors, and other devices and their characteristics; amplifiers, oscillators, filters, and regulators; logic gates, combinational and sequential circuits; analog and digital ICs. Also listed as PHY 321.

322. Analog and Digital Electronics Laboratory. Prior election of EGR/PHY 321 with a grade of C (2.0) or better; or concurrent election of EGR/PHY 321; or consent of instructor. (1).

Semiconductor device characteristics; rectifiers and amplifiers; logic circuit analysis and design; operational amplifiers and active filters; power supplies; memories, A/D and D/A. *Also listed as PHY 322*.

330. Engineering Circuit Analysis. PHY 245 and MTH 222, each with a grade of C (2.0) or better. (3).

Introduction to linear electric circuit analysis, including dc, ac, transient, delta, and wye circuits; active and passive elements. *Concurrent election of EGR 335 expected.*

335. Engineering Circuit Analysis Laboratory. *Prior election with a grade of C* (2.0) *or better, or concurrent election, of EGR 330.* (1).

Laboratory experiments in circuit analysis. One three hour laboratory period weekly.

340. Transport Processes: Momentum, Heat and Mass. MTH 222 and EGR 353, both with grades of C (2.0) or better; or consent of instructor. (4).

Principles of momentum, heat, and mass transport processes. Emphasis on similarities and differences in physical phenomena of various transport processes. Engineering applications in fluid dynamics, heat flow, and diffusion. Concurrent election of EGR 355 recommended.

350. Fluid Mechanics. *CHM* 260, *MTH* 220, *PHY* 245, *each with a grade of C* (2.0) *or better.* (3).

Introduction to the mechanics of fluids. Fluid properties, kinematics, fluid statics, Bernoulli equation, control volume; differential forms of the fundamental laws, dimensional analysis, similitude and fluid/flow phenomena. Computational fluid dynamics.

353. Thermodynamics. CHM 262, MTH 220, and PHY 245, each with a grade of C (2.0) or better. (3).

Study of the first and second laws of thermodynamics and their applications to the analysis of processes involving the control and utilization of energy. Properties and behavior of pure substances, ideal gases, and mixtures; heat engine and refrigeration cycles.

354. Optics. *PHY 245 with a grade of C (2.0) or better; MTH 220, 222, (3).*

Geometrical and wave optics. Topics selected from: refraction, reflection, polarization, dispersion, interference, diffraction, bi-refringence, scattering, and absorption and emission of photons. *Also listed as PHY 354*.

355. Thermofluids Engineering Laboratory. Prior election with a grade of C (2.0) or better in each, or concurrent election, of EGR 340 and 353. (1).

Laboratory experiments in the thermal properties of matter, including thermodynamic states, transport and transfer of thermal energy, momentum and mass, with and without internal thermal sources, and the transient and steady-state thermal properties of matter.

356. Heat Transfer. *EGR 353, MTH 222, each with a grade of C*(2.0) *or better; or consent of instructor.* (3).

Conductive, convective, and radiative heat transfer in steady state and transient conditions. Convection in external and internal flow, and free convection.

365. Engineering Design. BUS 313; EGR 312, 340, 353; grades of C (2.0) or higher in all previous EGR courses; consent of instructor. (4).

Introduction to the process of engineering design. Identification of specific problems or needs; comparison of alternative systems, processes, and components. Study of illustrative case histories. Practice in groups working on typical design projects. Laboratory exercises in construction, evaluation and feedback for design refinement.

367. Intermediate Electricity and Magnetism. PHY 245, MTH 220, 222, 305 each with a grade of C (2.0) or better; or consent of instructor. (3).

Electrostatics, behavior of dielectrics, electric currents and magnetism, electromagnetic induction, alternating current circuits, Maxwell's equations. *Also listed as PHY 367*.

370. Dynamics. EGR 230, MTH 305, CSC 175 each with a grade of C (2.0) or better; or consent of instructor. (3).

Application of principles of mechanics and other engineering science to analysis of force systems in motion, including kinematics of particles and rigid bodies; kinetics of particles and rigid bodies by Newton's laws; work and energy methods; impulse and momentum.

376. Solid State Physics. PHY 343; MTH 220, 222, 305 each with a grade of C (2.0) or better; or consent of instructor. (3).

Crystal structure, diffraction by crystals, thermal properties, dielectric properties; free electron theory of metals, band theory, semi-conductors, magnetism, magnetic resonances, defects, superconductivity. *Also listed as PHY 375*.

380. System Dynamics and Control. Prior election with a grade of C (2.0) or better, or concurrent election, of EGR 370; or consent of instructor. (3).

Modeling and analysis of such dynamic systems as electrical, fluid and thermal. Laplace transforms and solution techniques for first and second order linear differential equations. Introduction to linear feedback control theory, block diagrams, transient and frequency responses, stability, system compensation and design.

391. Independent Study. Consent of instructor. (1-4).

Laboratory study or study of current literature on a selected topic. May be reelected to a total of six credits. Graded ABCDE/Y.

395. Cooperative Practice in Engineering. EGR 280 and 301, each with a grade of C (2.0) or better; consent of Industrial Engineering Program Supervisor. (3).

Industrial and engineering job planned jointly by the student, the Industrial Supervisor, and the Engineering Cooperative Coordinator. Project report and oral presentation required. Student's work evaluated by the Industrial Supervisor and the Engineering Cooperative Coordinator. *May be reelected. Graded Pass/Fail/Y.*

397. Robotics and Mechatronics Laboratory. Prior or concurrent election of EGR 399. (1).

Laboratory experiments on electromechanical, pneumatic, hydraulic and piezoelectric actuators and systems. Topics selected from: sensors; real-time computer control using the personal computer; position, trajectory, and force control of multi-link manipulators; vision-based control and sensor fusion.

399. Introduction to Robotics and Mechatronics. MTH 220, CSC/CIS 175, each with a grade of C (2.0) or better; or consent of instructor. (3).

Synopsis of fundamental ideas and problems in robotics. Discussion of several sensors, actuators, power transmission devices, planning and implementation of robot trajectories, microcontrollers.

410. Vibrations. EGR 370 with a grade of C (2.0) or better; or consent of instructor. (3).

Free and forced vibrations of systems with one degree of freedom; rotating and reciprocating unbalance, critical speeds, vibration isolation and transmissibility, vibrating measuring instruments, support motion, frequency motion. Linear multiple-degree systems; analysis by matrix and approximation methods, modal analysis and mode summation.

433. Advanced Physics Laboratory II/III. Consent of instructor. (1-3).

Original problems selected and pursued in consultation with the instructor. For two credits, one four-hour laboratory weekly. May be reelected once, to a maximum of five credits. Also listed as PHY 433. Graded ABCDE/Y.

446. Problem Solving & Decision Making. BUS 211, EGR 301; admission to EGR program; consent of instructor. (3).

Overview of problem solving and decision making, including introduction to creativity tools, flowcharts, cause and effect diagrams, operational definition, Pareto analysis, run charts, control charts, and FMEA. Review of QS-9000, the automotive supplier quality standard.

466. Engineering Design II. EGR 280, EGR 315 or 365, two additional 300-level EGR courses, all with a grade of C (2.0) or better; senior standing; consent of instructor. (3).

Advanced design concepts including feedback, process and product improvement, computer aided design. Team projects and exercises in design improvement. *Graded ABCDE/Y*.

470. Product Development. MTH 122 and at least junior standing; or bachelor's degree in appropriate field; or consent of instructor. (3).

Properties of the product/technology development process, issues of product strategy, R&D management and implementation of new processes, including analysis of the process of product development; quality control, development and application of control charts. Theory of constraint and its application in manufacturing and engineering.

476. Engineering Design of Experiments. EGR 305, 340 and BUS 211, each with a grade of C (2.0) or better. (3).

Methods of design of experiments (DOE) developed and

applied to design and redesign of product and process. Students organized in teams use a computer simulation program to generate a case study involving redesign of a process.

495. Honors Thesis I. *Consent of the Department Chair. Open only to Honors Program students in engineering.* (4).

Credit and grade for EGR 495 is not given until successful completion of EGR 496. Also listed as HON 495. Graded ABC>N/Y.

496. Honors Thesis II. Prior or concurrent election of EGR 495 and consent of Department Chair. Open only to Honors Program students in engineering. (4).

Also listed as HON 496. Graded ABC>N/Y.

English (ENG)

326 David M. French Hall (810) 762-3285 Fax: (810) 237-6666

URL: http://www.umflint.edu/departments/English

Chair: Stephen D. Bernstein Principal Secretary: Karen Woods

Professors Robert W. Barnett, Stephen D. Bernstein, Thomas Foster, Jan Furman, Frederic J. Svoboda, Jacqueline Zeff; Associate Professors Janice Bernsten, Mary Jo Kietzman; Assistant Professors Anjili Babar, Jacob Blumner, Kazuko Hiramatsu, Alicia Kent, Suzanne Knight, Stephanie Roach, AnneMarie Toebosch; Full-Time Lecturers Cathy Akers-Jordan, Jim Anderson, Julie Colish, David Larsen, Maureen Thum, Janelle Wiess, Jan Worth-Nelson; Part-Time Lecturers Jill Bauer, Gerald Browning, Patricia Emenyonu, Hannah Furrow, Catherine O'Connor; Senior Instructional Associate Scott Russell.

Department Mission and Program Assessment

Because language is the chief means of human communication as well as an artistic medium, courses in English may focus on literature, composition, linguistics or English education. Despite this range, a common mission informs them. The Department of English exists to provide students with the instruction and the opportunity necessary to develop a critical understanding of how English has been used, how it can be used, and the logic of how it works. Emphasis on reading, writing, analysis, interpretation, and teaching —whether of literature, rhetoric, or linguistic structure—serves the goal of helping students examine historical, cultural, political, ethical, and aesthetic facets of the language in meaningful and productive ways.

Students often elect courses in English for the inherent reward. Many prepare to teach English, and others find it a useful preparation for occupations that do not require highly specialized training or in which there is a demand for ability in communication.

The Department participates in the University-wide effort to assess its academic programs. Information on assessment plans, including goals, methods and outcomes, is available at http://assessment.umflint.edu.

English Placement Exams

The English Department uses a reading test score and a Writing Placement Exam to place students into the appropriate freshman English class: ENG 100 (College Reading and Learning Strategies), 109 (College Writing Workshop), 111 (College Rhetoric), or 112 (Critical Writing and Reading).

Reading and writing placements are mandatory for (1) entering freshmen and (2) transfer students without prior credit for ENG 111 and 112 equivalents and adult returning students whose Writing Placement Exam score places them into a course for which they have not received transfer credit.

Reading Placement Exam

Reading placement is based on ACT Reading score. Students without an ACT Reading score or students wishing to retest their original reading score should take the Reading Placement Exam in the advising office. Based on ACT Reading Score or Reading Placement Exam results, students may be required to take ENG 100 (College Reading and Learning Strategies).

Students required to take ENG 100 based on their ACT Reading or Reading Placement Exam score may take ENG 100 currently with ENG 109 (1-3 credits) and/or ENG 111. However, to insure the necessary reading strategies for success in ENG 112, students required to take ENG 100 must successfully complete ENG 100 before taking ENG 112.

Writing Placement Exam

The Writing Placement Exam consists of a two-hour timed essay written on a given topic. The Writing Placement Exam is required of all incoming first year and transfer students who have not yet completed their first year composition requirements. First year and transfer students who have not already completed the equivalent of ENG 111 and 112 at another university may not register for ENG 111 or 112 unless they have taken the Writing Placement Exam and can be appropriately placed on the basis of their scores.

Based on Writing Placement Exam results, students may be required to complete ENG 109 for three credits before taking ENG 111. Students may also be required to take and successfully complete one credit of ENG 109 concurrent with ENG 111 or 112.

Note that any student who wants additional individualized writing instruction can elect the one credit ENG 109.

Programs in English

Five concentration programs are offered, all leading to the Bachelor of Arts degree: the General Program in English, the Honors Program in English, the Program in English with a Specialization in Writing, and the Teacher's Certificate Program in English. Minors are available in American Literature, British Literature, Technical Writing, Writing, and Linguistics. (See the *Catalog* section on Linguistics.) A Teacher's Certificate Program Minor is also offered.

General Program in English

Requirements. Thirty credits in English at the 200 level or above, including 18 at the 300 or 400 level and no more than six from ENG 202, 203 and 208. Within the 30 credits, the following are required:

- A. ENG 204 or 205 or 206 or 207; ENG 241.
- B. A course in American or American ethnic literature.
- C. A writing course from the 200 series or above.
- D. Two courses at the 300 level or above in British literature before 1800.

- E. Completion of an Individual Major Portfolio. Consult the department for portfolio guidelines.
- F. ENG 400 or equivalent.
- G. All requirements of the College of Arts and Sciences Bachelor of Arts degree, including general education requirements and a foreign language.

Honors Program in English

Requirements.

- A. All requirements of the General Program in English, to include ENG 400; at least one semester of ENG 395, Honors Independent Reading; one semester of ENG 396, Advanced Honors Research; and an additional course numbered 399 or higher.
- B. ENG 495 and 496, Honors Thesis I and II (4 credits each). No student with a grade of B- or lower in ENG 495 or ENG 496 will graduate with Honors in English.
- C. All requirements for the University Honors Scholar Program.

Prospective Honors Program students are urged to acquaint themselves as early as possible with the requirements above, as well as with the particular procedures for acceptance into the English Department's Honors Program. See the departmental honors advisor or the Honors Program Director for this information.

Program in English with a Specialization in Writing

Requirements. Thirty-six credits in English at the 200 level and above, including at least 18 at the 300 or 400 level and no more than six from ENG 202, 203 and 208.

- A. Literature. Fifteen credits as follows:
 - 1. Literary Analysis. ENG 241 (3 credits).
 - Classical Literature. One from: ENG 204, 205, 206, 207 (3 credits).
 - 3. British Literature Pre-1800. One from: ENG 303, 310, 312, 315, 316, 317, 319, 326, 327, 329, 330 (3 credits).
 - British Literature (any period). One additional from: ENG 303, 310, 312, 315, 316, 317, 318, 319, 326, 327, 329, 330, 331, 332, 333, 334, 385, 386 (3 credits).
 - American/Ethnic Literature. One from: ENG 213, 215, 353, 355, 356, 357, 364, 368, 374, 375, 382, 432, 433, 434 (3 credits).
- B. Writing. Eighteen credits as follows:
 - Composition Theory. Two from: ENG 336, 340, 363 (6 credits).
 - Writing Practice (Nonfiction, Creative Writing, and/or Technical and Professional Communications). Three from: ENG 252, 260, 296, 298; ENG/LIN 306; ENG 309/THE 390; ENG/COM 338, 345, 354, 391, 392, 393, 399 (9 credits).
 - 3. Linguistics. ENG/LIN 200 or 244 (3 credits).
- C. Senior Seminar. ENG 400 (3 credits).
- D. Completion of an Individual Major Portfolio. Consult the department for portfolio guidelines.

E. All requirements of the College of Arts and Sciences Bachelor of Arts degree, including general education requirements and a foreign language.

Teacher's Certificate Program

Requirements. Forty-five credits, including at least eighteen credits in English at the 300 level or above, and no more than six from ENG 202, 203, and 208, distributed as follows:

- A. Literature (18 credits).
 - 1. ENG 241.
 - British literature. One from ENG 303, 310, 312, 317, 318, 319, 326, 327, 329, 330, 331, 332, 333, 334, 385, 386
 - 3. Shakespeare. ENG 315 or 316.
 - 4. American literature. One from ENG 353, 355, 356, 357, 364, 368, 382, 432, 433, 434.
 - American ethnic literature. One from ENG 213, 215, 374, 375, 382, or a course approved by the English Department.
 - 6. An additional literature course at the 300 level or above.
- B. Writing (6 credits).
 - One from: ENG 252, 296, 298, 338, 340, 345, 354, 363, 392, 393, 399, 400; ENG/LIN 306.
 - 2. ENG 412/EDR 446.
- C. Education (6 credits). ENG 361/EDS 347, ENG 410/EDR 445; both taken as Education.
- D. Linguistics (6 credits). ENG/LIN 200, 244; both taken as Linguistics.
- E. Electives in English at the 200 level or above (9 credits).

The following courses are recommended as excellent preparation for teaching English: a course in women's literature chosen from: ENG 228, 337, or a course approved by the English Department; further courses in American or British literature or writing; a course in Greek and Roman literature chosen from ENG 204, 207; ENG/LIN 349; ENG 351.

- F. Completion of Individual Major Portfolio.
- G. A teacher's certificate minor chosen from outside the English Department.
- H. All requirements of the College of Arts and Sciences Bachelor of Arts degree, including general education requirements and a foreign language.

Prospective candidates should also study the sections entitled "General Requirements for Teacher Certification" and "Secondary Education Teacher's Certificate Programs," printed in the Department of Education section of this *Catalog*.

Minor in American Literature

Requirements. Twenty-one credits distributed as follows:

- A. ENG 213 or 215, 241, 356, 357.
- B. Three courses chosen from ENG 353, 355, 364, 368, 382, 383, 384, 432, 433, 434, 435.

Minor in British Literature

Requirements. Eighteen credits distributed as follows:

- A. ENG 241, 303 or 310, 315 or 316, 326 or 332.
- B. Two additional courses at the 300 level in British literature.

Minor in Linguistics

See Linguistics.

Minor in Writing

Requirements. Twenty-one credits as follows:

- A. One literature elective (3 credits).
- B. Five from: ENG 252, 296, 298, 306, 338, 340, 345, 354, 363, 392, 393, 399, 412, 490 (15 credits).
- C. LIN/ENG 240 or 244 (3 credits).

Minor in Creative Writing

Requirements. Twenty-one credits distributed as follows:

- A. ENG 241 and one literature elective.
- B. ENG 296.
- C. ENG 392, 393.
- D. Two from: ENG 252, 260, 298, 309, 399.

Minor in Technical and Professional Writing

Requirements. Twenty-four credits distributed as follows:

- A. ENG 241.
- B. ENG 345, 354.
- C. Three from: ENG 252, 298, 340, 363, 399; ENG/COM 338; ENG/LIN 306; COM 225, 340.
- D. ENG/LIN 200 or 244.

Minor in Composition Studies and Foundations of Writing Instruction

Requirements. Twenty-one credits distributed as follows: A. ENG 241.

- B. ENG/LIN 200 or 244.
- C. Two from: ENG 336, 340, 363.
- D. Three from: ENG 252, 260, 296, 298, 345, 399; ENG/COM 338; ENG/LIN 306.

Students with concentrations in English may not minor in American Literature, British Literature, Technical Writing or Writing.

Teacher's Certificate Minor

Requirements. Twenty-four credits distributed as follows:

- A. Five courses in literature (15 credits).
 - 1. ENG 241.
 - 2. A course in literature before 1850 from: ENG 303, 310, 312, 315, 316, 317, 326, 327, 330, 331, 350.
 - 3. A course in American literature from: ENG 353, 355, 356, 357, 364, 368, 382, 432, 433, 434.
 - 4. A course in American ethnic literature from: ENG 213, 215, 374, 382; or a course approved by the English Department.
 - 5. An additional literature course numbered 300 or above.
- B. A course in writing from: ENG 252, 296, 338, 340, 345, 354, 363, 412; ENG/LIN 306 (3 credits).
- C. ENG 361/EDS 347 (3 credits).
- D. A cognate linguistics course from ENG/LIN 200, 244 (244 recommended) (3 credits).

Courses in English

100. College Reading and Learning Strategies. (3).

Intensive work in reading for comprehension and associated learning strategies. Designed to help the student become an active, independent learner. May be required on the basis of test performance or may be elected by students, including transfer and returning students, who desire to improve their reading and learning skills. It is strongly suggested that students taking ENG 100 enroll concurrently in at least one 100-level lecture course in any subject area. *Graded ABC>N*.

109. College Writing Workshop. Placement by departmental examination or consent of instructor. (1-3).

Individual help for students having problems with writing. Work required in the Writing Center. May be reelected, to a total of three credits. The course cannot be added for three credits after the first week, nor for two credits after the fifth week, nor for one credit after the eighth week. Graded ABC>N.

110. College Writing Workshop II. ENG 109 or consent of Writing Center staff. (1-3).

Independent study in the Writing Center for only ESL (English as a Second Language) students who need further work in writing after completing three credits of ENG 109. May be reelected to a total of three credits. Graded ABC>N.

111. College Rhetoric. Demonstrated proficiency in reading and writing as determined by a qualifying score on departmental placement test or successful completion of ENG 109 as determined by the department. (3).

Introductory course in composition emphasizing written expression appropriate to successful college level work. Analytical readings; creative and critical thinking; development of a student's sense of integrity as a writer. Graded ABC>N.

112. Critical Writing and Reading. ENG 111 or equivalent. Completion of ENG 100 if required based on placement test results. Transfer students must take the departmental placement test before registering for this class. (3).

Intensive course in critical and analytical reading, writing and

research strategies necessary for successful academic work. Techniques for essay exams; argumentative, analytical, and critical papers; undergraduate research. Based on placement test results or at the discretion of the department, a student may be required to take one credit of ENG 109 concurrently with ENG 112 and must pass both courses to receive credit for either. Graded ABC>N.

200. Introduction to Linguistics. At least sophomore standing.
(3).

Introduction to the study of language. Goals and methodology of linguistics: phonology, morphology, transformational grammar, semantics. Language change and language universals. Relationship of language study to other disciplines: sociolinguistics, psycholinguistics, language learning, philosophy of language, animal languages, computers. *Also listed as LIN 200*.

202. Introduction to Prose Fiction. Prior or concurrent election of ENG 112. (3)h.

Examination of the several kinds of prose fiction--short story, novel and tale--focusing on the personal and social dimensions of narrative. Emphasis on the development of a critical vocabulary for discussing such aspects of fiction as the role of the narrator, irony, point of view, plot, character, romance and realism.

203. Introduction to the Drama. Prior or concurrent election of ENG 112. (3)h.

Study of the drama from earliest times to the present, with emphasis on social, ritualistic, personal and artistic elements. Attention to a critical vocabulary for discussing such formal concerns as plot, character, structure of the theater, realism, tragedy and comedy.

204. Literature of Greece and Rome. Prior or concurrent election of ENG 112. (3)h.

Contribution of classic myth to European and American literary culture. Selected masterpieces of ancient literature read in English translation. *Also listed as CPL 204*.

205. The Bible in English: Old Testament and Apocrypha. Prior or concurrent election of ENG 112. (3)h.

The Old Testament, in contemporary English translation, considered as a humanistic document of central importance to Western Civilization; emphasis on the literary values and cultural backgrounds of selected books from the Torah, History Books, Wisdom Literature, Prophets, Poetry and Apocrypha. *Also listed as CPL 205.*

206. The Bible in English: Old Testament Prophets, Apocalyptic and New Testament. Prior or concurrent election of ENG 112. (3)h.

The New Testament, and Old Testament materials relevant to

the formation of the New Testament, in contemporary English translation, considered as a humanistic document of central importance to Western civilization; emphasis on the literary values and cultural backgrounds of selected books from the Old and New Testaments, TO Prophets, and the Apocrypha. *Also listed as CPL 209.*

207. Survey of Greek and Roman Classical Literature. *ENG* 112. (3)h.

Survey of literature of the Greek and Roman classical age in English translation, with focus on styles of writing, including the epic, tragedy and comedy, lyrics, eclogues, epistles and satires, with emphasis on the contribution these works have made to western civilization. *Also listed as CPL 208*.

208. Introduction to Poetry. Prior or concurrent election of ENG 112. (3)h.

Readings of verse in English, drawn from a variety of periods and types, focusing on poetry as the individual's response to the larger world. Emphasis on development of a critical vocabulary for discussion of figures of speech, meter, rhyme, symbolism, imagery, poetic forms and genres.

209. Survey of African Literature. (3)h.

Introduction to works of representative writers from all parts of the African continent. *Also listed as AFA 206 and CPL 206*.

213. American Ethnic Literature. Prior or concurrent election of ENG 112. (3)h.

Comparative approach to American literature of various ethnic groups, including Black, Chicano, Indian, and white ethnic groups.

215. Survey of African-American Literature. Prior or concurrent election of ENG 112. (3)h.

Introduction to American literature written by African-American writers. Major authors studied in historical context along with cultural elements of folklore and related arts. *Also listed as AFA 215*.

228. Women and Literature. Prior or concurrent election of ENG 112. (3)h.

Study of writing by women in order to explore the concerns of women writers, recurrent themes in their work, and feminist approaches to literature. Readings include historically important works by women as well as contemporary literature. *Also listed as WGS 228*.

241. Elements of Literary Analysis. *ENG* 112. (3)h.

Concentrated study of literature through reading and careful analysis of poetry, fiction, drama. Critical essay writing based in such readings.

244. The Structure of English. (3).

Detailed examination of the structure of the English language with emphasis on structure of sentences and notions of grammar and usage. Also listed as LIN 244.

246. Saxons, Magicians, and Triangles. At least sophomore standing. (3)h.

Study of the later Middle Ages with a unifying theme: the development of the Arthurian legend. Literature the primary concern; medieval philosophy, life, and arts given considerable attention. Also listed as CPL 246.

252. Advanced Composition. ENG 112 or equivalent. (3).

Advanced work with the rhetorical elements of invention, form, and style; emphasis on writing for a variety of audiences; workshop activities in pre-writing, writing and revision; emphasis on the process of writing, from discovering subject matter to shaping discourse.

260. Writing the Personal Essay. *ENG* 112. (3).

Essay writing concerned with exploring philosophical and unconventional themes through autobiographical experience. Readings including such historically important essayists as Montaigne, Hazlitt, Dillard. Workshop format.

296. Introduction to Creative Writing: Fiction, Essay, Poetry, **Drama.** ENG 112 and one of ENG 202, 203, or 241. (3)h.

Creative writing in connection with readings in contemporary literatures. Workshop format. Students enrolled in this course and otherwise eligible may compete for the Avery Hopwood and Jule Hopwood Awards in creative writing.

298. Topics in Writing. ENG 112 or equivalent. (3).

Writing in a specific form or genre or for a specific audience; appropriate readings as models for writing. Examples of offerings: the essay, biography and autobiography, nature writing, writing for specific markets. May be elected twice. Only three credits may apply toward the concentration in English. Students enrolled in this course and otherwise eligible may compete for the Avery Hopwood and Jule Hopwood Awards in creative writing.

299. Topics in Literature. Prior or concurrent election of ENG 112. (3)h.

Examination of literature in the context of contemporary events. May include the American essay, detective fiction, fantasy literature, travel literature, the holocaust, immigrant literature, midwestern writers, fairy tales in children's literature. May be elected twice. Only three credits may apply toward the concentration in English.

303. Medieval Literature. A sophomore course in literature or consent of instructor. (3)h.

Reading and discussion of important literary works from Beowulf to Malory with considerable attention given to the medieval culture out of which they arose and which they reflect. **306.** Writing about Language. LIN/ENG 200. (3).

Theory and practice of writing about language through the study of various topics in linguistics. Topics include Sign Language, language acquisition and Ebonics. Also listed as LIN 306.

307. English Travelers in the Middle East & Cross-Cultural **Perceptions.** A sophomore course in the humanities or social sciences or consent of instructor. (3)h.

Survey of encounters from the Renaissance to the present between English travelers and native Muslims, as well as individuals from other religious and ethnic groups in the Ottoman Empire, Morocco, Persia and the modern Middle East. Travel writing as an important branch of literary studies; how narrative strategies may further imperialist agendas or undermine them by representing encounters that are mutual, cooperative, respectful and potentially transformative. Also listed as MES 307.

309. Playwriting. Consent of instructor. (3)f.

Principles and practice of modern dramatic composition. Group analysis or characterization, story, plot structure, dialogue, and other dramaturgical elements in the one-act play. Also listed as THE 390.

310. Chaucer and the Fourteenth Century. A sophomore course in literature. (3)h.

> Introduction to the literature of the late Middle Ages, including the Gawain poet, Langland's Piers Plowman, the great mystics, early cycle drama, and Chaucer's major works: the minor poems, Canterbury Tales, and Troilus and Criseyde. All but Chaucer read in modern English translation.

312. The Renaissance. A sophomore course in literature. (3)h.

English literature from 1560 to 1625, including the works of Sidney, Spenser, Marlowe, Jonson and Donne and Shakespeare's non-dramatic poetry.

315. Shakespeare's Principal Plays. A sophomore course in literature or consent of instructor. (3)h.

Study of selected comedies, histories and tragedies, with emphasis on the development of Shakespeare's art.

316. Shakespeare's Principal Plays. A sophomore course in literature or consent of instructor. (3)h.

Study of selected comedies, histories and tragedies, with emphasis on the development of Shakespeare's art.

317. Writing and Revolution in Seventeenth-Century **England.** A sophomore course in literature. (3)h.

English literature of the seventeenth century, including works of Milton, Dryden and their contemporaries.

318. Topics in Irish Literature. A sophomore course in literature or consent of instructor. (3)h.

Studies in the significant periods, genres and movements of Irish literature. Topics may vary (e.g., Irish Drama, Modern Irish Literature, Medieval Epic, or Lyric Poetry). May be elected twice.

319. Milton and Spenser: Radicals Making a Tradition. A sophomore course in literature. (3)h.

Intensive study of the major works of Edmund Spenser and John Milton, the two most important non-dramatic poets of 16th - and 17th-century England, in their socio-political contexts. Special focus on how an essentially radical English literary tradition was created by poets in the process of reading and rewriting their predecessors.

326. The Age of Enlightenment. A sophomore course in literature or consent of instructor. (3)h.

English literature from Dryden to Johnson, particularly the poetry of Dryden and Pope and the prose of Addison, Steele, Defoe, Swift, Boswell, and Samuel Johnson. Written reports on the fiction of Richardson, Fielding, Sterne and Smollett.

327. Age of Sensibility. *A sophomore course in literature.* (3)*h.*

English literature from Johnson to Burke, particularly the poetry of Thompson, Gray, Smart and Goldsmith, and the prose of Johnson and Burke. Attention to the eighteenth century art of travel writing as practiced by Boswell, Smollett and Sterne.

329. The Eighteenth Century British Novel. A sophomore course in literature or consent of instructor. (3)h.

Critical study of the early period of the novel in English, focusing on the relationship of the genre to its historical background, as well as to earlier prose. Consideration of such figures as Behn, Defoe, Richardson, Fielding, Sterne, Smollett, Burney, Walpole, Mackenzie and Edgeworth.

330. The Early Romantic Movement. A sophomore course in literature or consent of instructor. (3)h.

Major and minor writers from the early British Romantic period, including Blake, Wordsworth and Coleridge.

331. The Late Romantic Movement. A sophomore course in literature or consent of instructor. (3)h.

Major and minor writers from the late British Romantic period, including the Shelleys, Keats, Byron and Emily Bronte.

332. Victorian Literature. A sophomore course in literature. (3)h.

British poetry and prose from 1830-1900. Emphasis on issues of the day such as education, science and technology, religion, "the woman question", labor. Writers may include Tennyson, Browning, Barrett Browning, Arnold, Eliot, Bronte, Dickens, Carlyle, others.

333. Modern British Literature. A sophomore course in literature or consent of instructor. (3)h.

British poetry and prose from 1900-1945. Emphasis on Modernism as practiced by Joyce, Lawrence, Woolf, Yeats, Auden and Thomas, among others.

334. Post-Modern British Literature. A sophomore course in literature or consent of instructor. (3)h.

British prose and poetry after 1945, with emphasis on the variety

of reactions against Modernism in the context of post-war society. Writers may include Fowles, Lessing, Murdoch, Burgess, Larkin, Hill and Hughes.

335. Contemporary Poetry. A sophomore course in literature or consent of instructor. (3)h.

A study of representative contemporary American and British poets, e.g., Ginsberg, Creeley, Stafford, Wright and Smith.

336. History and Principles of Rhetoric. *ENG 112, 241; junior standing, or consent of instructor. (3).*

Introduction to rhetoric and rhetorical theory. Origins and history of rhetoric from the Greeks to the 20th Century; definitions of rhetoric from each historical period. Study of historical rhetoric as an influence on modern composition theory and practice.

337. Topics in Women's Literature. Sophomore course in literature or consent of instructor. (3)h.

Intensive study of the concerns and achievements of selected women writers as they explore a common theme, genre, or question. Topics may vary (e.g. Life Writings, Portrait of the Artist as a Young Woman, Marriage and the Novel). *May be elected twice. Also listed as WGS 337*.

338. Communications in Business. ENG 112; at least junior standing. (3).

Theory and practice of business communications. Audience; content and tone; collection and arrangement of data; selection of form, strategy and medium. Practical applications to management, including oral, written and audio-visual presentations. Also listed as COM 338.

340. Introduction to Composition Theory. *ENG* 112, 241; junior standing; or consent of instructor. (3).

Broad survey of competing theories of the field of Composition, including current-traditional, expressive, cognitive, and social construction; historical views that have helped shape the field. Substantial writing project derived from course curriculum and individual student interest

345. Technical Writing. ENG 112 or equivalent. (3).

Special problems in organizing and understanding technical information. Strategies for writing technical descriptions, definitions, classifications, abstracts and analyses. Writing assignments, revisions and oral presentations using graphics.

351. Language and the Mind. *ENG* 200 or *LIN* 200. (3).

Investigation of strategies used by speakers in acquiring and putting into use the rules of their language. Includes child language acquisition and development, experimental psycholinguistics (testing the psychological reality of grammars), nonverbal communication, bilingualism, and language disturbances. *Also listed as LIN 351*.

353. American Poetry in the Modernist Tradition. *ENG 112 and one of: ENG 202, 203, 204, 207, 208, 241. (3)h.*

Survey of the major poets of this century and history of the forces at work in the shaping of modern American poetry.

354. Public and Professional Writing. ENG 112; at least junior standing. (3).

Expository writing to develop writing skills needed for success in the academy and the chosen career. Emphasis on crafting of style and voice in public and professional writing. Résumés, cover letters, personal statements, professional interviews, academic articles, and editorials.

355. American Romanticism. *A sophomore course in literature or consent of instructor.* (3)h.

American prose and poetry from the Revolution to the Civil War. Rise of American national literature and American romanticism, including Transcendentalism and the "dark romantics." May include Irving, Cooper, Emerson, Hawthorne, Thoreau, Melville, Dickinson and Whitman.

356. American Realism and Naturalism. A sophomore course in literature or consent of instructor. (3)h.

American prose and poetry from the end of the Civil War to World War I. Examination of more "realistic" views of the world, including Naturalism. May include Twain, Howells, James and Crane.

357. Modern American Literature. A sophomore course in literature or consent of instructor. (3)h.

American prose and poetry from World War I to World War II. Rise of Modernism and other responses to a changing world. May include Fitzgerald, Hemingway, Faulkner, Pound and Eliot.

358. Major Novelists. A sophomore course in literature or consent of instructor. (3)h.

Intensive study of one to three major novelists, English, American, or continental.

359. Special Topics in Literary Studies. *ENG* 112 and a sophomore level literature class; or consent of instructor. (3)h.

Examination of literary topics of special interest that may cross historical periods, genre distinctions and disciplines. Depending on the topic, instruction in special research methods may be offered. Because students should have some prior experience analyzing literary texts, the course provides opportunities for developing unique research or creative projects. *May be elected only once*.

361. Teaching English in Middle and Secondary Schools. *Prior or concurrent election of EDS 360. (3).*

Outstanding problems in the teaching of English composition, literature and language in middle and secondary schools. Offered in the fall semester. Required of all candidates for the secondary teacher's certificate in English. Strongly recommended that this course be completed prior to student teaching in secondary English. Should be elected as EDS 347 by English teacher's certificate majors; may be elected as EDS 347 or ENG 361 by English teacher's certificate minors. Also listed as EDS 347.

363. Seminar in Collaborative Writing Theory and Practice. *Consent of the instructor.* (3).

Theory and practice in methods of teaching writing for tutors working in the Writing Center. *Graded ABCD>N*.

364. Early American Literature. A sophomore course in literature or consent of instructor. (3)h.

American prose and poetry of the colonial and revolutionary periods. Examination of the writings that form the basis for later American literature. May include Bradford, Taylor, Franklin and Paine.

368. Post-Modern American Literature. *A sophomore course in literature or consent of instructor.* (3)h.

American prose and poetry since World War II. Consideration of "post-modern" ways of structuring literary expression.

373. Philosophy in Literature. *One course in philosophy.* (3)h.

Examination of philosophical ideas and problems as they occur in works of literature. May focus on major authors such as Dostoevsky and Camus, or on philosophical ideas such as good and evil, freedom or personal identity. *Also listed as PHL 373*.

374. Major Themes in American Ethnic Literature. *ENG* 213, 215, or consent of instructor. (3)h.

Representative ethnic authors from various genres critically examined in the contexts of multicultural themes. Examples include rites of passage, nationalism and the American Dream, stereotypes and reversal of stereotypes, folklore and its literary applications, sexual attitudes and sex roles, and the image of ancestors.

375. Modern Native American Literatures. A sophomore course in literature or consent of instructor. (3)h.

Survey of post-contact written literature by indigenous peoples of North America.

382. Cultural Themes in Contemporary American Novels. A sophomore course in literature or consent of instructor.

Examination of the rich mythology, lore and legend of Native American, Hispanic, and African-American cultures through study of historical and other novels influenced by native traditions.

383. Modern Novel. A sophomore course in literature or consent of instructor. (3)h.

Critical study of the English and American novel in the twentieth century, illustrating contemporary trends in theory and development.

385. The Nineteenth Century British Novel. A sophomore course in literature or consent of instructor. (3)h.

Critical study of the Regency and Victorian novel, illustrating the development of the novel as an art form and its relationship to its social and political background, concentrating on such figures as Austen, Shelley, the Brontes, Dickens, Eliot, Hardy and Conrad.

386. The Twentieth Century British Novel. A sophomore course in literature or consent of instructor. (3)h.

Critical study of the modern and postmodern periods, illustrating major trends in theory and development. Discussion of the relationship of literature to the backdrop of

the World Wars and after in such figures as Lawrence, Woolf, Joyce, Waugh, Weldon, Murdoch, Swift and Ishiguro.

387. Continental European Fiction. A sophomore course in literature or consent of instructor. (3)h.

Classics of European fiction through the early twentieth century, read in translation. Cervantes, Balzac, Stendhal, Turgenev, Zola, Dostoevsky, Thomas Mann, Gide, Proust, and others. *Also listed as CPL 387. Graded ABCD>N*.

388. Modern Theatre. A sophomore course in literature or consent of instructor. (3)h.

History of the modern theatre, 1875 to present. Plays from European and American theatre: Ibsen, Strindberg, Chekhov, Wilde, Shaw, O'Neill, Eliot, Hellman, Brecht, Wilder, Miller, Williams, Beckett, Churchill, and Wilson. *Also listed as THE 302*.

390. Directed Readings. Six credits in literature and consent of departmental advisor and instructor. (1-3)h.

The maximum number of credits allowed for ENG 390 and ENG 399 combined is six.

391. Advanced Technical Writing. ENG 345 and one course in visual communication. (3).

Advanced work with technical writing strategies and formats. Topics include grammar and editing; technical style; advanced formats such as newsletters, brochures and manuals; collaborative writing; desktop publishing. Writing assignments, revisions, oral presentations with graphics.

392. Advanced Creative Writing: Fiction. ENG 296, writing sample, and consent of instructor before registering. (3).

Advanced work in fiction writing. Workshop or tutorial format. Students enrolled in this course and otherwise eligible may compete for the Avery Hopwood and Jule Hopwood Awards in creative writing.

393. Advanced Creative Writing: Poetry. ENG 296, writing sample, and consent of instructor before registering. (3).

Advanced work in poetry writing. Workshop or tutorial format. Students enrolled in this course and otherwise eligible may compete for the Avery Hopwood and Jule Hopwood Awards in creative writing.

394. Literary Criticism. A sophomore course in literature or consent of the instructor. (3)h.

History and variety of literary criticism from the classical period, the Renaissance and Enlightenment, the Romantic period, the twentieth century. Emphasis on the relationship of critical thought to its historical period. Critical theories applied to a variety of brief literary texts.

395. Independent Study for Honors Program Concentrators in English. Open only to Honors Program students in English. Consent of English honors advisor and Department Chair. (3)h.

May be reelected for credit. Graded ABCDE/Y.

396. Honors Research. Consent of English honors advisor and Department Chair. (1)h.

Honors research for English honors concentrators, to be taken in conjunction with a course numbered 300 or above, chosen with the advice and consent of the English honors advisor. *Graded ABCDE/Y*.

399. Directed Writing. ENG 112, at least one advanced writing course, and consent of instructor. (1-3).

Individualized work for students who wish to explore advanced topics in writing and rhetoric. The maximum number of credits allowed for ENG 390 and 399 combined is six.

400. Seminar. English major, at least junior standing, consent of instructor. See English secretary to apply for consent. (3)h.

Intensive study of selected writers, literary movements, critical theory, or other topics relative to the study of literature and language. Includes readings, discussion, oral and written reports. May be elected twice for credit with consent of instructor. Class size limited to 15.

409. American English. At least junior standing. (3).

Social and regional variations in American English considered in terms of contemporary views of cultural history and process of language change. *Also listed as LIN 409*.

410. Improvement of Reading in the Middle and Secondary School. Prior or concurrent election of EDE or EDS 360, or consent of instructor. (3).

Designed to acquaint middle and secondary school teachers with the nature of the reading process, reading curriculum, methods of teaching reading for special content, classroom diagnostic and remedial procedures, materials and equipment, and current reading programs at the middle and secondary level. Should be elected as EDR 445 by English teacher's certificate majors; may be elected as ENG 410 or EDR 445 by English teacher's certificate minors. Also listed as EDR 445.

412. Writing for Middle and Secondary School Teachers. Prior or concurrent election of EDE or EDS 360, or consent of instructor. (3).

Rationale, theory and methods for teaching composition to middle and secondary school students in both language arts and content area fields. Includes concepts of the writing process; techniques for generating, responding to, and evaluating writing; writing across the curriculum; structuring writing courses and programs. Requires field experience in local schools or preparation of an in-service presentation. Also listed as EDR 446.

432. The American Novel. At least junior standing, a 300-level course in literature; or consent of instructor. (3)h.

The American novel as a traditional and unique literary form; its relationship to its own native culture and to that of Europe. Critical analyses of works by authors such as Hawthorne, Melville, Twain, James, Dreiser, Dos Passos, Hemingway, Faulkner and Mailer.

433. American Poetry. At least junior standing, a 300-level course in literature; or consent of instructor. (3)h.

The development and continuity of American poetry, its style, subject matter, and stance toward American culture, from the colonial era to the present. Emphasis on late nineteenth and twentieth century poetry; close study of representative poets whose work and critical reputations make them influential figures in American literature and thought.

434. American Drama. At least junior standing, a 300-level course in literature or theatre history; or consent of instructor. (3)h.

Development of American Drama with attention to literary and theatrical elements, including historical and cultural influences and theatrical conventions. Emphasis on major playwrights and movements, marginal voices, and the relationship of popular entertainment to serious drama. *Also listed as THE 434*.

435. American Film I. *At least junior standing, a 300-level course in literature; consent of instructor. (3)h.*

History of American film from its beginning through the end of the studio era as an art form and an index to American popular culture. Only three credits from ENG 435, 436 may count toward the minimum hour requirement of any major or minor in English.

436. American Film II. At least junior standing, a 300-level course in literature; or consent of instructor. (3)h.

History of American film since the end of the studio era as an art form and an index to American popular culture. Only three credits from ENG 435, 436 may count toward the minimum hour requirement of any major or minor in English.

447. (**349**). History of the English Language. *ENG* 200 or *LIN* 200. (3).

Survey of the bases of the language and how it developed. Old English, Middle English, Early Modern and Modern English studied. *Also listed as LIN 447*.

448. Children's Literature. At least junior standing. (3).

A survey of content and literary merit of books read by the elementary school child. Common and divergent elements of the various forms of literature. Criteria to be considered in selecting books for children. *Also listed as EDR 430*.

474. Adolescent Literature. At least junior standing. (3).

Survey of the content and literary merit of books read by middle and high school students. Consideration of criteria for the selection of reading material; emphasis on approaches for teaching with such materials in a variety of school contexts. *Also listed as EDR 437*.

- [490. Writer in Residence. At least junior standing or consent of instructor. (2)h.]
- **495. Honors Thesis I.** *Consent of Department Chair. Open only to Honors Program students in English.* (4).

Credit and grade for ENG 495 is not given until successful completion of ENG 496. No student with a grade of B- or less in English 495 will graduate with Honors in English. Also listed as HON 495. Graded ABCDE/Y.

496. Honors Thesis II. Prior or concurrent election of ENG 495 and consent of Department Chair. Open only to Honors Program students in English. (4).

No student with a grade of B- or less in English 496 will graduate with Honors in English. Also listed as HON 496. Graded ABCDE/Y.

Environmental Studies

See Earth and Resource Science and the School of Health Professions and Studies.

Foreign Languages and Literatures

344 David M. French Hall (810) 762-3370 FAX (810) 762-3066 http://www.umflint.edu/departments/fll

Chair: Jamile T. Lawand

Principal Secretary: Gayle C. Marcum

Professors Juan E. Mestas, Paul E. O'Donnell; Associate Professors Imane A. Hakam, Matthew Hilton-Watson, Jamile T. Lawand, Rafael H. Mojica

Spanish Basic Course Coordinator: Dr. Dolores Pons-HervasProfessors Emeriti: Dr. Theophilus Lynch, Dr. Frank C.Richardson, Dr. Birgitta J. Vance

Associate Professor Emeritus: Dr. Douglas E. Miller

The Department of Foreign Languages and Literatures provides a sequence of courses that leads to familiarity with a particular foreign language and the experience associated with that language. Students may select language programs necessary to their development as educated and aware individuals, and to their pursuit of a career goal. These programs aid students in acquiring fluency in a language, acquiring a thorough understanding of a foreign culture, and experiencing a variety of linguistic approaches to the world.

Foreign language concentration programs aim at mastery of the language, an understanding of its literature and culture, and a knowledge of the linguistic processes which make up a native speaker's competence. Such knowledge is needed for teaching, for graduate work, and for other careers requiring specialized linguistic knowledge and skill. All courses, however, are open to any student who has satisfied the prerequisites.

Department Mission and Program Assessment

The goal of the Foreign Languages Department is to provide students with an opportunity to become conversant with the languages and cultures of other nations. This mission is consistent with institutional purposes and College core curriculum goals. The Department fosters the development of proficient oral and written communication skills in various foreign languages. Also, as an integral part of a liberal arts curriculum, its programs offer instruction that is necessary to the development of educated and aware individuals who are capable of adapting to a changing and increasingly diverse world. The Foreign Languages Department offers opportunities for study that promote the understanding and value of human, cultural, and ethnic diversity. The Department participates in the University-wide effort to assess its academic

programs. Information on assessment plans, including goals, methods and outcomes is available at http://assessment.umflint.edu.

Programs in Foreign Languages

Concentration programs, combination programs in language and linguistics and in language and international studies, Honors Programs, Teacher's Certificate Programs and Minors, and general minors are offered in French and Spanish. Courses in Arabic, German, Japanese, Latin and Russian are also available.

Courses in Foreign Languages (FOR)

305. Community Outreach Field Experience. Intermediate-level foreign language proficiency and consent of instructor. (1-3).

Academic service learning course designed to develop global awareness in Flint-area children through foreign language and culture instruction. Further development of foreign language skills, and acquisition of basic concepts of language learning in children, through coursework and creative teaching in an elementary school setting. May be reelected to a total of six credits.

Arabic (ARB)

There is no concentration program in Arabic. However, Arabic courses are available.

111. Beginning Standard Arabic I. (4)fl.

Basic structures and patterns the student must know to understand written and spoken Arabic. Active use of the language limited to oral and written exercises used to enhance knowledge of grammar and to develop listening and reading comprehension. *Graded ABCC->N*.

112. Beginning Standard Arabic II. ARB 111 or placement. (4)fl.

Continuation of ARB 111. Introduction of more complex structures and more active use of Arabic. Further practice in reading and speaking standard Arabic. *Graded ABCDD->N*.

205. Reading Arabic. ARB 112 with a grade of B or better, or equivalent proficiency and permission of the Foreign Language Department. (1).

Reading of representative modern prose for general comprehension. Designed to develop skills needed to read Arabic at sight. *Does not satisfy the foreign language requirement. Graded ABCD>N.*

211. Intermediate Standard Arabic I. ARB 112 or placement. (4).

Intensive practice in spoken and written Arabic complemented by review of structures and vocabulary. Emphasis on development of skills in conversational Arabic together with reading of Arabic texts. *Graded ABCD>N*.

[212. Intermediate Standard Arabic II. ARB 211 or placement. (4).]

French (FRN)

Faculty Advisors: Dr. Imane Hakam, Dr. Matthew Hilton-Watson

Programs in French

Five concentration programs are offered, all leading to the Bachelor of Arts degree: the General Program in French, the Honors Program in French, the Program in French and Linguistics, the Program in French and International Studies, and the Teacher's Certificate Program. A Minor in French and a Teacher's Certificate Minor are also available.

Students selecting a concentration in French are expected to have completed the equivalent of FRN 111 in high school. If not, they must go beyond the 120 credits normally needed to graduate.

General Program in French

Prerequisite. Completion of FRN 212 or equivalent proficiency as demonstrated by examination.

Requirements.

- A. Twenty-eight credits in French beyond the level of FRN 212, to include the following:
 - FRN 291, 301, 309, 310, 311 or 314, 318 or 329 (16 credits).
 - At least twelve additional credits in French language and/or literature.
- B. All requirements of the College of Arts and Sciences Bachelor of Arts degree, including general education requirements and a foreign language.

Cognate Requirements.

- A. HIS 211 or an equivalent history course approved by the advisor and a course in French history.
- B. A course in English or comparative literature to be approved by the advisor.

Prospective majors who enter with a substantial part of their introductory language completed in high school and those who intend to do graduate work in French are strongly advised to begin a second language as early as possible in their college programs.

Students in this program are strongly encourged to study in a French-speaking country. See faculty advisors for recommendations of foreign study programs.

Honors Program in French

Prerequisite. Honors election of FRN 212.*

Requirements.

- A. FRN 291, 301, 303, 309, 310, 311 or 314, 318 or 329 (19 credits).
- B. Three additional credits in language or literature.
- C. FRN 395, Honors Research Methods (1 credit), and FRN 396, Honors Independent Research (3 credits), to be elected consecutively in the junior year.

- D. FRN 495 and 496, Honors Thesis I and II (4 credits each). FRN 495 may be elected as HON 495 with permission of the Honors Program Advisor.
- E. At least one term or semester of residence or study in a French-speaking country.
- F. Honors reading proficiency in a second foreign language.
- G. HIS 210, HIS 211 or an equivalent history course approved by the advisor, and a course in French history (9 credits).
- H. LIN 200; ENG 204; ENG 205 or 241. Additional courses in linguistics and anthropology are strongly recommended.
- I. All requirements of the University Honors Scholar Program.
- J. All requirements of the College of Arts and Sciences Bachelor of Arts degree, including general education requirements and a foreign language.

Prospective Honors Program students are urged to acquaint themselves as early as possible with the requirements above as well as with the particular procedures for acceptance into the Foreign Language Department's Honors Program in French. See the departmental honors advisor or the Honors Program Director for this information.

Students in this program are strongly encourged to study in a French-speaking country. See faculty advisors for recommendations of foreign study programs.

*Students selecting the Honors Program in French are expected to have completed the equivalent of FRN 112 in high school. If not, they must go beyond the 120 credits normally needed to graduate.

Program in French and Linguistics

Prerequisites. FRN 212 or equivalent proficiency as demonstrated by examination.

Requirements.

- A. LIN 313, 346 (6 credits).
- B. FRN/LIN 360, 369 (6 credits).
- C. FRN 291, 301, 303, 309 (10 credits).
- D. FRN 310 and another 300-level literature course in French (6 credits).
- E. All requirements of the College of Arts and Sciences Bachelor of Arts degree, including general education requirements and a foreign language in a second foreign language.

Required Cognates.

- A. HIS 210 or 211 or an equivalent history course approved by the advisor; and a course in French history (6 credits).
- B. At least one course in English or comparative literature to be approved by the advisor (3 credits).
- C. One of ANT 240, 250, 260, 271, 280, 355 (3 credits).

Students in this program are strongly encourged to study in a French-speaking country. See faculty advisors for recommendations of foreign study programs.

Program in French and International Studies

Prerequisites. FRN 212 or equivalent proficiency; HIS 112 or 113.

Requirements.

- A. Two courses selected from: ANT 100, GEO 115, POL 230 (6).
- B. HIS 354 or 355 or 358; HIS 372 or 373; one course selected from an International Studies option category other than Western Europe (9).
- C. FRN 291, 301, 303, 309 (10).
- D. FRN 310, 346; FRN 311 or 314; one additional course in French numbered above 212 (12).
- E. All requirements of the College of Arts and Sciences Bachelor of Arts degree, including general education requirements and a foreign language.

Students in this program are strongly encourged to study in a French-speaking country. See faculty advisors for recommendations of foreign study programs.

Teacher's Certificate Program

Prerequisite. FRN 212 or equivalent proficiency as demonstrated by examination.

Requirements.

- A. Twenty-eight credits in French as follows:
 - 1. FRN 291, 301, 303, 309; FRN/LIN 360 (13 credits).
 - 2. FRN 310, 311 or 314, 318 or 329 (9 credits).
 - 3. Six additional credits in French literature.
- B. FRN 365/EDS 345.
- C. HIS 211 or an equivalent history course approved by the advisor, and a course in French history.
- D. LIN 200 and at least one course in English literature or comparative literature to be approved by the advisor.
- E. All requirements of the College of Arts and Sciences Bachelor of Arts degree, including general education requirements and a foreign language.

Prospective candidates should also study the section entitled "General Requirements for Teacher Certification" and "Secondary Education Teacher's Certificate Programs," printed in the Department of Education section of this *Catalog*.

Students in this program are strongly encourged to study in a French-speaking country. See faculty advisors for recommendations of foreign study programs.

Minor in French

Requirements.

- A. FRN 111, 112, 211, 212 (16 credits).
- B. Six credits selected from: FRN 301, 303, 309, 310, 311, 314, 315, 316, 317, 318, 329.

Teacher's Certificate Minor

Requirements.

- A. FRN 291, 301, 303, 309; FRN/LIN 360 (13 credits).
- B. FRN 310, 315; FRN 311 or 314 (9 credits).
- C. FRN 365/EDS 345.

Courses in French (FRN)

111. Beginning French I. Not open to students with more than one year of high school French except by departmental consent. (4)fl.

Basic structures and patterns the student must know to understand written and spoken French. Active use of the language limited to oral and written exercises used to enhance knowledge of grammar as well as develop listening and reading comprehension skills. *Graded ABCC->N*.

112. Beginning French II. FRN 111 or placement. (4)fl.

Continuation of FRN 111. Introduction of more complex structures and more active use of French. Further practice in reading texts adapted from newspapers, magazines, and literature. *Graded ABCDD->N*.

205. Reading French. FRN 112 with a grade of B or better, or equivalent proficiency and permission of the Foreign Language Department. (1).

Reading of representative modern prose for general comprehension. Designed to develop skills needed to read French at sight. *Does not satisfy the foreign language requirement. Graded ABCD>N.*

206. French Conversation. FRN 112, or equivalent proficiency and permission of the Foreign Language Department. (1).

Development of speaking skills through oral presentations and class discussions of readings and cultural materials from other media such as films, newspapers, and relevant online resources. Does not satisfy the foreign language requirement. Graded ABCD>N.

211. Intermediate French I. FRN 112 or placement. (4).

Intensive practice in spoken and written French complemented by review of structures and vocabulary. Emphasis on development of skills in conversational French together with reading of French texts. *Graded ABCD>N*.

212. Intermediate French II. FRN 211 or placement. (4).

Continued review of grammar topics. Reading of texts in French for an understanding of the cultural values of the French-speaking world. Discussions conducted in French to increase the student's level of fluency. *Graded ABCD>N*.

221/321. French Study Abroad. At least FRN 112 or placement; concentration in French. (3-12).

Intensive study of French language, literature and/or culture through class work, conversation and travel conducted in an independent study abroad program. Credit is assigned at the 200 or 300 level, depending upon previous language experience and on-site placement. Up to nine credits of these courses may fulfill major or minor requirements. *Does not satisfy the foreign language requirement.*

291. Laboratory of French Phonology. Prior or concurrent election of FRN 212 or consent of instructor. (1).

Intensive auditory and pronunciation practice stressing both hearing and speaking skills as the basic means of communication. Monitoring and correction of individual pronunciation problems.

301. Conversation and Composition I. FRN 212 or equivalent. (3).

Study of selected aspects of French and Francophone cultures incorporating oral and written practice in French. Continued practice in the application of grammar, the building of an active vocabulary, and the achievement of a practical command of spoken and written French.

303. Conversation and Composition II. FRN 301 or equivalent. (3).

Continuation of FRN 301. Oral and written practice in French based on study of selected aspects of French and Francophone cultures.

309. Advanced French Composition and Grammar. Prior election of FRN 301. (3).

Intensive review of grammar and practice in directed and free composition. Intended to give a solid basis for oral and written expression and for the teaching of French.

310. Understanding the French-Speaking World. FRN 212. (3)h.

Comprehensive look at France, the French, and the Frenchspeaking world outside Europe. Short stories, essays, newspapers, magazines, slides and films dealing with all aspects of French and Francophone culture, customs and values.

311. Survey of French Literature: Middle Ages to 1800. FRN 212 or equivalent. (3)h.

Reading in French of selections from literary masterpieces by major French writers from the Renaissance, Classical, and Enlightenment periods. Lectures on lives of authors and important social and intellectual influences in each period.

314. Survey of French Literature: 1800 to Present. FRN 212 or equivalent. (3)h.

Reading in French of selections from literary masterpieces by major French writers representing Romanticism, Realism, and Naturalism. The Belle Epoque to Surrealism, Existentialism, Absurdist theatre, and the "new novel." Lectures on lives of authors and important social and intellectual influences in each period.

315. Introduction to French Literature. FRN 212 or equivalent. (3)h.

Study of the principal forms of literary expression in French. Emphasis on the short story, drama, and poetry. Practice in analysis of form and interpretation of content. 316. French Classicism. FRN 212 or equivalent. (3)h.

Practice in analysis of form and interpretation of content through a study of the principal forms of literary expression in French with a focus on French authors from the French Classical period such as Corneille, Racine, Molière, La Fontaine, La Bruyère and Pascal.

- [317. Eighteenth Century Literature and Thought. FRN 212 or equivalent. (3)h.]
- 318. Realism and Naturalism. FRN 212 or equivalent. (3)h.

Practice in analysis of form and interpretation of content through a study of the principal forms of literary expression in French with a focus on French/francophone authors from the nineteenth century such as Balzac, Stendhal, Flaubert, Zola and Huysmans.

- [320. French Romanticism. FRN 315 or equivalent. (3)h.]
- **329. 20th Century Literature in Translation.** FRN 212 or a sophomore class in (any) literature or consent of instructor. (3)h.

Practice in analysis of form and interpretation of content through a study of the principal forms of French literary expression in English translation with a focus on French/Francophone authors from the 20th century such as Proust, Gide, Sartre, Camus, Beckett, Robbe-Grillet, Breton and Prevert.

- [346. French as a Multi-Cultural Language. FRN 315 or equivalent. (3)h.]
- **360.** Comparative Phonetics/The World's Major Languages. FRN 212 and prior or concurrent election of LIN 200. (3).

Sound systems of American English, French, German, Spanish and other languages. Concentrates on the world's major languages. Register-tone and contour tone languages. Acoustic phonetics. Problems of teaching French, German or Spanish pronunciation. *Also listed as LIN 360 and SPN 360*.

365. Teaching of Foreign Languages in Middle and Secondary Schools. FRN 212; prior or concurrent election of EDE or EDS 360. (3).

Designed for prospective teachers of foreign language in middle and secondary schools. Classroom layout for foreign language instruction. Teaching pronunciation and grammar. Teaching demonstrations by class members. Choosing and using textbooks; various theories of foreign language teaching; testing language skills. Also listed as EDS 345 and SPN 365. May be elected as FRN 365 by students with French as a minor for the secondary certificate.

- [369. Introduction to the Romance Languages. FRN 211 or SPN 211, ENG/LIN 200; or consent of instructor. (3). Also listed as LIN/SPN 369.]
- **391.** Directed Readings. FRN 212 and consent of Department Chair. (1-2)h.
- **392. Special Topics.** *Consent of Department Chair.* (1-3)h.

Seminars for advanced students. Titles, descriptions, and requirements of acceptable topics available from Department Chair. May be taken more than once if no topic is repeated.

395. Honors Research Methods. Consent of French Honors Program Advisor. (1).

Research methods for French honors concentrators, to be taken in conjunction with a course numbered 300 or above chosen with the advice and consent of the French honors advisor. *Graded ABCDE/Y*.

- **396.** Honors Independent Research. Consent of French Honors Program Advisor. Open only to Honors Program students in French. (3). Graded ABCDE/Y.
- **495. Honors Thesis I.** *Open only to Honors Program students in French.* (4).

Credit and grade for FRN 495 is not given until successful completion of FRN 496. Also listed as HON 495. Graded ABCDE/Y.

496. Honors Thesis II. Prior or concurrent election of FRN 495. (4).

Also listed as HON 496. Graded ABCDE/Y.

German (GER)

The concentration programs in German have been placed in moratorium. This means that for an unspecified length of time the Department is not offering concentrations or minors in German. However, introductory German courses, GER 205 and GER 392 are available.

Courses in German (GER)

111. Beginning German I. Not open to students with more than one year of high school German except by departmental consent. (4)fl.

Basic structures and patterns the student must know to understand written and spoken German. Active use of the language limited to oral and written exercises used to enhance knowledge of grammar as well as develop listening and reading comprehension skills. *Graded ABCC->N*.

112. Beginning German II. GER 111 or placement. (4)fl.

Continuation of GER 111. Introduction of more complex structures and more active use of German. Further practice in reading texts adapted from newspapers, magazines, and literature. *Graded ABCDD->N*.

205. Reading German. GER 112 with a grade of B or better, or equivalent proficiency and permission of the Foreign Language Department. (1).

Reading of representative modern prose for general comprehension. Designed to develop skills needed to read German at sight. *Does not satisfy the foreign language requirement. Graded ABCD>N.*

206. German Conversation. *GER 112 or equivalent proficiency and permission of the Foreign Languages Department.* (1).

Development of speaking skills through oral presentations and class discussion of readings and cultural materials from other media such as films, newspapers, and relevant online resources. Does not satisfy the foreign language requirement. Graded ABCD>N.

250. Intermediate German. GER 112 or Placement. (4)fl.

Intensive practice in spoken and written German complemented by review of structures and vocabulary. Emphasis on development of skills in conversational German together with reading of texts in German for an understanding of the cultural values of the German-speaking world.

392. Special Topics. *Consent of Department Chair.* (1-3)h.

Seminar for advanced students. Titles, descriptions and requirements of acceptable topics available from Department Chair. May be taken more than once if no topic is repeated.

Japanese (JPN)

There is no concentration program in Japanese. However, Japanese courses are available.

104. Japanese Language I. Enrollment in Japan Center Program. (10)fl.

Basic structures and patterns of Japanese. Extensive oral practice with everyday situations. Use of a romanized script to aid in learning the language.

105. Japanese Language II. *JPN 104.* (10)fl.

Continuation of JPN 104. Introduction of more complex structures and continued expansion of basic vocabulary. Oral practice for conversational competence.

111. Beginning Japanese I. (4)fl.

Basic structures and patterns of Japanese. Extensive oral practice with everyday situations. Use of a Romanized script to aid in learning the language. *Graded ABCC->N*.

112. Beginning Japanese II. JPN 111. (4)fl.

Continuation of JPN 111. Introduction of more complex structures and continued expansion of basic vocabulary. Oral practice for conversational competence. *Graded ABCDD->N*.

Latin (LAT)

There is no concentration program in Latin. However, introductory Latin courses are available.

104. Beginning Latin I. Not open to students with more than one year of high school Latin except by departmental consent. (4)fl.

Basic Latin grammar with readings of selections by famous writers of prose and poetry. No prior knowledge of a foreign language required. Useful for those wishing to enter professions in which a knowledge of Latin is helpful. Excellent introduction to the study of European languages. *Graded ABCC->N*.

105. Beginning Latin II. LAT 104 or consent of instructor. (4)fl.

Continuation of LAT 104 with more advanced readings in prose and poetry. On completion, the student should have a grasp of the fundamentals of Latin grammar, have had contact with some of the great writers of Latin prose and Latin poetry,

and have some ability to read Latin from the easy to intermediate level with the aid of a Latin-English dictionary. *Graded ABCDD->N*.

205. Reading Latin. LAT 105 with a grade of B or better, or equivalent proficiency and permission of the Foreign Language Department. (1).

Reading of representative classic authors for general comprehension. Designed to develop skills needed to read Latin at sight. Does not satisfy the foreign language requirement. Graded ABCD>N.

Russian (RUS)

There is no concentration program in Russian. However, introductory Russian courses are available.

[111. Beginning Russian I. Not open to students with more than one year of high school Russian except by departmental consent. (4)fl.]

[112. Beginning Russian II. RUS 111 or placement. (4)fl.]

Spanish (SPN)

Faculty Advisors: Dr. Jamile Lawand, Dr. Rafael Mojica, Dr. Paul O'Donnell

Programs in Spanish

Five concentration programs are offered, all leading to the Bachelor of Arts degree: the General Program in Spanish, the Honors Program in Spanish, the Program in Spanish and Linguistics, the Program in Spanish and International Studies, and the Teacher's Certificate Program. A Minor in Spanish and a Teacher's Certificate Minor are also available.

Students selecting a concentration in Spanish are expected to have completed the equivalent of SPN 111 in high school. If not, they must go beyond the 120 credits normally needed to graduate.

General Program in Spanish

Prerequisite. SPN 212 or equivalent proficiency as demonstrated by examination.

Requirements.

- A. Twenty-eight credits in Spanish beyond the level of SPN 212, to include the following:
 - 1. SPN 291, 301, 309, 310 or 319, 311 or 314, 318 or 320 (16 credits).
 - Nine additional credits in Spanish literature, including at least one course in the literature of Spain and one course in the literature of Latin America.
 - 3. At least three additional credits in Spanish language.
- B. All requirements of the College of Arts and Sciences Bachelor of Arts degree, including general education requirements and a foreign language.

Cognate Requirements.

A. HIS 211 or an equivalent history course approved by the advisor, and an additional course in history or culture pertinent to the Spanish-speaking world. B. ENG 244 or a course in English literature or comparative literature approved by the advisor.

Prospective majors who enter with a substantial part of their introductory language completed in high school and those who intend to do graduate work in Spanish are strongly advised to begin a second language as early as possible in their college programs.

Students in this program are strongly encourged to study in a Spanish-speaking country. See faculty advisors for recommendations of foreign study programs.

Honors Program in Spanish

Prerequisite. Honors election of SPN 212.*

Requirements.

- A. SPN 301, 303, 309, 310 or 319, 311 or 314, 317, 318 or 320 (21 credits).
- B. Three additional credits in language or literature.
- C. SPN 395, Honors Research Methods (1 credit), and 396, Honors Independent Research (3 credits), to be selected consecutively in the junior year.
- D. SPN 495 and 496, Honors Thesis I and II (4 credits each). SPN 495 may be elected as HON 495 with permission of the Honors Program advisor.
- E. At least one term or semester of residence or study in a Spanish-speaking country.
- F. Honors reading proficiency in a second foreign language.
- G. HIS 210, 211 or an equivalent history course approved by the advisor, and an additional course in history or culture pertinent to the Spanish-speaking world.
- H. LIN 200; ENG 204; ENG 205 or 241. Additional courses strongly in linguistics and anthropology are recommended.
- I. All requirements of the University Honors Scholar Program.
- J. All requirements of the College of Arts and Sciences Bachelor of Arts degree, including general education requirements and a foreign language.

Prospective Honors Program students are urged to acquaint themselves as early as possible with the requirements above as well as with the particular procedures for acceptance into the Foreign Language Department's Honors Program in Spanish. See the departmental honors advisor or the Honors Program Director for this information.

Students in this program are strongly encourged to study in a Spanish-speaking country. See faculty advisors for recommendations of foreign study programs.

*Students selecting an Honors Program in Spanish are expected to have completed the equivalent of SPN 112 in high school. If not, they must go beyond the 120 credits normally needed to graduate.

Program in Spanish and Linguistics

Prerequisites. ANT 100, LIN 200, SPN 212 or equivalent

proficiency as demonstrated by examination.

Requirements.

- A. LIN 313, 346 (6 credits).
- B. SPN/LIN 360, SPN/HIS 312 (6 credits).
- C. SPN 301, 303, 309 (9 credits).
- D. SPN 310 or 319, SPN 311 or 314 or 318 or 320 (6 credits).
- E. All requirements of the College of Arts and Sciences Bachelor of Arts degree, including general education requirements and a foreign language in a second foreign language.

Required Cognates.

- A. HIS 210 or 211, and an additional course pertinent to the history or culture of the Spanish-speaking world (6 credits).
- B. ENG 244 or a course in English or comparative literature approved by the advisor (3 credits).
- C. ANT/LIN 290 or 335 (3 credits).

Students in this program are strongly encouraged to study in a Spanish-speaking country. See faculty advisors for recommendations of foreign language study programs.

Program in Spanish and International Studies

Prerequisites. SPN 212 or equivalent proficiency; HIS 112 or 113.

Requirements.

- A. Two courses selected from: ANT 100, GEO 115, POL 230 (6) credits).
- B. Two from: ANT 284; HIS 302, 303, 339, 343; POL 344; and a course from an International Studies option category other than Latin America (9 credits).
- C. SPN 291, 301, 303, 309; SPN 300 or 308 (13 credits).
- D. SPN 310 or 319, 311 or 314 or 318 or 320; an additional course in Spanish numbered above 212 (9 credits).
- E. All requirements of the College of Arts and Sciences Bachelor of Arts degree, including general education requirements and a foreign language.

Students in this program are strongly encouraged to study in a Spanish-speaking country. See faculty advisors for recommendations of foreign study programs.

Teacher's Certificate Program

Prerequisite. SPN 212 or equivalent proficiency as demonstrated by examination.

Requirements.

- A. Twenty-eight credits in Spanish as follows:
 - 1. SPN 291, 301, 303, 309; LIN/SPN 360 (13 credits).
 - 2. SPN 310 or 319, 311 or 314, 318 or 320 (9 credits).
 - 3. An additional course in the literature of Spain and an

additional course in the literature of Latin America (6 credits).

- B. SPN 365/EDS 345.
- C. HIS 211 or an equivalent history course approved by the advisor, and an additional course in history or culture pertinent to the Spanish-speaking world.
- D. LIN 200; ENG 244 or a course in English literature or comparative literature approved by the advisor.
- E. All requirements of the College of Arts and Sciences Bachelor of Arts degree, including general education requirements and a foreign language.

Prospective candidates should also study the sections entitled "General Requirements for Teacher Certification" and "Secondary Education Teacher's Certificate Programs," printed in the Department of Education section of this *Catalog*.

Students in this program are strongly encouraged to study in a Spanish-speaking country. See faculty advisors for recommendations of foreign study programs.

Minor in Spanish

Requirements.

- A. SPN 211, 212; or equivalent proficiency by examination.
- B. SPN 205 or 206 or 291.
- C. Three from: SPN 300, 301, 303, 308, 310, 311, 314, 318, 319, 320.

Teacher's Certificate Minor

Requirements.

- A. SPN 301, 303, 309; SPN/LIN 360 (12 credits).
- B. SPN 310 or 319, 311 or 314, 318 or 320 (9 credits).
- C. SPN 365/EDS 345.

Students in this program are strongly encouraged to study in a Spanish-speaking country. See faculty advisors for recommendations of foreign study programs.

Courses in Spanish (SPN)

111. Beginning Spanish I. Not open to students with more than one year of high school Spanish except by departmental consent. (4)fl.

Basic structures and patterns the student must know to understand written and spoken Spanish. Active use of the language limited to oral and written exercises used to enhance knowledge of grammar as well as develop listening and reading comprehension skills. *Graded ABCC->N*.

112. Beginning Spanish II. SPN 111 or placement. (4)fl.

Continuation of SPN 111. Introduction of more complex

structures and more active use of Spanish. Further practice in reading texts adapted from newspapers, magazines, and literature. *Graded ABCDD->N*.

120. Basic Spanish for Educators. Not open to students with more than one year of high school Spanish except by departmental consent. (3).

Development of basic functional skills in Spanish for individuals working in the education field. Focus on vocabulary, structures and patterns needed for practical situations such as communicating with students and parents, reading and writing reports, etc., at an elementary level. Discussion of Hispanic cultural topics to promote awareness and understanding of the Spanish-speaking community. *Does not satisfy the foreign language requirement. Graded ABCC->N.*

205. Reading Spanish. SPN 112 with a grade of B or better, or equivalent proficiency and permission of the Foreign Language Department. (1).

Reading of representative modern prose for general comprehension. Designed to develop skills needed to read Spanish at sight. *Does not satisfy the foreign language requirement. Graded ABCD>N.*

206. Spanish Conversation I SPN 112, or equivalent proficiency and permission of the Foreign Language Department. (2).

Development of speaking skills through oral presentations and class discussions of readings and cultural materials from other media such as films, newspapers, and relevant online resources. Does not satisfy the foreign language requirement. Graded ABCD>N.

207. Spanish for Medical Purposes. SPN 212 or placement and acceptance into the Dominican Republic Medical Mission Program. (2).

Basic medical terminology and structures used in communication with patients in a hospital; emphasis on interviewing and conversing. Required orientation meetings and testing after return from hospital program in the Dominican Republic. *Graded ABCD>N*.

211. Intermediate Spanish I. SPN 112 or placement. (4).

Intensive practice in spoken and written Spanish complemented by review of structures and vocabulary. Emphasis on development of skills in conversational Spanish together with reading of Spanish texts. *Graded ABCD>N*.

212. Intermediate Spanish II. SPN 211 or placement. (4).

Continued review of grammar topics. Reading of texts in Spanish for an understanding of the cultural values of the Spanish-speaking world. Discussions conducted in Spanish to increase the student's level of fluency. *Graded ABCD>N*.

221/321. Spanish Study Abroad. At least SPN 112 or placement; concentration in Spanish. (3-12).

Intensive study of Spanish language, literature and/or culture through class work, conversation and travel conducted in an independent study abroad program. Credit is assigned at the 200 or 300 level, depending upon previous language experience and on-site placement. Up to nine credits of these

courses may fulfill major or minor requirements. Does not satisfy the foreign language requirement.

291. Laboratory of Spanish Pronunciation. Concurrent election of SPN 301 or consent of instructor. (1).

Intensive practice in listening and pronunciation, stressing both hearing and speaking skills. Monitoring and correction of individual pronunciation problems. Graded ABCC->N.

300. Introduction to Translation. SPN 212 or equivalent. (3).

Idiomatic translations from Spanish to English. Material selected from journalistic, scientific, and technical works; literature; expository prose; and local governmental publications. Course stresses literary translation.

301. Conversation and Composition I. SPN 212 or equivalent. (3).

Selected aspects of Spanish and Spanish-speaking cultures incorporating oral and written practice in Spanish. Continued practice in the application of grammar, the building of an active vocabulary, and the achievement of a practical command of spoken and written Spanish.

303. Conversation and Composition II. SPN 301 or equivalent. (3).

Continuation of SPN 301. Oral and written practice in Spanish based on study of selected aspects of Spanish and Spanishspeaking cultures.

308. Business Spanish. SPN 212 or equivalent or consent of instructor. (3).

Study of the Spanish language of business through inferential reading of general business texts, and practice in listening comprehension. Development of commercial and businessrelated vocabulary. Some practice of writing skills using summaries of texts read and heard. Reading and listening exercises based on original or slightly edited texts, documents, and media reports.

309. Advanced Spanish Composition and Grammar. SPN 301 or equivalent. (3).

Intensive review of grammar and practice in directed and free composition. Intended to give a solid basis for oral and written expression and for the teaching of Spanish. Graded ABCD>N.

310. Understanding the Spanish-Speaking World: Spain. SPN 212 or equivalent. (3)h.

Cultural ways of Spain. Short stories, essays, newspapers, magazines, slides and films dealing with Spanish culture, customs and values.

311. Survey of Spanish Literature: Middle Ages to 1700. SPN 212 or equivalent. (3)h.

Reading in Spanish of selections from literary masterpieces by major Spanish writers from the Medieval, Renaissance, and Baroque periods. Introduction to forms of literary expression in Spanish, such as fiction, poetry and drama, with practice in analysis of form and interpretation of content.

312. Spanish Dialects in the United States. SPN 212 or equivalent. (3).

Structural evolution of the Spanish language. Introduction to dialectology and its application to the development of both peninsular and Latin American dialects. Structure of Mexican-American, Cuban, and Puerto Rican Spanish as spoken in the United States. Taught principally in Spanish. Graded ABCD>N.

314. Survey of Spanish Literature: 1700 to Present. SPN 212 or equivalent. (3)h.

> Reading in Spanish of selections from literary masterpieces by major Spanish writers representing Classicism, Romanticism, Realism, Naturalism, Generation of '98, vanguardismo, and Spain since Franco. Introduction to forms of literary expression in Spanish, such as fiction, poetry and drama, with practice in analysis of form and interpretation of content.

317. Spanish Literature of the Nineteenth Century. Prior or concurrent election of SPN 311 or 314 or 318 or 320. (3)h.

Analysis of some of the works of the most famous exponents of Romanticism and Realism in nineteenth century Spain as expressed in drama, prose, or poetry.

318. Survey of Spanish American Literature: Spanish Colony to Modernismo. SPN 212 or equivalent. (3)h.

Reading in Spanish of selections from literary masterpieces by major Spanish American writers representing the Spanish Colony, the Enlightenment, Romanticism, Realism, Naturalism, and Modernismo. Introduction to forms of literary expression in Spanish, such as fiction, poetry and drama, with practice in analysis of form and interpretation of content.

319. Understanding the Spanish World: Latin America. SPN 212 or equivalent. (3)h.

Cultural ways of Latin America. Short stories, essays, newspapers, magazines, slides and films dealing with Latin-American culture, customs and values.

320. Survey of Spanish American Literature: Twentieth Century. SPN 212 or equivalent. (3)h.

Reading in Spanish of selections from literary masterpieces by major Spanish American writers representing the novel of the Mexican Revolution, the vanguardia, realismo mágico and lo real maravilloso, postvanguardista poetry, Boom and Post-Boom fiction, and essay. Introduction to forms of literary expression in Spanish, such as fiction, poetry and drama, with practice in analysis of form and interpretation of content.

322. Don Quijote. Prior or concurrent election of SPN 311 or 314 or 318 or 320. (3)h.

Detailed study of Cervantes' masterpiece with special attention to the literary movements and spiritual and historic forces which influenced the work. Lecture, readings and reports.

329. Spanish Literature of the Twentieth Century. *Prior or concurrent election of SPN 311 or 314 or 318 or 320.* (3)h.

Analysis of fiction of the post-Civil War period. Works of Camilo José Cela, Miguel Delibes, Ramón J. Sender, Ana María Matute, Marina Mayoral, and others.

 The Boom in Spanish American Fiction. Prior or concurrent election of SPN 311 or 314 or 318 or 320. (3)h.

Content and form of *la nueva ficción hispanoamericana*. Works by Borges, Cabrera Infante, Carpentier, Cortázar, Donoso, Fuentes, García Márquez, Vargas Llosa, and others.

332. Twentieth Century Spanish American Fiction. *Prior or concurrent election of SPN-311, 314, 318 or 320. (3)h.*

Study of works representative of authors in and outside The *Boom*. SPN-332 broadens the options of SPN-331, a course with readings more typical of authors of the nineteen sixties *Boom* in Spanish American fiction. Trends highlighted include *la onda*; the neobaroque; and minimalism in the short story.

333. The Spanish Golden Age. Prior or concurrent election of SPN 311 or 314 or 318 or 320. (3)h.

Analysis of Spanish masterpieces published during the sixteenth and seventeenth centuries, with emphasis on the theatre.

360. Comparative Phonetics/The World's Major Languages. SPN 212 and prior or concurrent election of LIN 200. (3).

Sound systems of American English, French, German, Spanish and other languages. Concentrates on the world's major languages. Register-tone and contour tone languages. Acoustic phonetics. Problems of teaching French, German or Spanish pronunciation. *Also listed as FRN 360 and LIN 360*.

365. Teaching of Foreign Languages in Middle and Secondary Schools. SPN 212; prior or concurrent election of EDE or EDS 360. (3).

Designed for prospective teachers of foreign language in middle and secondary schools. Classroom layout for foreign language instruction. Teaching pronunciation and grammar. Teaching demonstrations by class members. Choosing and using textbooks; various theories of foreign language teaching; testing language skills. Also listed as EDS 345 and FRN 365. May be elected as SPN 365 by students with Spanish as a minor for the secondary certificate.

- **391.** Directed Readings. SPN 212 and consent of Department Chair. (1-2)h.
- **392.** Special Topics. Consent of Department Chair. (1-3)h.

Seminars for advanced students. Titles, descriptions, and requirements of acceptable topics available from the Department Chair. May be taken more than once if no topic is repeated.

395. Honors Research Methods. Consent of Spanish Honors Program Advisor. (1).

Research methods for Spanish honors concentrators, to be taken in conjunction with a course numbered 300 or above chosen with the advice and consent of the Spanish honors advisor. Graded ABCDE/Y.

- **396. Honors Independent Research.** Consent of Spanish Honors Pro-gram Advisor. Open only to Honors Program students in Spanish. (3). Graded ABCDE/Y.
- **495. Honors Thesis I.** Open only to Honors Program students in Spanish. (4).

Credit and grade for SPN 495 is not given until successful completion of SPN 496. Also listed as HON 495. Graded ABCDE/Y.

496. Honors Thesis II. Prior or concurrent election of SPN 495. (4).

Also listed as HON 496. Graded ABCDE/Y.

499. Advanced Spanish Syntax and Applied Conversation. SPN 303, 309 or equivalent; or permission of instructor, based on demonstrated proficiency. (3)fl.

Advanced, proficiency-based course for upper-level students and teachers in the public, private and charter school systems wishing to review their Spanish. Covers subjects not taught in SPN 309, reviewing most important grammar points. Carefully monitored conversational use of functions, notions, skills and grammar reviewed in class. Exit oral interview using established department proficiency guidelines.

Graduate Courses in Spanish

500. Advanced Spanish Syntax and Applied Conversation. SPN 303, 309 or equivalent; or permission of instructor, based on demonstrated proficiency. (3)fl.

See SPN 499 for description. Not open to students with credit for SPN 499.

Geography

See Earth and Resource Science.

Gerontology

See Health Sciences and Administration.

History (HIS)

322 David M. French Hall (810) 762-3366

(FAX) (810) 762-3367

Website: http://www.flint.umich.edu/departments/history

Chair: Dr. Roy S. Hanashiro

Principal Secretary: Amanda Broadworth

Professors Roy S. Hanashiro, Bruce A. Rubenstein; Associate Professors Joseph G. Rahme, Theodosia S. Robertson; Assistant Professors John S. Ellis, Ami Pflugrad-Jackisch.

Professors Emeriti: Dr. Robert W. Heywood, Dr. Dorothea E. Wyatt.

As a disciplined and rigorous study of the past, history involves an analysis of earlier civilizations and societies: processes of change, problems of cause and consequence, and relationships between past and present. The study of history offers a breadth of perspective and an array of intellectual approaches that reach into other disciplines in the social sciences and humanities. The perspectives, analytical skills, and knowledge acquired have wide application and great value.

Departmental courses at the 100 and 200 levels are designed to introduce first year students and sophomores to trends and processes in history. Upper division courses usually will interest juniors and seniors, introducing more specific themes, periods and places, as well as helping students refine their analytical, writing, and research skills.

The history curriculum serves students pursuing a variety of interests and careers, including education, law, government service, journalism, and archival and museum studies. Those who plan to work in managerial and professional positions also will benefit from the concrete skills and broader awareness fostered by the study of history. Moreover, any person wishing to relate to national and world issues, past and present, will benefit from acquiring a broad historical perspective. For students particularly interested in local history or general archival work, the presence of the University of Michigan-Flint Archives makes advanced study in these areas possible at the undergraduate level.

Department Mission and Program Assessment

The mission of the History Department is to provide students with a disciplined and rigorous study of the past in which they come to understand better the operation of processes of change and continuity, problems of cause and consequence, and relationships between the past and the present. The Department participates in the University-wide effort to assess its academic programs. Information on assessment plans, including goals, methods and outcomes is available at http://assessment.umflint.edu.

Programs in History

Three concentration programs are offered, all leading to the Bachelor of Arts degree: the General Program in History, the Honors Program in History, and the Teacher's Certificate Program. A Minor in History and a Teacher's Certificate Minor are also available.

General Program in History

For a Bachelor of Arts degree with a concentration in history, the student is expected to complete a balanced program of studies in history, the other social sciences, and the humanities as approved by the advisor.

Prerequisites. A two-semester sequence in world history and a two-semester sequence in history of the United States.

Requirements.

- A. Thirty-three or more credits in history, of which at least 18 are numbered 300 or above, to include:
 - 1. HIS 112, 113.
 - 2. HIS 220, 221.
 - 3. HIS 299, 301; normally elected in the sophomore and junior years.
 - The remaining work in history so distributed as to give the student a comprehensive knowledge of several fields, including those outside the traditional scope of

European history and United States history, and advanced work in one field. Courses must be selected with the approval of the departmental advisor.

- B. During the third and fourth year at least nine credits in cognates chosen from the social sciences or the humanities with the approval of the advisor; to include two courses at the advanced level in a single discipline.
- C. All requirements of the College of Arts and Sciences Bachelor of Arts degree, including general education requirements and a foreign language.

Honors Program in History

Prerequisites. HIS 112, 113, 220, 221.

Requirements.

- A. Completion of 26 credits in courses numbered 300 or higher, to include:
 - HIS 299, 301; taken during the student's sophomore and junior years.
 - 2. An honors election of one 300-level history course approved by the department honors advisor. At least three credits must be in non-Western history (i.e., East Asia, West Asia or Africa.)
 - Twelve additional credits in history selected with the approval of the department honors advisor.
 - 4. HIS 495, 496 (8 credits).
- Additional elections in cognate areas so as to assure a balanced program.
- C. All requirements of the University Honors Scholar Program.
- D. All requirements of the College of Arts and Sciences Bachelor of Arts degree, including general education requirements and a foreign language.

Prospective Honors Program students are urged to acquaint themselves as early as possible with the requirements above, as well as with the particular procedures for acceptance into the History Department's Honors Program. See the Honors Program Director for this information.

Teacher's Certificate Program

Prerequisites. HIS 112, 113, 220, 221.

Requirements.

- A. Completion of 39 credits, distributed as follows.
 Appropriate courses may be used to fulfill more than one requirement.
 - 1. Requirements A through E of the General Program in History. Courses that fulfill General Program Requirement E (an area beyond Europe and US) are: HIS 215, 216, 230, 231, 283, 290, 291, 352, 376, 377, 378, 380, 385, 386, 397, 430.
 - A course on the US in a global context from: HIS 328, 346, 412, 479.
 - 3. A course with emphasis on economy from: HIS 307, 328, 329, 374.
 - 4. A course with emphasis on politics from: HIS 321, 374, 386, 479.
- B. EDS 343.

- C. A teacher's certificate minor in another discipline.
- D. All requirements of the College of Arts and Sciences Bachelor of Arts degree, including general education requirements and a foreign language.

Prospective candidates should also study the sections entitled "General Requirements for Teacher Certification" and "Secondary Education Teacher's Certificate Programs," printed in the Department of Education section of this *Catalog*.

Minor in History

Requirements. Completion of 21 credits as follows:

- A. HIS 112 or 113.
- B. HIS 220 or 221.
- C. Five additional history courses including at least nine credits in the 300 series. Students should select *Option 1* or *Option 2* to fulfill the requirements for a minor. *Option 1* is intended for those students whose concentration or interests suggest a need for breadth in the minor; *Option 2* allows for greater focus and depth in one field, which may be more appropriate, depending on the student's concentration program.
 Ontion 1

At least one course in each of the following three areas: (1) North America; (2) Europe (including England and Russia); (3) Asia, Africa, Mexico, or Latin America.

Option 2

At least three courses in one of the three areas described in Option 1.

Teacher's Certificate Minor

Requirements. At least 21 credits in history including HIS 112, 113, 220, 221.

Courses in History (HIS)

112. World History to 1500. (3)s.

Survey of cultural, social, intellectual, economic and political heritage in the development of major civilizations to the sixteenth century. History and interconnections among civilizations of the ancient Middle East, the Mediterranean periphery, Europe, Sub-Saharan Africa, the Americas, East Asia and the Indian Subcontinent, examined from a global perspective. *Not open to students who have completed HIS 110. Also listed as INT 112.*

113. World History since 1500. (3)s.

Survey of cultural, social, intellectual, economic and political heritage in the development of major civilizations since the sixteenth century. History and interconnections among civilizations of Europe, the Mediterranean periphery, East Asia, the Middle East, Sub-Saharan Africa, the Americas, and the Indian Subcontinent, examined from a global perspective. Not open to students who have completed HIS 111. Also listed as INT 113.

210. Western Civilization to 1600. (3)s.

Study of the cultural tradition of the West from its beginnings in the ancient Near East and classical antiquity to the close of the European Renaissance, ca.1600. Focus on the historical context of particular aspects of the western heritage in law, religion, politics, society, and the arts, with close examination of distinctive examples through discussion and writing.

211. Western Civilization since 1600. (3)s.

Emergence of modern ideas and institutions of the West since 1600. Focus on the historical context of particular aspects of the western tradition such as science, industrialization, individualism, political revolution, and ideologies; emphasis on their reflection in the arts and debates about the role of the west in the world. Close examination of materials through discussion and writing.

215. Islamic Civilization to 1500. (3)s.

Context in which Islam arose; life of the prophet Muhammad; early Islamic conquests; growth and development of different aspects of Islamic civilization including theology, law, philosophy, art and architecture; military challenges to the Islamic community from the Crusades and Mongols.

216. Islamic Civilization since 1500. *A course in western civilization, or world history, or consent of instructor.* (3)s.

The spread of Islamic civilization in Asia and Africa; rise, development and decline of the Islamic gunpowder empires (Ottoman, Safavid, and Mughal); interaction between European imperialisms and Muslim societies; cross-cultural perceptions; contemporary challenges facing the Muslim world.

220. United States to 1898. (3)s.

Development and growth of American society, economics, culture, governmental structures, and core democratic values to 1898.

221. United States since 1898. (3)s.

Evolution of American social and cultural values and the role of government since 1898, to reflect both the United States' changing social/cultural mores and its global economic and political responsibilities in the twentieth century and beyond.

230. Survey of African History to 1800. (3)s.

African history from ancient times to the end of the 18th century. Economic, political and social foundations of ancient African civilizations. The encounter with Europe; development of the Atlantic slave trade in the 16th century; consequences on Africa and people of African descent. Growth of legitimate trade and the beginning of colonial conquest in Africa. Lectures, documentary films, videos, class discussions. *Also listed as AFA 230*.

235. Introduction to the History of African Diaspora. (3)s.

This course explores key issues and events in the history of the African Diaspora. The African Diaspora is broadly defined to encompass the experiences of people of African descent across time and vast geographical areas. Taking the current trends in Diaspora studies literature into account, it emphasizes the "homeland plus Diaspora" model, and examines the history of the people of African descent in Africa and other parts of the world. It also evaluates the contributions of Africans in the formation of multi-ethnic, cross-cultural societies in Asia,

Europe and the Americas. The course discusses the dialectical relationships between Africans and the people of the African Diaspora, and the cultural and intellectual world that they created since the sixteenth century. Using appropirate textbooks, essays, primary sources and documentary videos, the course attempts to help understand the historical and cultural bonds between Africans and people of African Diaspora. After a brief overview of the African background, it chronologically introduces the African Diaspora experiences in Asia, Europe, the Caribbean, North and South America. It deals with the Atlantic slave trade and the connections between slavery and the development of racism in America. This course is recommended for students who are completing a certificate program in Africana Studies, those who are at entry level or junior standing. Also listed as AFA 235.

283. Introduction to Islam and the Modern "Middle East." (3)s.

The rise of Islam, specificity of Islamic civilization, interaction between the West and Islam, cross-cultural perceptions, and challenges confronting the modern" Middle East" and the Muslim world. Ethnic and religious diversity of the contemporary "Middle East." Sources for the study of the Islamic world.

290. East Asia to 1600. (3)s.

Development of Chinese, Japanese and Korean civilizations from antiquity to 1600. Development of various cultures with special attention to the influence of Chinese culture on other East Asian civilizations. Politics, economics, foreign relations.

291. East Asia since 1600. (3)s.

Development of Chinese, Japanese and Korean civilizations from 1600 to present. Examines differing responses to Western culture, along with the rise of various schools of political thought (democracy, communism, fascism).

299. (300). Introduction to History. Two history courses; at least sophomore standing. Open to non-history concentrators with consent of Department Chair. (3)s.

Introduction to the discipline of history, including historical methods, research and writing techniques, and different modes of historical writing.

301. History Capstone Seminar. HIS 299, at least junior standing. Open to non-history concentrators with consent of Department Chair. (3)s.

Investigation of historical problems in a particular area of student interest as a small cohort under the direction of a History Department faculty member and as a part of a larger cohort of students in the History concentration; completion of a master project in history and a seminar presentation. Primarily for first semester juniors beginning a concentration in History.

- [302. Latin America from Colonization to Independence. At least sophomore standing or consent of instructor. (3)s.]
- [303. Latin America: Independence to the Present Day. At least sophomore standing or consent of instructor. (3)s.]
- [304. History of Brazil. At least junior standing or consent of instructor. (3)s.]

- [305. Central America from Conquest to the Present. At least sophomore standing or consent of instructor. (3)s.]
- [306. Social History of the United States Since 1865. At least junior standing or consent of instructor. (3)s.]
- **307. History of Business in America.** *At least junior standing.* (3)s.

Origins and growth of business in the United States. Business activities before the Civil War. Consolidation and the antitrust movement. The depression of 1929, the New Deal, World War II, and the Cold War. *Also listed as BUS 307*.

- [308. Topics in Modern Latin American History, Politics and Culture. HIS 302, 303; or consent of instructor. (3)s.]
- **314.** History of the Old South. HIS 220 or consent of instructor. (3)s.

History of the American South from early seventeenth century to the outbreak of the Civil War. Origins and characteristics of slavery and slave culture; divisions in free white Southern society; proslavery thought; the growth of southern nationalism.

315. American Civil War and Reconstruction. Junior standing or consent of instructor. (3)s.

Social, political and economic issues leading to the Civil War; the war itself; and the problems of reconstruction.

- [316. America Comes of Age: The United States, 1877-1914. At least junior standing. (3)s.]
- [317. America Between the Wars, 1919-1939. Junior standing or consent of instructor. (3)s.]
- **318.** Contemporary America. At least sophomore standing and a course in United States history. (3)s.

Social, economic and political developments since the New Deal with particular emphasis on world and cultural relationships.

320. The American Military Experience. Junior standing or consent of instructor. (3).

American military history from the colonial wars through the post-Vietnam era. How technology, politics, society and culture have interacted with the military establishment and strategic policy; influences of war on various aspects of American life.

321. History of the United States Constitution, 1789 to Present. *At least sophomore standing; a course in history.* (3)s.

Historical examination of the Constitution of the United States focusing on the events that affected its writing; the Constitutional Convention; the evolution of interpretations of the Constitution and resulting impact on the American society.

323. United States Theatre History. HIS 221 or consent of instructor. (3)h.

Examination of performance in the United States as an attempt to forge an "American" identity as part of political, national, cultural, social, esthetic and economic developments. *Also listed as THE 303*.

325. History of the British Isles to 1688. *A course in world history or western civilization, or consent of instructor.* (3)s.

Ancient and medieval history of the peoples of the British Isles and the gradual construction of the British state to 1688. Special attention to international context of British history; differences, similarities, interconnections and conflicts between the peoples of England, Ireland, Scotland and Wales.

326. History of the British Isles since 1688. A course in world history or western civilization, or consent of instructor. (3)s.

Exploration of the problematic construction of British national identity in relation to ethnicity, class, gender and the state since 1688. Special attention to the parallels, conflicts and interconnections between the peoples of England, Ireland, Scotland and Wales.

327. A History of the Vietnam War. Junior standing, HIS 221; or consent of instructor. (3)s.

Involvement of the United States in Vietnam from initial commitment to the French in the early 1950s through full-scale involvement under President Johnson to the final defeat of South Vietnam in 1975. Examines domestic opposition to the war. Includes footage from video tapes and films of the war.

329. Michigan History. At least junior standing. (3)s.

Survey of the political, economic and social development of Michigan from the eighteenth century to the present.

332. Development of the American West. *One course in United States history and at least junior standing.* (3)s.

Westward movement from its beginnings in the early seventeenth century; economic, political, social and cultural consequences of internal American expansion.

333. Labor in America. At least junior standing and a course in United States history, or consent of instructor. (3)s.

Exploration of the transformation of work in America from 1600 to the present, emphasizing the struggles of workers to organize in the nineteenth and twentieth centuries, the changing nature of the work process, and the particular experiences of female, immigrant, and minority workers.

334. History of Ethnic and Racial Minorities in the United States. At least junior standing; a course in US history; or consent of instructor. (3)s.

Historical examination of the role of minority groups in the United States with emphasis on the changing patterns of immigration, the process of assimilation, the evolution of ethnicity, and the differences and similarities in the experiences of minority groups. *Also listed as AFA 334*.

335. History of the African-Americans to 1877. *A course in American or African history.* (3)s.

African American experience from African origins to 1877. Pre-16th century African civilizations, the Atlantic slave trade, the middle passage, racial slavery during the colonial and early republic. Survival strategies of the enslaved and free, struggles for freedom, equality, and social justice during the colonial and post revolutionary period. The abolitionist movement; the role of African Americans in the Civil War and reconstruction. Lectures and documentary videos. *Also listed as AFA 335*.

336. (231). Africa in Modern Times, 1800 to Present. (3)s.

Coming of European colonialism to Africa in the late nineteenth century and efforts of Africans to recapture their independence. Survey through the present period. *Also listed as AFA 336*.

338. Topics in African-American History. A course in American or African-American history. (3)s.

A different topic taught each year. May be reelected once. Also listed as AFA 338.

339. History of Mexico. *At least sophomore standing or consent of instructor. (3)s.*

Survey of Mexican history from pre-conquest times to the present. Indian and Spanish origins of Mexican society and culture, colonial institutions, the movement for national independence, liberalism and conservatism in the nineteenth century, origins and continuing impact of the Revolution of 1910.

- [340. Mexico in the Twentieth Century. At least sophomore standing or consent of instructor. (3)s.]
- [341. Comparative Revolutions in Modern Latin America. At least sophomore standing or consent of instructor. (3)s.]
- [343. History of the Caribbean. At least sophomore standing or consent of instructor. (3)s.]
- **346.** Twentieth Century World History. Junior standing or consent of instructor. (3)s.

Survey of the history of the world in the 20th century in its political, economic, social, and cultural manifestations. Central historiographical themes of the 20th century; salient issues confronting the globe entering the 21st century. *Also listed as INT 346.*

351. Early Modern Europe. A course in world history or western civilization, or consent of instructor. (3)s.

Focus on transition to modern society through the Renaissance, Reformation, and the Age of Reason. Particular attention to thought and culture of these periods in relation to changing political and social landscapes.

352. History and Civilization of Russia. A course in world history or western civilization or European history, or consent of instructor. (3)s.

Survey of Russian history and civilization from 988 to the 1990's: Kiev, Tatars, Muscovy through the tsarist imperial state, the revolution and Soviet era, the Commonwealth of Independent States and contemporary problems. Historical, literary, and film sources; emphasis on recurring themes and issues.

353. History of East Central Europe. *At least sophomore standing (3)s.*

Survey of major states of East Central Europe from pre-history to the present, their languages, peoples, cultures. Achievements of medieval times; roles of Roman and Orthodox Christianity and Islam; connections with West Europe; foreign domination and nationalism; postcommunist challenges; overview of current issues.

355. Twentieth Century Europe. A course in European history or western civilization, or consent of instructor. (3)s.

Development of European thought, culture and politics in the twentieth century, including the First World War; social dislocation and the rise of fascism; World War Two; Postwar consensus and rebuilding; The Cold War in Europe; European Union; and contemporary challenges.

357. Polish Culture through History and Literature. A course in world history or western civilization or European history, or consent of instructor. (3)s.

Poland's political and cultural development from pre-history to the present. Tenth century origins, development of distinctive political and social institutions, cultural patterns and traditions of minorities, participation in European civilization. Political events and values, perceptions of periods as seen through documents, memoirs, literature, drama, architecture, music.

360. An Introduction to Holocaust History. A course in world history or western civilization and at least sophomore standing. (3)s.

Introduction to the chronology, terminology and geography of the Holocaust (1933-1946); growth and development of field of Holocaust studies; the civilization of East European Jewry prior to its destruction and the context of European history before the twentieth century.

367. History of Germany. A course in European history or western civilization, or consent of instructor. (3)s.

Patterns and problems in German history from the close of antiquity and the medieval German empire through Reformation times, the age of absolutism and the era of industrialization, the Weimar Republic and its culture, the Hitler dictatorship, the two Germanies to 1990. Exploration of post-unification issues.

368. The History of African-American Religion. Sophomore standing or consent of instructor. (3)h.

Exploration of the core values associated with the struggle to create and maintain the African-American religious experience in America, which has borrowed values from a number of cultures and has served to influence the on-going process of defining American culture. *Also listed as AFA 358*.

369. History of American Women. *At least sophomore standing.* (3)s.

Examination of the evolution of women's experience in the United States from 1600 to the present, paying particular attention to the economic, reproductive and sexual, familial, and communal roles; participation in public life; and the means by which women have expressed their culture. *Also listed as WGS 369*.

370. Women In Western Societies. HIS 113, 211; or consent of instructor. (3)s.

Women in Europe since the seventeenth century; ways in which historical process is illuminated by questions of gender. Women's role in high and low culture, in elite and laboring society, since early modern times, and how the great events and large-scale changes of history affected women's lives and gender relations. Women in a variety of societies from Russia to Spain. *Also listed as WGS 370*.

372. The French Revolution. *A course in western civilization, junior standing; or consent of instructor.* (3)s.

Events, ideologies and personalities of the French Revolution from 1789 to 1815. Topics include: French Absolutism; Louis XVI; Robespierre and the Terror; Napoleonic Wars and Napoleonic Europe.

373. 19th Century Europe. A course in world history or western civilization, or consent of instructor. (3)s.

Development of European thought, culture and politics in the 19th century, including political revolution and ideologies; industrial culture, class and gender; nationalism and imperialism; collapse of the European order at the turn of the century.

374. History of the British Empire since 1790. A course in world history or consent of instructor. (3)s.

The expansion and ultimate collapse of the British Empire in the 19th and 20th centuries. Exploration of political, economic, ideological, cultural and technological foundations of imperialism and colonial resistance.

376. History of Modern China. A course in world history or western civilization, or consent of instructor. (3)s.

Chinese civilization and culture from the Ch'ing Dynasty of the 17th century to the present. Philosophical foundations (Confucianism-Marxism), art, architecture and literature examined along with the Western impact and political developments of the 20th century.

377. Pre-Modern Japan to 1600. A course in world history or western civilization, or consent of instructor. (3)s.

Development of Japanese civilization from antiquity to 1600. Japanese culture, and political and economic developments. Continental cultural influence, development of a distinctive Japanese culture (religion, art and literature), and the worlds of the aristocrat and samurai.

378. History of Modern Japan. A course in world history or western civilization, or consent of instructor. (3)s.

Japanese civilization and culture from the Tokugawa Period (1600-1868) to the present. Process of modernization and changes in Japanese culture, philosophy, society, economy and politics. Includes the political and economic development of postwar Japan.

380. History of Modern India and South Asia. A course in world history or consent of instructor. (3)s.

History of modern India and South Asia, with special attention to ethnic, religious and national identity in the Indian subcontinent. The collapse of the Mughal Empire; East India Company and the British Raj; Indian nationalism and the Muslim League; Independence and Partition; Nehru, Socialism and Secularism; Interregional conflicts, religious riots and contemporary concerns.

385. History of the Modern "Middle East" since 19th Century. *At least junior standing or consent of instructor.* (3)s.

Interaction between European imperialisms and the Ottoman and Qajar dynasties; European imagination of the "Orient" and

Muslims; incorporation of the region in the world economy; rise of new social classes and origins of the contemporary state system; clash of competing nationalisms and pan-national movements; transformations of traditional cultural forms, especially literature. The Arab-Israeli conflict, interconnections between Islam and politics, the recent Islamicist revival, the Iranian revolution, and recent domestic challenges confronting "Middle Eastern" states.

386. International Relations of the "Middle East." At least junior standing or consent of instructor. (3)s.

Relations from the early 19th century until the present. Europe's expansion into the Ottoman Empire; incorporation of the "Middle East" into the global economy; clash of European ideas with Islamic traditions; rise of pan-national movements; the Arab-Israeli conflict; the rise of OPEC; struggle for the Persian Gulf. Western perceptions of Muslims; international dimensions of the recent Islamicist revival; Islam as a global cultural system.

387. Islam and Political Change. At least junior standing or consent of instructor. (3)s.

Role of religion in political life of the Muslim world since the nineteenth century. Political, intellectual, social and cultural transformations of Islamic traditions and values, both orthodox and popular. Evolution and transformation of the modernist pattern of thought; challenges to the authority of religious scholars from secular, modernist and Islamist movements; growth of non-political, popular Islamic movements. Special attention to comparative case studies of Egypt, Iran, Turkey, Pakistan and the Arab Gulf states.

391. Directed Reading in History. At least junior standing and consent of instructor. (1-3)s.*

Designed for students with special interests in history. Designation indicates (A) United States history; (B) English history; (C) modern European history; (D) ancient and medieval history; (E) African history. No more than a total of three credits from HIS 391 and 395, combined, may apply to the requirements for the General Program or Minor or Teacher's Certificate Program in History. Graded ABCDE/Y.

393. Special Topics in History. Not open to freshmen. (3)s.

Each semester and/or section, a different topic to be announced in advance of registration. May be taken more than once, but not so as to repeat a topic.

395. Directed Research. HIS 301 or 15 credits in history and consent of Department Chair and instructor. (1-3)s.*

Independent research experience under the direction of a member of the Department of History.

*No more than a total of three credits from HIS 391 and 395, combined, may apply to the requirements for the General Program or Minor or Teacher's Certificate Program in History. Graded ABCDE/Y.

409. Colonial America. HIS 220 or consent of instructor. (3)s.

History of Colonial America from early settlement to the eve of the American Revolution. Examination of the American Colonies from an Atlantic perspective, focusing on European motivation for settlement, origins and development of slavery, religious and economic change, creation of early American culture.

410. Era of the American Revolution. HIS 220 or consent of instructor. (3)s.

Examination of the decades surrounding the American Revolution and America's transformation from British colony to independent republic. Political and social origins of the Revolution; formation of the republican state; changing notions of citizenship and equality; the role of political leaders in society; social and cultural consequences of the Revolution.

411. Conflict, Reform, and Expansion: America before the Civil War. HIS 220 or consent of instructor. (3)s.

Exploration of the major social, economic and political developments in the United States in the decades leading up to the Civil War. The market revolution; religion and reform; westward expansion; slavery and abolition; the origins and development of the second-party system; the politics of slavery.

412. The Atlantic World in Transition: 1400-1850. HIS 220 or consent of instructor. (3)s.

History of the interaction of Europeans, Native Americans, and Africans between approximately 1400 and 1800. European exploration and colonization in the New World, Caribbean, and Africa; the origins and development of the Atlantic Slave Trade; the complex cultural connections that tied these regions together; movements for colonial independence.

 Sin, Salvation, and Celebrity in Early America. HIS 220 or consent of instructor. (3)s.

Examination of the tremendous changes that took place in American culture between the American Revolution and the Civil War. Topics include Crime and disorder; moral reform; religious revival; immigration; prostitution; the development of commercial entertainment.

419. History of Sport in the United States. Junior standing or consent of instructor. (3)s.

Sports as a reflection of national society. Recreational patterns; also such issues as racism, sexism, urbanism, legal and labor history, progressivism, immigration, and nativism. Impact of professional and amateur sports on the cultural development of the nation; how both participatory and spectator sports mirror the values, aspirations and needs of people in any given time period.

428. (328). Emergence of the United States as a World Power Since 1914. A course in United States history and at least junior standing, or consent of instructor. (3)s.

Origins and consequences of American entry into two world wars, the Cold War, and American relationships with underdeveloped regions; changing views of isolationism and intervention.

430. American Indian History. At least junior standing, a course in United States history. (3)s.

White images, government policies, and philanthropy in regard to Indians. Dynamics of the history of Native Americans from before white contact to the present day. Anglo-American Indian relations within the boundaries of what is now the United States. 431. American Urban History. At least junior standing and a course in United States history or urban studies. (3)s.

Rise of the city in America from colonial times to the present. tracing the spread of urban settlement; the evolution of an organized system of cities; the development of life, institutions, and landscape in the city; and the diverse consequences of urbanization.

433. Muslims in North America. (3)s.

Origins, conditions, cultural practices, and conflicts of Muslims in North America. Examination of the critical issues of adaptation, authenticity and diversity confronting Muslims in the United States and Canada, focusing on the different African-American Muslim communities, especially the "Nation of Islam." Investigation of existing stereotypes of Muslims in contemporary popular culture, including novels, films and comics. Also listed as AFA 433.

435. Black America Since the Civil War. At least junior standing. (3)s.

Examination of movements, organizations, personalities, and leadership trends among Black Americans since the Civil War. Also listed as AFA 435.

- [436. Exploring Community History. Two courses in the social sciences or consent of instructor. (3)s.]
- 438. Jazz, Rock & Cinema: A Social History of the 20th Century United States. At least junior standing; a course in U.S. history. (3)s.

Social history of the 20th century U.S. examined through film and musical expression. Topics include the Harlem Renaissance and its impact on race relations and cultural acceptance, the great depression and its entertainment value, Vietnam & the media, women's rights.

457. The Family in Historical Perspective in Europe and **America.** At least sophomore standing. (3)s.

Evolution of the family between 1600 and the present in Europe and America, including the peasant family, preindustrial urban family, wage-earning nuclear family, and contemporary household. Social, economic and demographic factors that influence the forms families have taken, the quality of family life, and ideas about the family. Also listed as SOC 457 and WGS 457.

479. Pacific World in Transition since 19th Century. A course in world history, or consent of instructor. (3)s.

Examination of diplomacy in the Pacific world, focusing on relationships between China, Japan, the United States and United Kingdom. Discussion of British and American imperialism including the Opium War in China, Perry in Japan, the "unequal treaties," and Chinese and Japanese immigration to the US. Post-WWII to focus on US-Japan-China relationship and the coming/ending of Cold War Asia.

495. Honors Thesis I. HIS 395 and permission of Honors Council and Department. (4).

Credit and grade for HIS 495 is not given until successful completion of HIS 496. Also listed as HON 495. Graded ABCDE/Y.

496. Honors Thesis II. Permission of Honors Council and Department. (4).

No student with a grade of B- or less in HON/HIS 496 will graduate with Honors in History. Also listed as HON 496. Graded ABCDE/Y.

Graduate Courses in History

509. Colonial America. Graduate standing. (3).

See HIS 409 for description. Not open to students with credit for HIS 409.

510. Era of the American Revolution. *Graduate standing.* (3).

See HIS 410 for description. Not open to students with credit for HIS 410.

511. Conflict, Reform, and Expansion: America before the Civil War. Graduate standing. (3).

See HIS 411 for description. Not open to students with credit for HIS 411.

512. The Atlantic World in Transition: 1400-1850. Graduate standing; HIS 112, 220. (3).

See HIS 412 for description. Not open to students with credit for HIS 412.

519. History of Sport in the United States. *Graduate standing.*

See HIS 419 for description. Not open to students with credit for HIS 419.

521. History of the United States Constitution, 1789 to **Present.** Graduate standing. (3).

See HIS 321 for description. Not open to students with credit for HIS 321.

528. Emergence of the United States as a World Power since **1914.** *Graduate standing.* (3).

See HIS 328 for description. Not open to students with credit for HIS 328.

530. American Indian History. Graduate standing; a course in United States history. (3).

See HIS 430 for description. Not open to students with credit for HIS 430.

531. American Urban History. Graduate standing; a course in United States history or urban studies. (3).

See HIS 431 for description. Not open to students with credit for HIS 431.

534. History of Ethnic and Racial Minorities in the United **States.** *Graduate standing.* (3).

See HIS 334 for description. Not open to students with credit for AFA/HIS 334. Also listed as AFA 534.

538. Jazz, Rock & Cinema: A Social History of the 20th Century United States. Graduate standing; a course in U.S. history. (3).

See HIS 438 for description. Not open to students with credit for HIS 438.

546. Twentieth Century World History. *Graduate standing.* (3).

See HIS 346 for description. Not open to students with credit for HIS/INT 346. Also listed as INT 546.

557. The Family in Historical Perspective in Europe and America. *Graduate standing.* (3).

See HIS 457 for description. Not open to students with credit for HIS/SOC/WGS 457.

569. History of American Women. Graduate standing. (3).

See HIS 369 for description. Not open to students with credit for HIS/WGS 369. Also listed as WGS 569.

574. History of the British Empire since 1790. *Graduate standing.* (3).

See HIS 374 for description. Not open to students with credit for HIS 374.

579. Pacific World in Transition since 19th Century. *Graduate standing.* (3).

See HIS 479 for description. Not open to students with credit for HIS 479.

587. Islam and Political Change. *Graduate standing.* (3).

See HIS 387 for description. Not open to students with credit for HIS 387.

Interdisciplinary Studies (IDS)

See the "Bachelor of Interdisciplinary Studies" section of this *Catalog* for degree requirements.

Courses in Interdisciplinary Studies (IDS)

498. Interdisciplinary Studies Thesis I. Approval of course of study by CAS Curriculum Committee for Bachelor of Interdisciplinary Studies; consent of instructor. (3).

Independent study course designed for the preliminary work on the thesis/final project for the Bachelor of Interdisciplinary Studies, to be completed in IDS 499.

499. Interdisciplinary Studies Thesis II. IDS 498; approval of course of study by CAS Curriculum Committee for Bachelor of Interdisciplinary Studies; consent of instructor. (3).

Independent study course designed for the completion of the thesis/final project for Bachelor of the Interdisciplinary Studies.

International Studies (INT)

See the "International and Global Studies Program" section of this *Catalog*.

Law and Society

310 David M. French Hall

(810) 762-3470 Fax: (810) 762-3473

URL: http://www.flint.umich.edu/departments/polsci

Director: Albert Price

Principal Secretary: Suzanne Shivnen

Program Faculty: Jami Anderson(Philosophy), Simon Cushing
 (Philosophy), Albert Price (Political Science), Judy
 Rosenthal (Anthropology)

Program in Law and Society

A Minor in Law and Society is available.

Minor in Law and Society

The minor is designed to help students understand the law and legal processes from a variety of different disciplinary perspectives. Participating disciplines include anthropology, political science, linguistics, philosophy, communication, criminal justice, public administration, business, and sociology. With a liberal arts rather than a pre-professional focus, the program grounds students in the ways in which legal thinking and legal institutions regulate behavior and attempt to deliver justice.

Requirements. Eighteen credits, distributed as follows:

- A. ANT/POL 351 or COM/LIN 231 (3 credits).
- B. Legal Foundations and Perspectives (6 credits). Courses in two different disciplines, selected from: ANT/POL 351 (if not chosen for A); COM/LIN 231 (if not chosen for A); PHL 362; POL 222, 333, 380, 381; SOC 485.
- C. Legal Processes (3 credits). POL 326 or 420 or 430.
- D. Substantive Law (6 credits). Courses in two different disciplines, selected from BUS 250, 351; COM 331; CRJ 380 or POL 428; POL 329; PUB 422, 425, 487; PUB/HCR 424.

Students with concentrations in Political Science are allowed to count at most six credits of courses in the concentration toward this minor.

Law Studies Information

Pre-Law

Faculty Advisor: Dr. Albert Price (Political Science)

There is no specific undergraduate program or set of required courses that a student must take to prepare for law school. Generally, law schools suggest that pre-legal education should stress the development of broad skills and insights rather than the mastery of specific subject matter. A sound pre-legal education is

one that serves to develop verbal and writing skills, creative and analytical thinking, and habits of thoroughness.

Law school admission is usually highly competitive. The applicant's academic preparation, academic record, Law School Admission Test (LSAT) scores, and other indicators of success are considered.

Michigan law schools are the University of Michigan-Ann Arbor, Thomas Cooley Law School, Detroit College of Law at Michigan State, University of Detroit, and Wayne State University.

Students planning to enter law school should seek the assistance of the pre-law faculty advisor early in their undergraduate years.

Linguistics (LIN)

326 David M. French Hall

(810) 762-3285 Fax: (810) 237-6666

URL: http://www.flint.umich.edu/departments/English

Faculty Advisors: Jan Bernsten, Kazuko Hiramatsu, AnneMarie

Toebosch

Principal Secretary: Karen Woods

Linguistics courses are offered for students interested in some aspect of language study and its relationship to other disciplines. Students of anthropology, education, English, foreign languages, philosophy and psychology find particular value in the study of linguistics.

Programs in Linguistics

A Minor in Linguistics is available. A concentration program in French and Linguistics is available through the Department of Foreign Languages.

Minor in Linguistics

Requirements. Completion of 18 credits, distributed as follows:

A. ENG/LIN 200.

B. Fifteen credits selected from: ANT/LIN 313, 335; COM/LIN 231, 284; ENG/LIN 244, 306, 349, 351, 409; FRN/GER/LIN/SPN 360; LIN 299, 346, 390.

One year of a foreign language is recommended.

LIN 313, 346 and 360 may apply either to the concentration program in a language and linguistics or to the minor in linguistics, but not to both.

Courses in Linguistics (LIN)

200. Introduction to Linguistics. At least sophomore standing. *(3)*.

Introduction to the study of language. Goals and methodology of linguistics: phonology, morphology, grammar, semantics. Language change and language universals. Relationship of language study to other disciplines: sociolinguistics, psycholinguistics, language learning, animal languages. Also listed as ENG 200.

231. Language and Law. (3).

Study of language in the American judicial process; legal language reform, the role of the linguist as expert witness, comprehension of jury instructions, effects of language variation on witness credibility, legal rights of linguistic minorities. Also listed as COM 231.

244. The Structure of English. (3).

Detailed examination of the English language with emphasis on structure of sentences and notions of "grammar" and "usage." Also listed as ENG 244.

284. Gender and Communication. At least sophomore standing. (3)s.

Analysis of gender/communication issues, including how women and men use language differently, how women and men are portrayed in language, and how language reflects and recreates social reality. Also listed as COM 284 and WGS 284.

290. Language and Culture. ANT/INT 100 or LIN 200. (3)s.

Analysis of the relationship between linguistic categories and patterns of culture. Also listed as ANT 290.

299. Topics in Linguistics. ENG/LIN 200 or consent of instructor. (3).

Some aspect of the study of language from a linguistic perspective. Topics vary and may include such areas as historical linguistics, theoretical issues in linguistics, theories of second-language acquisition, philosophy of language, computers and natural language processing.

306. Writing about Language. LIN/ENG 200. (3).

Theory and practice of writing about language through the study of various topics in linguistics. Topics include Sign Language, language acquisition and Ebonics. Also listed as ENG 306.

311. First Language Acquisition. ENG/LIN 200. (3).

Study of first language acquisition, including typical and atypical language development. Survey of general stages and proposed theories. Analysis of child language data.

313. Second Language Acquisition. ENG/LIN 200. (3).

Second language acquisition theory and strategies. Problems in phonology, morphology, syntax, pragmatics, and cross-cultural

335. Language Variation in Society. ANT 100 or ENG/LIN 200. (3)s.

Language variation within the same language community, circumstances under which it occurs, and its relationship to group interaction. Regional dialects, ethnic dialects, sexrelated language differences, pidgins and creoles, and languages in mutual contact. Also listed as ANT 335.

346. Linguistic Analysis. ENG/LIN 200. (3)s.

Problem-solving in phonology, morphology, and syntax. Practical and theoretical issues in linguistic analysis, using a wide variety of languages as illustrations.

351. Language and the Mind. ENG/LIN 200. (3).

Strategies used by speakers in acquiring and putting into use the rules of their language. Child language acquisition and development, experimental psycholinguistics, nonverbal communication, bilingualism, and language disturbances. *Also listed as ENG 351*.

360. Comparative Phonetics/The World's Major Languages. FRN 212 or GER 212 or SPN 212; prior or concurrent election of ENG/LIN 200. (3).

Sound systems of American English, French, German, Spanish and other languages. Concentrates on the world's major languages. Register-tone and contour tone languages. Acoustic phonetics. Problems of teaching French, German or Spanish pronunciation. *Also listed as FRN 360 and SPN 360*.

[369. Introduction to the Romance Languages. FRN 211 or SPN 211, ENG/LIN 200; or consent of instructor. (3). Also listed as FRN/SPN 369.]

390. Directed Readings. A course with the LIN prefix or a course in the application of linguistics, and consent of instructor. (1-2).

Individual study in linguistics. Investigation of a well-defined problem in linguistic theory or applied linguistics, under the direction of a faculty member.

409. American English. At least junior standing. (3).

Social and regional variations in American English considered in terms of contemporary views of cultural history and process of language change. *Also listed as ENG 409*.

447. (349). History of the English Language. *ENG/LIN 200.* (3).

Survey of the bases of the language and how it developed. Old English, Middle English, Early Modern and Modern English studied. *Also listed as ENG 447*.

Graduate Courses in Linguistics

520. Linguistics for Teachers. Graduate standing. (3)g.

Principles of linguistics and their applications in the classroom. Focus on language structure and language variation, with particular emphasis on their relevance to teaching and learning of Standard English. Discussion of the role of Standard English in American society, and larger political issues such as the "English-Only" movement and bilingual education. Students pursue individual projects relating their expertise and experience as teachers to the course material.

521. Language Acquisition. *Graduate standing.* (3)g.

Theories of how children acquire language and how these theories have been applied in classroom settings. Discussion of the acquisition of sounds, words and grammar, as well as the interwoven development of oral and written language. Individual differences and atypical language development also examined. Students pursue individual research projects based on field work with children in natural settings—at home, at play or at school.

Master of Liberal Studies

See Graduate Study.

Mathematics (MTH)

402 William R. Murchie Science Building (810) 762-3244 FAX: (810)766-6880

Chair: Dr. Ricardo Alfaro Principal Secretary: Pat Klein

Professors Ricardo Alfaro, Steven C. Althoen, Robert A. Bix, Harry D'Souza, Kenneth Schilling; Associate Professors Lixing Han, Kristina Hansen, Mehrdad Simkani, Kirk Weller; Assistant Professor Shu-Yi Tu

Mathematics is both a science and an art. While most people are aware of the value of mathematical computation, those who study mathematics also get to see the beauty of mathematics as an art that reveals truth through logical reasoning. The roots of mathematics lie in ancient Mesopotamia, Egypt, Greece and the Orient. Much of modern mathematics derives from seventeenth century physics. Today's mathematical discoveries and important new applications have extended the reach of mathematics beyond the physical sciences to every area of human endeavor.

The study of mathematics is an excellent way to prepare for a broad range of careers in such fields as business, government, industry, law, medicine, politics and teaching. You will find mathematics majors are employed as actuaries, animators, benefits administrators, climate analysts, college professors, cryptologists, epidemiologists, forensic analysts, market researchers, pollsters, programmers, scientists, statisticians and teachers.

Department Mission and Program Assessment

The mission of the UM-Flint Mathematics Department is to share its knowledge and appreciation of mathematics within and outside the University, to participate in the creation and dissemination of mathematical ideas, and to do its part in making UM-Flint a vital learning institution committed to serving the needs of its students. The Department participates in the University-wide effort to assess its academic programs. Information on assessment plans, including goals, methods and outcomes is available at http://assessment.umflint.edu.

Programs in Mathematics

Seven concentration programs are offered: the General Program in Mathematics (Bachelor of Arts), the General Program in Mathematics (Bachelor of Science), the Honors Program in Mathematics (Bachelor of Arts or Bachelor of Science), the Program in Actuarial Mathematics (Bachelor of Science), and the Teacher's Certificate Program (Bachelor of Arts or Bachelor of Science). A Minor in Mathematics and a Teacher's Certificate Minor are also available.

General Program in Mathematics (Bachelor of Arts)

This program is designed for the student who wants to study mathematics as part of a broad liberal arts education.

Requirements. Completion of at least 120 credits, including:

- A. MTH 121, 122, 200, 220, 222 (18 credits).
- B. MTH 328, 331 or 333, 400, 423, 456 or 470 (13-14 credits).
- C. Two additional courses in mathematics, selected from: MTH 305, 327, 329, 331, 333, 354, 357, 362, 372, 374, 375, 377, 378, 385, 392, 422, 456, 470 (6-8 credits).
- D. CSC 175 and any necessary prerequisites.
- E. All requirements of the College of Arts and Sciences Bachelor of Arts degree, including general education requirements and a foreign language.

General Program in Mathematics (Bachelor of Science)

This program is designed for the student who wants to study mathematics in some depth as preparation for graduate school or a career in mathematics or a related field.

It is recommended that the general education requirements be completed in the first two years.

Requirements. Completion of at least 124 credits, including:

- A. MTH 121, 122, 200, 220, 222 (18 credits).
- B. Option A or B below.
- C. PHY 243, 245 (10 credits).
- D. All requirements of the College of Arts and Sciences Bachelor of Science degree, including general education requirements and a foreign language.

Option A, Abstract Mathematics

This option is recommended for the student who plans to go on to graduate school in mathematics or a related field. The emphasis of the option is on abstract, rigorous mathematics and on the development of the student's analytical and creative talents.

Requirements, Option A.

- A. MTH 328, 329, 400, 423, 456, 470 (17 credits).
- B. Four additional courses in mathematics, selected from: MTH 305, 327, 331, 333, 354, 357, 362, 372, 374, 375, 377, 378, 385, 392, 422 (12-13 credits).
- C. CSC 175 and any necessary prerequisites.
- D. Completion of ARB 112, GER 112, ITL 112, SPN 112, LAT 105, RUS 112, or JPN 112, or equivalent proficiency by examination (0-8 credits). Students who wish to meet this requirement with courses taken in high school or at other colleges and universities, or those who have attained fluency in a foreign language without formal course work, must demonstrate such equivalent proficiency by examination.

Option B, Mathematical Sciences

This option is recommended for the student who plans to apply mathematics in a nonacademic career. The program has a dual emphasis, focusing on abstract mathematics and its applications.

Requirements, Option B.

- A. MTH 305, 357, 372, 374, 375, 377, 400, 470 (22 credits).
- B. Two additional courses in mathematics, selected from: MTH 327, 328, 329, 331, 333, 354, 362, 378, 385, 392, 422, 423, 456 (6-8 credits).
- C. CSC 175 and any necessary prerequisites, CSC 275.

Honors Program in Mathematics (Bachelor of Arts or Bachelor of Science)

With the same goals and emphases as the General Programs in Mathematics, these programs allow the well-prepared student to get in-depth experience in mathematics by preparing an honors thesis.

Requirements.

- A. Acceptance into the Mathematics Department's Honors Program.
- B. All requirements of the General Program in Mathematics (Bachelor of Arts or Bachelor of Science) or the Program in Actuarial Mathematics.
- C. All requirements of the University of Michigan-Flint Honors Scholar Program, including MTH 394/HON 393, MTH 494/HON 495, MTH 495/HON496. (BA students must elect HON 393, 495 and 496.)

Prospective Honors Program students are urged to acquaint themselves as early as possible with the requirements above as well as with the particular procedures for acceptance into the Mathematics Department's Honors Program. See the departmental honors advisor or the Honors Program Director for this information.

Program in Actuarial Mathematics (Bachelor of Science)

This program is designated an "Undergraduate -Introductory" actuarial science program by the Society of Actuaries. It is designed for the student who wishes to pursue a career as an actuary, a career which requires strong mathematical skills as well as training in business-related areas. Actuaries work for insurance companies, financial planning agencies, governmental agencies, and other organizations to assist them in planning for the future using statistical and other mathematical techniques.

Actuaries advance in their careers by passing examinations offered by the two American actuarial societies, the Society of Actuaries and the Casualty Actuarial Society. The courses required for this degree cover much of the material on the first two examinations of these two organizations. It is often possible for students to take an examination prior to graduation.

Requirements. Completion of 124 credits, including:

- A. MTH 121, 122, 200, 220, 222 (18 credits).
- B. MTH 372, 374, 375, 377, 378, 393, 400, and at least two other courses in mathematics numbered 300 or higher, excluding MTH 390, 391 (23-25 credits).
- C. BUS 201, 202, 361 (9 credits).
- D. CSC 175 and any necessary prerequisites.

- E. ECN 201, 202, 315, 354 (12 credits).
- F. Also recommended: BUS 363, 463; knowledge of Excel; a minor in Computer Science or Business (Finance).
- G. All requirements of the College of Arts and Sciences Bachelor of Science degree, including general education requirements.

Teacher's Certificate Program (Bachelor of Arts or Bachelor of Science)

The Teacher's Certificate Program is designed to meet the needs of future teachers of secondary school mathematics. This program may lead to either a Bachelor of Arts or a Bachelor of Science degree.

Requirements, Bachelor of Arts.

- A MTH 121, 122, 200, 220, 222, 328, 333, 362, 385, 400 (31 credits).
- B. At least two additional courses in mathematics numbered 300 or higher, excluding 370, 390, 391 and 395 (6-8 credits).
- C. One from: MTH 375 (may also be used for part B), BIO 404/HCR 402, PSY 301, BUS 211 (3-4 credits).
- D. All Teacher's Certification requirements, including EDS 341.
- E. CSC 175 and any necessary prerequisites.
- F. MTH 395 is recommended.
- G. All requirements of the College of Arts and Sciences Bachelor of Arts degree, including general education requirements and a foreign language.

Prospective candidates should also study the sections entitled "General Requirements for Teacher Certification" and "Secondary Education Teacher's Certificate Programs" printed in the Department of Education section of this *Catalog*.

Requirements, Bachelor of Science.

- A. MTH 121, 122, 200, 220, 222, 328, 333, 362, 385, 400 (31 credits).
- B. At least five additional courses in mathematics numbered 300 or higher, excluding 370, 390, 391 `nd 395 (15-17 credits).
- C. One from: MTH 375 (may also be used for part B), BIO 404/HCR 402, PSY 301, BUS 211 (3-4 credits).
- D. All Teacher's Certification requirements, including EDS 341.
- E. CSC 175 and any necessary prerequisites.
- F. PHY 243, 245 (10 credits).
- G. MTH 395 is recommended.
- H. All requirements of the College of Arts and Sciences Bachelor of Science degree, including general education requirements.

Prospective candidates should also study the sections entitled "General Requirements for Teacher Certification" and

"Secondary Education Teacher's Certificate Programs" printed in the Department of Education section of this *Catalog*.

Minor in Mathematics

The Minor in Mathematics provides a good mathematical background for students interested in advanced study in such fields as computer science, economics, the engineering sciences, law, management, and the natural sciences.

Requirements. At least 23 credits distributed as follows:

- A. MTH 122, 220, 222.
- B. Four courses selected from: MTH 200, 305, 321, 327, 328, 329, 331, 333, 354, 357, 362, 370 or 372, 374, 375, 377, 378, 385, 392, 422, 423, 456, 470.

Teacher's Certificate Minor

Requirements.

- A MTH 121, 122, 200, 220, 328, 333, 362, 385 (26 credits).
- B. At least one additional course in mathematics numbered 200 or higher, excluding MTH 230 (3-4 credits).
- C. One from: MTH 375, BIO 404/HCR 402, PSY 301, BUS 211 (3-4 credits).
- D. EDS 341. (3 credits).

Courses in Mathematics (MTH)

090. Intermediate Algebra. A qualifying score on departmental placement test. (3).

Properties of numbers, absolute values, linear equations and inequalities, systems of linear equations, polynomials, factoring, algebraic expressions, exponents and radicals. Not open to students who have completed MTH 111 with a grade of C (2.0) or better. Credit for MTH 090 applies to determination of grade point average and full-time or parttime status, but does not count toward a degree.

111. College Algebra. MTH 090 with a grade of C (2.0) or better, or equivalent as determined by departmental placement test. (3).

Review of intermediate algebra, linear and quadratic equations, theory of polynomial equations. *Not open to students who have completed MTH 117 or higher with a grade of C* (2.0) *or better.*

112. Liberal Arts Mathematics. MTH 111 with a grade of C (2.0) or better, or equivalent as determined by departmental placement test. (3).

Problem-solving in such areas of mathematics as logic, number theory, graph theory, and mathematical games. Problems chosen to develop a broad understanding of the nature of mathematics.

116. Mathematical Inquiry II. *MTH 112 or 115 with a grade of C (2.0) or better.* (4).

Probability, statistics, number theory, and additional topics such

as combinatorics, geometry and social choice. Emphasis on individual and group problem-solving and discovery, including appropriate technology. Designed for elementary education concentrators.

118. Calculus for Management and Social Sciences. MTH 111 with a grade of C(2.0) or better, or equivalent as determined by departmental placement test. (4).

Polynomial, exponential and logarithmic functions and their graphs; the derivative and applications; the integral and applications; functions of several variables and partial derivatives. Not open to students with credit for MTH 121 or 122.

120. Pre-Calculus Mathematics. MTH 111 with a grade of C (2.0) or better, or equivalent as determined by departmental placement test. (4).

Trigonometric, exponential and logarithmic functions, their properties, graphs, and fundamental identities; polar coordinates; conic sections. Not open to students who have completed MTH 121 or higher with a grade of C (2.0) or higher.

121. Calculus I. MTH 120 with a grade of C (2.0) or better, or qualifying score on departmental placement test. (4).

Differentiation and its applications; limits; introduction to integration.

122. Calculus II. *MTH 121 with a grade of C* (2.0) *or better.* (4).

Integration and its applications; infinite series.

124. Concepts of Calculus. MTH 115, 120, each with a grade of C(2.0) or better. (4).

Integrals, derivatives, and the Fundamental Theorem of Calculus.

130. Introduction to Functions. MTH 111 with a grade of C (2.0) or better, or equivalent as determined by departmental placement test. (3).

Functions and graph, exponential and logarithmic functions, introduction to sequences and series, binomial theorem.

133. Elementary Geometry. MTH 115, 120, each with a grade of C (2.0) or better. (3).

Euclidean geometry, transformational geometry, the historical development of geometry. Some proofs utilizing axiomatics included.

192. Selected Topics. *See the course schedule for prerequisites.* (1-4).

Topics of interest in mathematics, to be announced in the course schedule. Various offerings treat different topics. Course may be reelected for additional credit, but not so as to repeat a topic.

193. Mathematics Honors Seminar. *Open by invitation.* (1).

Introduction to advanced mathematics. May include the nature of the real line, limits and continuous functions, applications of calculus to mathematical modeling in biology and physics, and introductions to other branches of mathematics such as number theory and topology. Course may be elected twice; each offering must emphasize a different topic.

200. Mathematical Proofs and Structures. MTH 122 with a grade of C(2.0) or better. (3).

Introduction to propositional and predicate logic; reading and writing of mathematical proofs. Naive set theory; number systems. Designed for students considering a concentration in mathematics or intending to take MTH 328, 329, 333, 354, 422, 423 or 456.

220. Elementary Linear Algebra. MTH 122 with a grade of C (2.0) or better. (3).

Systems of linear equations, matrices, Euclidean spaces, eigenvectors, applications.

222. Multivariate Calculus. MTH 122 with a grade of C (2.0) or better. MTH 220 recommended. (4).

Differential and integral calculus of several variables, including partial derivatives, multiple integrals, line integrals.

230. Introduction to Discrete Structures. MTH 121 or 130. (3).

Sets, integers and modular arithmetic, propositional logic, induction, recurrence relations, permutations and combinations, relations and equivalence relations, functions and order of growth, trees and graphs. Also listed as CIS 230 and CSC 230.

232. Multivariable Calculus for Chemistry. MTH 122 with a grade of C(2.0) or better. (3).

Vectors and matrices; determinants, eigenvalues. Functions of several variables; partial differentiation; maximum and minimum values; double and triple integrals. Introduction to Fourier transform. Not open to students who have completed MTH 222 with a grade of C(2.0) or better.

240. Elementary Discrete Structures for Elementary **Education.** MTH 115 and 120, each with a grade of C(2.0)or better. (3).

Topics from number theory (including the Euclidean algorithm, unique factorization, congruence and cryptography), graphs and trees, matrices, sets and equivalence relations, and permutations and combinations.

305. Differential Equations. MTH 222 or 232 with a grade of C (2.0) or better, or concurrent election of MTH 222 or 232. (3).

Solution of first order equations, linear equations with constant coefficients; certain higher order differential equations, Laplace transform methods, applications. Usually offered in the Fall.

327. Coding Theory. MTH 220 with a grade of C (2.0) or better. (3).

Fundamental concepts of error-correcting codes and cryptography. Finite fields; linear, cyclic and BCH codes; Reed-Solomon codes and digital audio recording. Usually offered in the Winter of even-numbered years.

328. Modern Algebra. MTH 200, 220, each with a grade of C (2.0) or better. (3).

Integer and polynomial rings and their quotients; field

extensions and the impossibility of geometric constructions. Additional topics may include groups, rings, finite fields, or the unsolvability of quintics. *Usually offered in the Fall*.

329. Linear Algebra. MTH 200, 220, each with a grade of C (2.0) or better. (3).

Linear transformations of vector spaces; canonical forms of matrices. *Usually offered in the Winter of even-numbered years*.

331. Conics and Cubics. *MTH* 200, 220, each with a grade of *C* (2.0) or better. (3).

Introduction to algebraic curves of low degree. Intersections of curves; Bezout's Theorem; theorems of Pascal and Brianchon; classification of cubics, addition on cubics. *Usually offered in the Winter of odd-numbered years.*

333. College Geometry. MTH 122 with a grade of C (2.0) or better; MTH 200 with a grade of C (2.0) or better or concurrent election of MTH 200.

Selected topics in Euclidean, projective, and other geometries. Usually offered in the Winter.

354. Number Theory. MTH 200 with a grade of C (2.0) or better, or consent of instructor. (3).

Divisibility, congruences, number theoretic functions. Diophantine equations, distribution of primes, rational approximation. *Usually offered in the Fall of odd-numbered years*.

357. Advanced Calculus. MTH 222 with a grade of C (2.0) or better; MTH 305 with a grade of C (2.0) or better or concurrent election of MTH 305. (3).

Intended for science concentrators. Fourier series, differential and integral vector calculus. Additional topics chosen from orthogonal functions and partial differential equations. *Usually offered in the Winter of odd-numbered years*.

362. Combinatorics with Applications. MTH 200, 220, each with a grade of C (2.0) or better, or concurrent election. (3).

Combinatorics including permutations, combinations, inclusion/exclusion. Discrete probability including special distributions, expected values, Bayes' Theorem. Graph theory including paths, trees, and optimization algorithms. Introduction to linear programming. Not open to students with credit for MTH/CIS/CSC 230. Usually offered in the Fall of even-numbered years.

370. Probability with Statistical Applications. *MTH 220 with a grade of C (2.0) or better. (3).*

Probabilities of events; independence and conditional probabilities; discrete and continuous random variables; expectation, variance and standard deviation; special distributions; joint distributions; applications to statistics. Not open to students who have completed MTH 372 with a grade of C (2.0) or better.

372. Probability. *MTH* 222 *with a grade of C* (2.0) *or better.* (3).

Random experiments, sample spaces, probabilities of events; independence and conditional probability; discrete and

continuous random variables, distribution and density functions; expectation, variance, and standard deviation; special distributions and moment generating functions; analysis of joint distributions. *Usually offered in the Fall of odd-numbered years*.

374. Introduction to Numerical Analysis. MTH 220 with a grade of C (2.0) or better; knowledge of a programming language. (3).

Numerical methods for solving algebraic equations in one or more variables, integration, interpolation, curve-fitting, and solving differential equations. Emphasis on theoretical aspects, including error analysis. Applications and problems for computer solutions. *Usually offered in the Winter of odd-numbered years*.

375. Mathematical Statistics. *MTH 372 with a grade of C* (2.0) *or better; or MTH 222, 370, each with a grade of C* (2.0)) *or better.* (3).

Limiting distributions, stochastic convergence, central limit theorem, point and interval estimation of parameters, hypothesis testing, nonparametric tests, sufficiency, completeness, linear regression, analysis of variance. *Usually offered in the Winter of even-numbered years*.

377. Methods of Operations Research. *MTH 220 with a grade of C (2.0) or better; or consent of instructor. (3).*

Topics in mathematical modeling, including detailed study of linear programming and simplex methods. Additional topics chosen among dynamic programming, game theory, queuing theory, integer programming, and project scheduling. *Usually offered in the Fall of even-numbered years*.

378. Theory of Interest. MTH 122 with a grade of C (2.0) or better or concurrent election of MTH 122; or MTH 118 with a grade of B (3.0) or better. (3).

Theory and applications of interest, including measurement of interest; annuities certain; amortization schedules and sinking funds; bonds and related securities. Intended for students interested in actuarial science, finance, or applications of mathematics to business.

385. History of Mathematics. MTH 200 with a grade of C (2.0) or better. (3).

Mathematical ideas with emphasis on the development of at least one of the areas of algebra, geometry, or calculus. *Usually offered in the Winter of odd-numbered years*.

390. Problem-Solving Seminar. Consent of instructor. (1).

Emphasis on techniques such as exploring examples, special cases, extreme cases, and working backward from known answers. Students encouraged to submit solutions to the problem sections of mathematics journals and to enter mathematics competitions. May be reelected, to a total of four credits.

391. Directed Study. *Consent of instructor.* (To be arranged).

Independent study under supervision of the instructor.

392. Selected Topics. *See the course schedule for prerequisites.* (1-4).

Topics of interest in mathematics, to be announced in the course schedule. Various offerings treat different topics. Course may be reelected for additional credit, but not so as to repeat a topic. Usually offered in the Fall of even-numbered years.

393. Actuarial Exam Preparation Seminar. MTH 372 with a grade of C(2.0) or better.(1).

Review of calculus and probability required for Course 1 (exam) of the Society of Actuaries/Casualty Actuarial Society. Students solve problems from past exams.

394. Honors Independent Study. Consent of Honors Advisor. *Open only to Honors Program students in mathematics.* (3).

Independent study in preparation for the senior honors thesis. Graded ABCDE/Y.

395. Mathematics Instructional Practicum. Consent of department chair; admission to the Education Program.

Teaching experience in mathematics under the supervision of a Mathematics faculty member. Students help with specific courses, based on interest and experience. Graded Pass/Fail.

400. Senior Seminar in Mathematics. Concentration in mathematics; senior standing; grades of C (2.0) or better in four mathematics courses numbered 300 or higher; consent of instructor. (1).

Students individually prepare a written paper and an hour seminar talk on a mathematics topic. Students take the MFAT exam. Intended for election in the last year prior to graduation. Usually offered in the Fall and Winter.

422. Foundations of Mathematics. MTH 200, 220, each with a grade of C(2.0) or better. (3).

Source and evolution of mathematical ideas and methods, relation to logic. Axiomatic method, cardinal and ordinal numbers. Usually offered in the Fall of odd-numbered years.

423. Elementary Topology of the Linear Continuum. MTH 200 with a grade of C(2.0) or better; consent of instructor. (3).

Axiomatic development of the topological properties of the linear continuum without consideration of an algebraic structure. Neighborhoods, open sets, limit points, Bolzano-Weierstrass property, Heine-Borel property, category, Cantor-Bendixson theorem. Proofs presented by the students. *Usually* offered in the Winter of even-numbered years.

456. Real Analysis. *MTH* 200, 222, each with a grade of *C* (2.0) or better. (4).

Topology of Euclidean spaces, concepts of limit, continuity, differentiability and integrability of real and vector functions. Additional topics chosen among infinite series, inverse and implicit function theorems, Stieltjes integrals, line and surface integrals. Usually offered in the Fall of even-numbered

470. Theory of Functions of a Complex Variable. MTH 222 with a grade of C(2.0) or better. (3).

Complex numbers, the Cauchy-Riemann equations, analytic functions, power series, integration, the Cauchy theorems, meromorphic functions, Laurent series, the maximum principle, residues. Usually offered in the Winter of oddnumbered years.

494. Honors Thesis I. MTH 394 and consent of Honors Advisor. Open only to Honors Program students in mathematics. (4).

Credit and grade for MTH 494 is not given until successful completion of MTH 495. Also listed as HON 495. Graded ABCDE/Y.

495. Honors Thesis II. Prior or concurrent election of MTH 494 or HON 495; consent of Honors Advisor. Open only to Honors Program students in mathematics. (4).

Also listed as HON 496. Graded ABCDE/Y.

Pre-Medical Study

Pre-Medicine

Science Faculty Advisors: Dr. Steve Myers and Dr. Robert Stach

There is keen competition for the limited number of places available in medical schools. Therefore, prospective applicants are urged to plan an alternate career option as they pursue a bachelor's degree. Students are also advised to obtain exact information from their prospective medical schools concerning requirements for admission.

In general, medical schools stress scholastic achievement, especially in the sciences, as a major criterion for admission. Premed students may major in any discipline so long as the requirements of the medical program to which they are applying are fulfilled. Medical schools are looking for well-rounded students with a broad, liberal arts background. Such a background can be demonstrated by pursuing a non-science major or minor, or focused sequences of courses in multiple disciplines. Such factors as the quality of the undergraduate college and the recommendations supplied by its faculty, results of the Medical College Admission Test (MCAT), and residence are also considered. Personal qualities such as integrity, motivation, leadership, and maturity are often discernible through the applicant's record of nonacademic activities, an autobiographical statement, and the personal interview at the medical school.

Each student who plans to apply for admission to medical school should seek the assistance and guidance of an advisor from the Biology or Chemistry/Biochemistry Departments at the University of Michigan-Flint, or consult Biology website for more information http://www.umflint.edu/departments/biology/undergrad_programs.htm. As a minimum, the following courses should be completed before applying to medical school:

BIO: 111, 113, 326, 328.

CHM: 160, 161, 162, 163 or 165, 330, 331, 332, 333. ENG: One year (typically 111 and 112).

MTH: Wide variation; some require integral calculus.

PHY: 143 and 145; or 243 and 245.

Pre-medical advisors, in addition, highly recommend:

BIO: 409, 410, 432, 435.

CHM: 450, 452.

The following courses are also of special value and should be selected according to one's area of concentration in consultation with one's advisor:

BIO: 412, 425, 450.

CHM: 340, 366, 367, 451, 453.

Pre-Veterinary Information

Admission to Veterinary Schools is extremely competitive. Each student who plans to apply for admission should seek the assistance and guidance of an advisor from the Chemistry Department or the Biology Department. As a minimum, the student should follow the curriculum outlined above for a Pre-Medicine program. Additional courses would include BIO 408 and 431.

"Middle Eastern" Studies (MES)

Director: Dr. Jamile Lawand (Foreign Language)

Program Faculty: Dr. Imane Hakam (FOR), Dr. Mary Jo
Kietzman (ENG), Dr. Jamile Lawand (FOR), Dr. Joseph
Rahme (HIS), Dr. Judy Rosenthal (ANT), Dr. Kathryn
Schellenberg (SOC)

The "Middle Eastern" Studies minor is an interdisciplinary program dedicated to providing students with an understanding of the cultural, political and social realities of the "Middle East."

varied course offerings introduce students to the history, language,

politics, economy, literature, art and traditions of a region that not only has made important contributions to Europe, but also has played a significant role in shaping the human experience. Students will gain different perspectives on both historical and current issues involving the "Middle East," as well as further appreciate the cultural diversity of the United States. The program is designed to enrich career preparation in fields where there is an increasing need and interest in global awareness, such as education, business, government, and international relations.

Program in "Middle Eastern" Studies (MES)

A Minor in "Middle Eastern" Studies is available.

Minor in "Middle Eastern" Studies

ENG/MES 307.

Requirements. Eighteen to 19 credits, distributed as follows:

- A. Core courses. Two from: ANT 240, HIS 283, HIS 385 (6 credits).
- B. Electives. At least one course selected from each of the following groups. (12-13 credits).
 1. ANT 215; HIS 215, 216, 386, 387; AFA/HIS 433.
 2. ARB 212; ENG 205 or 206; MES 263, 265, 323;
- C. Cognate. Completion of ARB 112, or equivalent proficiency by examination (0-8 credits).

Courses in "Middle Eastern" Studies (MES)

263. East Meets West: Muslims in Spain. At least sophomore standing. (3)h.

Exploration of the Arabo-Islamic influences in Spanish culture, as evidenced in the artistic, intellectual and literary expressions during the Muslim presence in Spain, 711-1492.

265. Sephardim: The Jews of Spain. *At least sophomore standing.* (3)h.

Study of the Sephardic experience from ancient to modern times; special emphasis on social and cultural contributions of the Sephardim in medieval Spanish society, particularly during the Jewish Golden Age of the tenth and eleventh centuries.

307. English Travelers in the Middle East & Cross-Cultural Perceptions. A sophomore course in the humanities or social sciences or consent of instructor. (3)h.

Survey of encounters from the Renaissance to the present between English travelers and native Muslims, as well as individuals from other religious and ethnic groups in the Ottoman Empire, Morocco, Persia and the modern Middle East. Travel writing as an important branch of literary studies; how narrative strategies may further imperialist agendas or undermine them by representing encounters that are mutual, cooperative, respectful and potentially transformative. *Also listed as ENG 307*.

323. Modern Arabic Literature in Translation. ANT 240 or HIS 283 or 385; or consent of instructor. (3)h.

Reading and discussion of representative Arabic authors of the 20th century, such as Kahlil Gibran, Nobel Prize winner Naguib Mahfouz, Yusuf Idris, Emile Habiby, and Nawal al-Sa'dawi.

Music (MUS)

126 David M. French Hall (810) 762-3377 FAX (810) 762-3326

Website: http://www.umflint.edu/departments/mus/

Chair: Lois Alexander (2004-2007)

Administrative Assistant: Marie Angeluski

Associate Professors Lois Alexander, Kirk C. Aamot; Assistant Professor Mary Wagner; Lecturers Julie Anne Carr, Francesco Cavallini, Carol Chaney, James Coviak, Brian Di Blassio, Ken Duquaine, John Hill, Scott Hochstetler, Michael Hovanian, Sheri Jaffurs, G. Donald Kaye, Walter Kimsey, Ida Leshchinskaya, Ray MacLean, Matthew Packer, Jeffrey Price, Mary Procopio, Kelly Splear, Elizabeth Stevens, Amy Vancise, Joseph Wright, Mari Yancho; Media Consultant Carol Chaney

Associate Professors Emeriti: Carolyn Mawby, Vincent O'Keeffe, Raymond Roth, Johannes Tall.

A concentration in music provides students with the opportunity to study the essential elements of this art form--rhythm, melody, harmony, texture, timbre, form, expression--as it developed and continues to develop through time and in world cultures. The

Department of Music prepares students for careers as successful eductors, performers, composes, and cultural leaders. The department's dedicated faculty seeks students of high artistic and intellectual promise to pursue musical studies. The pursuit of a career in music requires diligent practice and perseverence under the guidance of accomplished teacher-artists. The Department of Music offers courses for students who wish to concentrate their studies in music as a profession, and for those who wish to study music as part of general education.

The Department of Music is a fully-accredited member of the National Association of Schools of Music, 11250 Roger Bacon Drive, Suite 21, Reston, VA 20190, (703) 437-0700.

Music scholarships are available by audition to music majors, music minors, and students participating in performance ensembles. For additional information, interested students should consult the Financial Aid section of this *Catalog* or contact the Department of Music.

Department Mission and Program Assessment

The Music Department dedicates itself to a high quality of instruction in curricula emphasizing music theory, history, and performance. The Bachelor of Arts, Bachelor of Music Education, and Bachelor of Science curricula provide students with fundamental background and specialized knowledge needed for analyzing, understanding, and performing music, and to assist them in achieving their goals in various fields of music. In addition, the Department's active schedule of concerts and recitals contributes to the educational and cultural offerings of the university and greater Flint community. The Department participates in the University-wide effort to assess its academic programs. Information on assessment plans, including goals, methods and outcomes is available at http://assessment.umflint.edu.

Programs in Music

Five concentration programs are available: the Bachelor of Music Education (BME), the General Program in Music (Bachelor of Arts), Music Performance (Bachelor of Science), and the Honors Program in Music (Bachelor of Music Education or Bachelor of Arts). The Music Department also offers minors in Music and Music Theatre.

Acceptance into any of the music degree programs requires acceptance to the University by the Office of Admissions, and acceptance into the Music Department. Admission into the Music Department is based on an audition in instrumental or vocal performance. Please contact the department for details.

Bachelor of Music Education

Prerequisites. The following are requirements for admission into the upper level sequence (MUS 381, 382, 387, 491, 492, 493) leading to a Bachelor of Music Education degree with teacher certification (K-12). The music education faculty must approve any exceptions.

- A. MUS 130, 241, 242, 243, 252, 261, 262.
- B. Students must apply for admission to the Education Program. Deadlines for applying are January 15 and September 15 (applications available January 1 and September 1). *Requirements* for admission are: (1) admission to UM-Flint; (2) overall grade point average of 2.75; (3) 2.75 grade point average in the major (all required music performance

courses, see Requirements section) and minor (all required music history and theory courses); (4) at least 18 hours completed in the major and 12 hours completed in the minor; (5) passing score on the MTTC Basic Skills Test; (6) PSY 100 grade of C or better; and (7) completion of at least 55 credit hours. Students are strongly encouraged to regularly consult with their music advisor.

Transfer Students. Students transferring from other institutions must consult with a member of the music education faculty.

Requirements.

- A. Performance (40 credits).
 - 1. Applied Music* (16 credits). MUS 151, 152, 251, 252, 351, 352, 451, 452.
 - *Attendance in performance class is required of all applied music students, including those enrolled in MUS 392.
 - Performance Organizations (major performance area) (7 credits).
 - A student enrolled in MUS 151-452 must concurrently enroll in a large performance organization in his/her major performance area: Chorale (MUS 210/410), Chamber Singers (MUS 211/411), or Wind Symphony (MUS 201/401) Guitar and keyboard majors must participate in Wind Symphony a minimum of one semester.
 - 3. Secondary Instrument (6-7 credits).
 - a. Passing grade on departmental piano proficiency exam.
 - b. Secondary instrument courses selected from MUS 115, 117, 118, 121, 124, 125, 126, 127, 128. Instrumental majors elect 7 credits; vocal or keyboard majors elect 6 credits including MUS 117.
 - c. MUS 132 is strongly recommended
 - 4. Conducting (4 credits). MUS 371, 372.
 - Additional performance courses to yield a total of 40 credits.
- B. Music Theory/Aural Harmony (18 credits). MUS 141, 142, 143, 144, 241, 242, 243.
- C. Music Literature and History (12 credits). MUS 162, 261, 262, 361.
- D. Methodology (37-38 credits).
 - 1. Education (24 credits). EDE or EDS 300, 302, 360, 499; EDE 469 (5 cr.); EDS 469 (5 cr.); ENG 410/EDR 445.
 - Music Education (13-14 credits). MUS 170, 384; EDE 346/MUS 381, EDS 346/MUS 382; MUS 383 (for instrumentalists) or one from MUS 232, 366, 368 (for voclists).
- E. All general education requirements of the College of Arts and Sciences.

General Program in Music (Bachelor of Arts)

Requirements.

- A. Music Theory (16 credits). MUS 141, 142, 143, 144, 241, 242. MUS 243 strongly suggested.
- B. Music Literature and History (12 credits). MUS 162, 261, 262, 361.

- C. Performance (19 credits).
 - Applied Music (12 credits).
 MUS 151, 152, 251, 252, 351, 352. Attendance in performance class is required of all applied music students, including students enrolled in MUS 392.
 - Performance Organizations (7 credits).
 A student enrolled in Applied Music (MUS 151-452) must concurrently enroll in a large performance organization in his/her major performance area: Chorale (MUS 210/410), Chamber Singers (MUS 211/411), or Wind Symphony (MUS 201/401). Guitar and keyboard majors must participate in Wind Symphony a minimum of one semester.
- D. All requirements of the College of Arts and Sciences Bachelor of Arts degree, including general education requirements and a foreign language.

Honors Program in Music

Requirements.

- A. All requirements of either the BA (music) or the BME (music education) degree.
- B. MUS 391, Independent Study (Music Research Methods), for one credit, to be taken during the first semester of the junior year in conjunction with one of: MUS 345, 361, 371, or 372.
- C. One course from: MUS 345, 361, 371, 372.
- D. MUS 393, Honors Independent Study, during the second semester of the junior year.
- E. MUS 498 and MUS 499, Honors Thesis I and II (4 credits each).
- F. All requirements for the University Honors Scholar Program.
- G. All requirements of the College of Arts and Sciences Bachelor of Arts degree, including general education requirements and a foreign language.

Prospective Honors Program students are urged to acquaint themselves as early as possible with the requirements above, as well as the particular procedures for acceptance into the Music Department's Honors Program. Please contact the Departmental Honors Advisor or the Honors Program Director for this information.

Program in Music Performance (Bachelor of Science)

Requirements.

- A. Performance concentration (34 credits).
 - Applied Music (20 credits).
 MUS 251 (2), 152 (2), 251 (2), 252 (2), 351 (2), 352 (2), 356, 451, 452, 456. MUS 352 & 356, and MUS 452 & 456 should be taken concurrently.
 - 2. Ensemble (8 credits). From: MUS 201, 205, 210, 211, 401, 405, 410, 411.
 - 3. Keyboard skills (*1-2 credits*). MUS 130 with a grade of B (3.0) or better, or equivalent proficiency as demonstrated by examination.
 - 4. Conducting (4 credits). MUS 371, 372.

- B. Music Theory (18 credits). MUS 141, 142, 143, 144, 241, 242, 243.
- C. Music History/Literature (12 credits). MUS 162, 261, 262, 361,
- D. Music Electives (18 credits).From: MUS 222, 226, 232, 313, 321, 345, 362, 365, 366, 368, 422, 445, 455, and additional ensembles.
- E. Completion of ARB 112, GER 112, ITL 112, SPN 112, LAT 105, RUS 112, or JPN 112, or equivalent proficiency by examination (0-8 credits). Students who wish to meet this requirement with courses taken in high school or at other colleges and universities, or those who have attained fluency in a foreign langauge without formal course work, must demonstrate such equivalent proficiency by examination.
- F. All requirements of the College of Arts and Sciences Bachelor of Science degree, including general education requirements.

Minor in Music

Requirements. Twenty-five credits, distributed as follows:

- A. Music history and theory (12 credits). Six credits from each group below.
 - Music Theory (6 credits).
 MUS 135, 141, 142, 143, 144, 241, 242, 243.
 - Music History (6 credits).
 MUS 162, 220, 222, 226, 261, 262, 361, 422, 455.
- B. Performance (7 credits).
 - Applied Music* (3 credits).
 From: MUS 151, 152, 251, 252, 351, 352, 451, 452.*
 *Students taking applied music must also register for a large performance ensemble in their major performance area.
 - 2. Performance organizations (4 credits).
- C. Additional courses to bring the total to 25 credits.

Minor in Music Theatre

Interested students must identify themselves to department advisors in both Theatre and Music.

Prerequisite. MUS 135 (3 cr) or equivalent proficiency as demonstrated by examination

Requirements. Twenty-seven to 31 credits as follows:

- A. Music Theatre Core (9 credits). THE/MUS 240, 334 (elected twice)
- B. Music (8 credits). MUS 129, 141, 151, 152.
- C. Theatre (6 credits). THE 230, 339.
- D. Dance (4 credits). DAN 120; three credits selected from: DAN 116, 117, 121, 130, 131, 132, 140, 141.
- E. Performance (0-4 credits). Vocal ensemble as designated by music advisor must be taken concurrently with Applied Voice.

Students enrolled in the Music Theatre minor will be expected to participate in appropriate performance activities of the Music, Theatre and Dance Programs. Credit is available.

Courses in Music (MUS)

The student who wishes to elect a course requiring an audition (MUS 151-452) must arrange with the Department of Music to complete the audition before registering for the course, and must secure an accompanist if one is required for the selection to be performed.

100. An Introduction to Music. (3)f.

The elements of music, its forms and styles. Listening skills promoted in class and through outside assignments. No previous study or knowledge of music required. Includes readings, lectures, listenings, discussions and concert attendance.

115. Recorder and Other Renaissance Instruments. Music reading and consent of instructor. (1)f.

Study and performance of Renaissance instrumental music.

117. Guitar Class. Consent of department. (1)f.

Techniques, performance, and teaching methodology as it relates to classroom usage of the guitar. For students concentrating in music.

118. Guitar Class II. MUS 117 or consent of department. (1)f.

Continuation of techniques learned in MUS 117, with emphasis on the classical style of playing. For students concentrating in music.

121. Brass Class. Consent of department. (1)f.

Techniques, performance, and teaching methodologies for trumpet, horn, trombone, euphonium, and tuba. For students concentrating in music.

124. Percussion Class. Consent of department. (1)f.

Techniques, performance, and teaching methodology for the various instruments of the percussion family. For students concentrating in music.

125. String Class. Consent of department. (1)f.

Techniques, performance, and teaching methodology for violin, viola, cello, and string bass. For students concentrating in music.

126. Voice Class. Consent of department. (1)f.

Techniques to develop proper tone production, placement, and correct enunciation of the human voice as a musical instrument.

127. Single Reed, Flute. Consent of department. (1)f.

Techniques, performance, and teaching methodology for clarinet, saxophone, and flute. For students concentrating in music.

128. Double Reed. *Consent of department.* (1) f.

Techniques, performance, and teaching methodology for oboe and bassoon. For students concentrating in music.

129. Keyboard Skills I. *Consent of department.* (1) *f.*

Introduction to basic piano technique; chord progressions with tonic, subdominant and dominant chords in root position; harmonizations using tonic, subdominant and dominant chords in all major keys; sight reading short works in major keys; and solo repertoire.

130. Keyboard Skills II. MUS 129 or consent of department. (1)f.

Continuation of MUS 129. Chord progressions, scales, sightreading, harmonizations, improvisation in all major and minor keys. Solo repertoire taken from intermediate level collections.

131. Keyboard Skills III. MUS 130 or consent of department.

Continuation of MUS 130. Chord progressions, including supertonic and submediant; open score reading of choral literature; sight-reading chorales; accompaniments for vocal and instrumental solos; modulations in major and minor keys.

132. Keyboard Skills IV. *MUS 131 or consent of department.* (1)f.

Continuation of MUS 131. Chord progressions with chords in root position and inversions, open score reading of choral literature, sight reading chorales, accompaniments for vocal and instrumental solos, modulations in major and minor keys with improvised melodies; intermediate solo repertoire.

135. Fundamentals of Music. (3)f.

For students who wish to acquire a working knowledge of some basic skills in music theory, including music reading, scales, chords, rhythms, and aural comprehension. Graded ABCD>N.

136. Keyboard for Non-music Majors I. (1)f.

Beginning piano skills developed in group setting. Basic notereading and performance skills addressed via elementary keyboard literature.

137. Keyboard Skills for Non-music Majors II. MUS 133. (1)f.

Continuation of skills learned and developed in MUS 133, with particular focus on piano literature.

141. Music Theory I. MUS 135 or consent of instructor. (3)f.

Study of tonal harmony, beginning with structural characteristics of the fundamental materials. Progressions of diatonic triads, dominant and secondary sevenths, harmonic analysis. Use of notation software.

142. Music Theory II. MUS 141 or consent of instructor. (3)f.

Continuation of the study of tonal harmony, including modulation, techniques of melodic and rhythmic development and chromatic harmony. Use of notation software.

143. Aural Harmony I. MUS 135 or consent of instructor. (2).

Ear training and sight singing provided through classes and individual laboratory work. Should be taken concurrently with MUS 141. Graded ABC>N.

144. Aural Harmony II. MUS 143 or consent of instructor. (2).

Ear training and sight singing provided through classes and individual laboratory work. *Should be taken concurrently with MUS 142. Graded ABC>N.*

151. Applied Music I. *Consent of department after audition.* (2)*f.*

Private instruction in instrumental or vocal music. Weekly one-hour lessons (14 total) in techniques idiomatic to the instrument or voice, and in representative repertoire. Students must be concurrently enrolled in MUS 201/401, 210/410 or 211/411; attend weekly performance class meetings; meet performing requirements in performance class; and present a jury performance to a committee of music faculty. Spring/Summer students have other requirements.

152. Applied Music II. *MUS 151 or consent of department after audition.* (2)*f.*

Private instruction in instrumental or vocal music. Weekly one-hour lessons (14 total) in techniques idiomatic to the instrument or voice, and in representative repertoire. Students must be concurrently enrolled in MUS 201/401, 210/410 or 211/411; attend weekly performance class meetings; meet performing requirements in performance class; and present a jury performance to a committee of music faculty. Spring/Summer students have other requirements.

162. Introduction to Music Literature. Consent of Music department. (3)h.

Designed for music majors in preparation for MUS 261 and 262. Study and analysis of the great works from the choral and orchestral repertoire; study from musical scores of style characteristics and compositional approaches of the various musical eras. Knowledge of musical notation and basic chord structures presupposed.

170. Music Technology I. MUS 141. (2).

Computer applications to music industry and music education. Use of several types of software in recording, editing, multimedia presentation, and other applications. Students create data and audio CDs and DVDs.

180. Music for Elementary School Teachers. (3)f.

Techniques, materials, and methods available to the elementary teacher with little or no musical experience. Provides students with basic understanding of music theory, playing recorder, movement to music, listening activities, simple percussion instruments, and composing. Also listed as EDE 123.

185. Music in Early Childhood. (3)

Study of musical growth and development in children from birth through kindergarten. Techniques, materials, and methods for introducing music to children. Highly recommended for early childhood education concentrations. No prior music experience necessary. *Also listed as ECE 120*.

200. The History of Blues, Jazz and Rap. (3).

Examination of the foundations for Jazz, Rock'n'Roll, Gospel Music, Soul, Rhythm and Blues as well as other popular forms of American music. Microcosm of American life in its portrait

of Africana peoples' experiences in America. Also listed as AFA 200.

201. Wind Symphony. Freshman or sophomore standing only and consent of instructor. (1)f.

Rehearsal and performance of works in the idiom. Historical, theoretical and stylistic information for works performed. Minimum of two concerts per semester. Individual practice time outside of rehearsal required. At least three hours rehearsal weekly. May be repeated for multiple credit.

202. African Music and Cultures. (3).

Overview of the three types of music in Africa today; traditional, popular and written art music. Investigation of the diversity and shared characteristics of African cultures with reference to historical, social and cultural backgrounds of the music. *Also listed as AFA 202*.

204. Jazz Combo. Freshman or sophomore standing only; concurrent enrollment in MUS 201 for wind and percussion players; consent of instructor. (1)f.

Rehearsal and performance of small-group jazz; performance for department jazz concerts and for community and campus events. Other activities include transcribing selected solos, learning piano voicings, and discussion of classic small-group recordings. *May be repeated for multiple credit.*

205. Jazz Ensemble. Freshman or sophomore standing. Open to non-music and music majors; ability to read music required. (1)f.

Rehearsal and performance of works in the style of big band jazz, fusion, bebop and fusion; emphasis on improvisation. Minimum of two concerts per semester. Individual practice time outside of rehearsal required. May be repeated for multiple credit.

210. University Chorale. Freshman or sophomore standing. (1)f.

Rehearsal and performance of diverse choral styles from all periods. Historical, theoretical and stylistic information about works performed. Maximum of three concerts per semester. Students must have the ability to match pitches. *May be repeated for multiple credit*.

211. Chamber Singers I. Freshman or sophomore standing only; concurrent enrollment in MUS 210; consent of instructor. (1)f.

The smaller, select choral performance group on campus, which performs in diverse styles from Renaissance madrigals and motets and through contemporary vocal jazz and folk music. Open to advanced vocal students by audition or permission of instructor. May be repeated for multiple credit.

213. Gospel Choir. Freshman or sophomore standing only and consent of instructor. (1)f.

Rehearsal and performance of works in the Gospel Music tradition. May be repeated for multiple credit. Also listed as AFA 213.

220. Music Survey. MUS 100 or consent of instructor. (3)h.

In-depth study of selected composers of Western music, bringing

to life the music, personalities and social settings of major composers including J. S. Bach, Mozart, Beethoven, etc. Outside reading, listening assignments and individual research required.

222. Jazz Survey. (3)h.

History of jazz in America, forces which helped to develop it, its growth and evolution into the various styles. Effects upon twentieth century and contemporary music.

226. Music in World Cultures. At least sophomore standing or consent of instructor. (3)h.

Introduction to music of nonwestern cultures and the place of music in those cultures. Includes using nomenclature and techniques of ethnomusicology.

230. Opera Workshop. Freshman/sophomore standing only, and consent of instructor; concurrent election of MUS 151, 152, 251, 252, 351, 352, or 451. (1).

Study of opera through live performance of acts, scenes, or segments of standard operatic repertoire. May be repeated for multiple credit. Graded ABC>N.

232. Vocal Pedagogy. MUS 141, 143, 151. (2)f.

Study of methods and materials used in teaching vocal music and developing sequential voice curriculum for elementary and secondary school students.

240. Music and the Theatre. (3)h.

Survey of the use of music in theatrical production with major emphasis on the period from the seventeenth century to the present. Music performed in lyric theatre, opera, operetta, music halls, minstrelsy, the American musical, and films. Investigates both theatrical history and musical heritage. *Also listed as THE 240*.

241. Music Theory III, Orchestration. MUS 142 or consent of instructor. (3)f.

Fundamentals of orchestration including study and discussion of various styles of scoring from the Baroque period to the present. Practical exercises in scoring, orchestration and writing for school and chamber music ensembles. Use of notation software.

242. Music Theory IV, Topics in Music Theory. MUS 241. (3).

Selected topics in music field including advanced melodic, harmonic, and structural analysis of music from the medieval period to the present. Use of notation software.

243. Aural Harmony III. MUS 144 or consent of instructor. (2).

Ear training and error detection provided through classes and individual laboratory work. Should be taken concurrently with MUS 241. Graded ABC>N.

245. Survey of Rock and Roll Music. At least sophomore standing. (3)h.

History and development of the genre; its role in changing the definition of popular music in the United States; factors which caused it to become an international genre; its growth and evolution to the present time.

251. Applied Music III. *MUS 152 or consent of department after audition.* (2)*f.*

Private instruction in instrumental or vocal music. Weekly one-hour lessons (14 total) in techniques idiomatic to the instrument or voice, and in representative repertoire. Students must be concurrently enrolled in MUS 201/401, 210/410 or 211/411; attend weekly performance class meetings; meet performing requirements in performance class; and present a jury performance to a committee of music faculty. Spring/Summer students have other requirements.

252. Applied Music IV. *MUS 251 or consent of department after audition.* (2)*f.*

Private instruction in instrumental or vocal music. Weekly one-hour lessons (14 total) in techniques idiomatic to the instrument or voice, and in representative repertoire. Students must be concurrently enrolled in MUS 201/401, 210/410 or 211/411; attend weekly performance class meetings; meet performing requirements in performance class; and present a jury performance to a committee of music faculty. Spring/Summer students have other requirements.

253. Improvisation Skills. MUS 141. (1)f.

Study of melodic embellishment and the creation of new melodies over a given chord progression or ground bass. Includes modal improvisation, the relation of various scales to chord function, and analysis of contemporary improvisatory styles. *Graded ABCC->N*.

254. Jazz Piano. *Audition or consent of instructor.* (1-2)f.

Development of jazz improvisation and styles at the keyboard. Includes all necessary studies and techniques. *Graded ABCC->N*.

261. Music History I. MUS 220 or consent of instructor. (3)h.

Survey of the history and literature of Western music from the ninth century through the Middle Baroque era. A significant amount of the course involves melodic, harmonic, and formal analysis of musical examples. *Designed for music majors; students with a musical background may also qualify.*

262. Music History II. MUS 142 or consent of instructor. Prior election of MUS 261 recommended. (3)h.

Continuation of MUS 261, from the late-Baroque era through the present. Emphasis on development and subsequent breakdown of classical forms; investigation of philosophical, political and economic influences on music and performance practices; score analysis a significant part of the course.

301. Wind Ensemble. Open to advanced instrumental students by audition or consent of instructor. (1)f.

Rehearsal and performance of works in the idiom. Historical, theoretical, and stylistic information concerning works performed. May be repeated for multiple credit.

302. Chamber Music. Audition or consent of instructor; concurrent enrollment in MUS 201/401, 210/410 or 211/411. Open to non-music and music majors. (1)f.

Performances for department recitals and other events as scheduled. *Open to advanced instrumental and vocal students interested in rehearsal and performance of chamber*

music. Final exam by department jury. May be repeated for multiple credit.

303. Contemporary Music Ensemble. Consent of instructor. (1)f.

Concentrates mainly on performances of twentieth century compositions. May be repeated for multiple credit.

305. Accompanying. Consent of department. (1)f.

Practical experience in accompanying vocal and instrumental performers. May be repeated for multiple credit.

 African-American Music. A course in African-American studies or consent of instructor. (3)h.

Examination of the music developed and influenced by African-Americans in the United States. African-American music styles, forms, and performance practices that were influenced by European music; African music retentions.

321. Women and Music. ENG 112. (3)h.

Examination of how values in society have influenced the roles of women in music. Study of women of various periods; how society encouraged, limited or enabled them to fulfill their careers; views of their contributions during their lifetime, in historical documentation, and from a twenty-first century viewpoint. Course designed for, but not limited to, the non-music major. Also listed as WGS 321.

334. Music Theatre Workshop. Consent of instructor. (3)f.

Movement and vocal production for music theatre. Basic modes of show dance including ballet, tap, jazz, clogging, adagio partnering. Speech-level singing, song as monologue, musical analysis. Examination of rehearsal and audition techniques. Culminates in scene study and performance. May be repeated to a total of 9 credits. Also listed as THE 334.

336. Creative Learning Experiences. *Prior or concurrent election of EDE 360.* (3).

Creative activities for early childhood, elementary, and middle school children through the integration of art, music, play and drama. Techniques of planning, presenting, and evaluating creative learning experiences for the classroom. *Also listed as ART 336, EDE 340 and THE 336.*

345. Composition I. MUS 241 and consent of instructor. (1-3).

Individual instruction in original composition.

351. Applied Music V. *MUS 252 or consent of department after audition.* (2)f.

Advanced private instruction in instrumental or vocal music. Weekly one-hour lessons (14 total) in techniques idiomatic to the instrument or voice, and in representative repertoire. Students must be concurrently enrolled in MUS 201/401, 210/410 or 211/411; attend weekly performance class meetings; meet performing requirements in performance class; and present a jury performance to a committee of music faculty. Spring/Summer students have other requirements.

352. Applied Music VI. *MUS 351 or consent of department after audition.* (2) *f.*

Advanced private instruction in instrumental or vocal music. Students receive weekly one-hour lessons (14 total) in

techniques idiomatic to the instrument or voice, and in representative repertoire. Students must be concurrently enrolled in MUS 201/401, 210/410 or 211/411; attend weekly performance class meetings; meet performing requirements in performance class; and present a jury performance to a committee of music faculty. Spring/Summer students have other requirements.

356. Junior Recital. (2)*f*.

Preparation and recital of at least thirty minutes of music on the student's primary instrument. Evaluation by a committee including the student's applied music instructor.

361. Seminar in Music History. MUS 261 and 262, or consent of instructor. (3)h.

Selected topics in music history. Individual research required. Ability to analyze music formally, melodically, and harmonically necessary.

362. English and American Art Song. MUS 152. (3)h.

History of the art song of English and American composers. Song literature as well as use of text by English and American poets. Emphasis on nineteenth and twentieth century composers.

365. Wind Literature. MUS 372 or consent of instructor. (3)f.

Examination of band music appropriate for groups of varying levels of ability and maturity; repertoire representing all styles and periods.

366. Diction for Singers. (3).

Basic rules of singing diction in six languages (English, French, German, Italian, Latin and Spanish). Study of the International Phonetic Alphabet (IPA) for increased language awareness and pronunciation accuracy.

368. Western Art Song. *MUS* 152. (3).

History and literature of the German Leid and French, Spanish and Italian Art Song, as well as performance practices pertaining to these songs. Emphasis on nineteenth and twentieth century composers.

371. Conducting I. Prior or concurrent election of MUS 241 or consent of instructor. (2).

Fundamentals of conducting, score study, beginning choral technique, baton technique, and analysis of music from the conductor's viewpoint.

372. Conducting II. MUS 371 or consent of instructor. (2).

Rehearsal techniques for vocal and instrumental ensembles; score reading and principles of interpretation: phrasing, dynamics, expression, style and tradition.

381. Teaching General Music, Grades K-8. *MUS* 130, 241, 242, 243, 252, 261, 262. (3).

Development of essential competencies for teaching elements of music, music literacy, movement and music, listening activities, and works appropriate for grades K-8. Discussion of current methodologies, national standards in music education and modes of assessment. Observations in various school music situations. *Also listed as EDE 346*.

382. Methods and Materials for Teaching Secondary School **Performance Classes.** MUS 130, 241, 242, 243, 252, 261, 262. (3).

Organization, methods, materials and testing assessment procedures for secondary school vocal and instrumental performance groups. Discussion of national standards in music education, the teaching-learning environment, place of music in the total school curriculum, recruiting and public relations. Observations of various school music situation, laboratory experiences in conducting performing ensembles. Also listed as EDS 346.

383. Techniques for Marching and Beginning Bands. MUS 241, 201/401, 152; or consent of instructor. (2)f.

Organization, methods, materials, assessment procedures, software, copyright, ethics, and safety matters for marching and beginning bands. On site observations and laboratory experiences. Students must use requisite software and be able physically to demonstrate knowledge of marching technique.

384. World Musics for the Music Educator. MUS 130, 142, 152. 201/401 or 210/410; or consent of department. (3)h.

Curricular development and techniques for classroom instruction in non-Western musics, including characteristics in instrumentation, timbre, structure, and other elements as they occur in selected cultures. Aural comprehension and identification of musics studied critical components of the course.

391. Independent Study. *Consent of instructor.* (1-3).

Special projects tailored to the student's academic needs and interests. May not be used for Applied Music instruction. May be repeated to a total of four credits.

392. Independent Study-Applied Music. Consent of department after audition. (1-2).

Private applied music instruction in instrumental or vocal music, taken outside the applied music sequence; weekly onehour lessons (14 total). Students must be concurrently enrolled in MUS 201/401, 210/410 or 211/411 and attend weekly performance class. Spring/Summer students have other additional requirements. May be repeated for multiple credit or as a substitution for a secondary instrument course (for one credit).

- **393.** Honors Independent Study. Open only to Honors Program participants in Music. Second semester of the junior year. (3)f. Graded ABCDE/Y.
- **401.** Wind Symphony. Junior or senior standing. Open to nonmusic and music majors who play a wind or percussion instrument. (1)f.

Rehearsal and performance of works in the idiom. Historical, theoretical and stylistic information for works performed. Minimum of two concerts per semester. Individual practice time outside of rehearsal required. At least three hours rehearsal weekly. May be repeated for multiple credit.

404. Jazz Combo. Junior or senior standing; concurrent enrollment in MUS 401 for wind and percussion players; consent of instructor. (1)f.

Rehearsal and performance of small-group jazz; performance for department jazz concerts and for community and campus events. Other activities include transcribing selected solos, learning piano voicings, and discussion of classic small-group recordings. May be repeated for multiple credit.

405. Jazz Ensemble. Junior or senior standing; concurrent enrollment in MUS 401 for wind and percussion players. Open to non-music and music majors; ability to read music required. (1)f.

Rehearsal and performance of works in the style of big band jazz, fusion, bebop and fusion; emphasis on improvisation. Minimum of two concerts per semester. Individual practice time outside of rehearsal required. May be repeated for multiple credit.

410. University Chorale. Junior or senior standing only. (1)f.

Rehearsal and performance of diverse choral styles from all periods. Historical, theoretical and stylistic information about works performed. Maximum of three concerts per semester. Students must have the ability to match pitches. May be repeated for multiple credit.

411. Chamber Singers II. Junior or senior standing only; concurrent enrollment in MUS 410; consent of instructor. (1)f.

The smaller, select choral performance group on campus, which performs in diverse styles from Renaissance madrigals and motets and through contemporary vocal jazz and folk music. Open to advanced vocal students by audition or permission of instructor. May be repeated for multiple credit.

413. Gospel Choir. *Consent of instructor, junior or senior* standing. (1)f.

Rehearsal and performance of works in the Gospel Music tradition. May be repeated for multiple credit. Also listed as AFA 413.

422. Jazz in American Culture. At least junior standing. (3)h.

Examination of jazz in American culture. Evolution of jazz and jazz styles, minstrelsy and revues, effect on American composers and language, storyville, the "Jazz Age" and American literature, morality and jazz, effects of segregation, jazz as an American export, Black nationalism, and the avante garde.

430. Opera Workshop. Junior or senior standing and consent of instructor. Concurrent election of MUS 151, 152, 251, 252, 351, 352, or 451. (1)f.

Study of opera through live performance of acts, scenes, or segments of standard operatic repertoire. May be repeated for multiple credit. Also listed as THE 430.

445. Composition II. MUS 345 or consent of instructor. (1-3).

Advanced individual instruction in original composition.

451. Applied Music VII. MUS 352 or consent of department after audition. (2)f.

Advanced private instruction in instrumental or vocal music. Students receive weekly one-hour lessons (14 total) in techniques idiomatic to the instrument or voice, and in

representative repertoire. Students must be concurrently enrolled in MUS 201/401, 210/410 or 211/411; attend weekly performance class meetings; meet performing requirements in performance class; and present a jury performance to a committee of music faculty. Spring/Summer students have other requirements.

452. Senior Performance-Applied Music VIII. MUS 451, senior standing, and approval by the Department of Music of a specific project proposed by the student. (2)f.

Completion of one of the following, to be evaluated by a music faculty committee of at least three members: (a) Preparation and recital of at least 30 minutes of music on the primary instrument of the student. The committee shall include the student's instructor in applied music. (b) Completion of a major project, under the supervision of a faculty advisor who shall be a member of the committee. (c) An approved combination of (a) and (b). Attendance in performance class is required.

455. American Music. At least junior standing. (3)h.

Development of music in the United States from Colonial times to the present. European heritage; European influence; search for American expression; the American school of composers. Music in American culture.

456. Senior Recital. MUS 451 or consent of department; to be taken concurrently with MUS 452. (2)f.

Preparation and recital of at least thirty minutes of music on the student's primary instrument. Evaluation by a committee including the student's applied music instructor.

470. Music Technology I. *MUS* 141. (3).

Computer applications to music industry and music education. Use of several types of software in recording, editing, multimedia presentation and other applications. Students will create data and audio CDs and DVDs. Individual project with application to music education or music industry required.

491. Seminar in Music Education. MUS 381. (2).

Detailed study of selected topics in music education.

492. Practicum in Music Education. Consent of department. (1-2).

Open to qualified students of advanced standing. Provides an opportunity for music education students to acquire practical experience in their field under professional supervision. No more than two credits may be earned in this course.

493. Special Courses in Music Education. *MUS 381.* (2).

See course schedule for title in any semester. May be repeated for a total of four credits.

- **498.** Honors Thesis I. Open only to Honors Program students in music. MUS 393. (4). Graded ABCDE/Y.
- **499. Honors Thesis II.** Open only to Honors Program Students in music. Prior or concurrent election of MUS 498. (4). Graded ABCDE/Y.

Graduate Courses in Music

522. Jazz in American Culture. Graduate standing. (3).

See MUS 422 for description. Not open to students with credit for MUS 422.

555. American Music. Graduate standing. (3).

See MUS 455 for description. Not open to students with credit for MUS 455.

Pharmaceutical Studies Information

Pre-Pharmacy

Faculty Advisor: Dr. Jessica Tischler

Licensing as a pharmacist requires completion of a Doctorate of Pharmacy (Pharm-D) degree.

In Michigan, the schools of pharmacy are at Ferris State University, the University of Michigan-Ann Arbor, and Wayne State University. Students who want to become pharmacists should seek detailed information early from the schools of pharmacy to which they may wish to apply for admission. Students who plan to apply for admission to a pharmacy school should seek the assistance and guidance of an advisor from the Chemistry Department at the University of Michigan-Flint.

Each student's program is tailored to the requirements of the school of pharmacy where admission is sought. Specific courses are required in each of several areas including biology, chemistry, and mathematics. Consult the web site for the school(s) of interest for specific requirements or consult the UMF pharmacy information web page:

http://www.umflint.edu/departments/chemistry/pharmacy/careers

- A. One to four semesters of biology.
- B. Completion of organic chemistry.
- C. One semester of calculus.
- D. Up to two semesters of physics.
- E. Two semesters of English.
- F. Four semesters of courses other than science and mathematics to include specific requirements of the school of pharmacy where admission will be sought.

Pre-Medicinal Chemistry

A two-year program is available to prepare students to apply for admission to the Bachelor of Science degree program in medicinal chemistry of the School of Pharmacy at the University of Michigan-Ann Arbor. The program includes the following:

- A. BIO 111.
- B. CHM 160, 161, 162, 163, 330, 331, 332, 333.
- C. ENG 111.

- D. GER 111 and 112.
- E. MTH 121, 122, 221, 222, 305.
- F. PHY 243 and 245.

Pre-Pharmaceutical Sciences

Students wishing to apply for admittance to the Bachelor of Science degree program in pharmaceutical science of the School of Pharmacy at the University of Michigan-Ann Arbor should enroll in a two-year program that includes the following courses: A. BIO 111 and 326 (optional).

- B. CHM 160, 161, 162, 163, 330, 331, 332, 333.
- C. ENG 111.
- D. Humanities, 6 credits.
- E. MTH 121 and 122.
- F. PHY 143 and 145 or PHY 243 and 245.
- G. Social sciences, 6 credits.

Philosophy (PHL)

544 David M. French Hall (810) 762-3380

Website: http://www.umflint.edu/departments/phl

Chair: Jami L. Anderson

Principal Secretary: Laura J. Milem

Professors Charles E. M. Dunlop (David M. French Professor), L. Nathan Oaklander (David M. French Professor); Associate Professors Jami L. Anderson, Simon Cushing, Lecturer Steven Wandmacher

Professor emeritus Paul Peterson

Philosophy addresses fundamental questions concerning human beings and their place in the world. For example: Is one moral code really superior to another? What evidence is there for the existence of God and life after death? Is the mind like a computer? Are some paintings better than others, or is beauty just in the "eye of the beholder?" What distinguishes science from non-science? What can we really know?

As these sample questions suggest, philosophy covers a lot of ground. Quite naturally, therefore, philosophy is closely connected to other areas of study. Related coursework for philosophy students includes anthropology, art, computer science, communication, English, history, mathematics, political science, psychology, and sociology. Studying philosophy (and some related fields) will enhance one's understanding of where our culture came from and how it has been shaped by philosophical ideas.

Philosophy is not just a subject; it is also a method. Philosophy emphasizes analytical skills connected with logical thinking, careful reading, and clear writing. This, combined with its connections to many other disciplines, makes the study of philosophy appropriate for students contemplating graduate work in a variety of fields. In addition, success in today's workforce is increasingly dependent upon good reasoning and communication skills. Studying philosophy can promote the development of these skills.

Department Mission and Program Assessment

The mission of the Philosophy Department falls into two interconnected areas: to produce clear thinkers and skilled communicators, and to advance understanding of our culture and history through an examination of the ways they have been shaped by philosophical ideas. This mission means that the Department aims to provide students with the critical reasoning skills and communication skills that will prepare them for advanced study in philosophy as well as success in today's workforce, with an understanding of our culture and history that is a necessary component of responsible citizenry. The Department participates in the University-wide effort to assess its academic programs. Information on assessment plans, including goals, methods and outcomes is available at http://assessment.umflint.edu.

Programs in Philosophy

Four concentration programs are offered, all leading to the Bachelor of Arts degree: the General Program in Philosophy, the Program in Philosophy with Emphasis in Ethics, Social and Political, the Honors Program in Philosophy, and the Joint Program in Philosophy and Psychology. A minor in Philosophy is also available.

General Program in Philosophy

Prerequisites. PHL 101; PHL 202 or 302.

Requirements. Twenty-four credits in philosophy beyond the prerequisites, including:

- A. Value Theory. PHL 360 or 361 or 368 (3 credits).
- B. History. PHL 340 *or* 342; one from: PHL 312, 341, 343, 380, 484 (6 credits).
- C. Metaphysics and Epistemology: One from: PHL 321, 322, 323, 325 (3 credits).
- D. Seminar. Two from PHL 385, 438 489 (6 credits).
- E. Electives. PHL 309 is highly recommended (6 credits).
- F. All requirements of the College of Arts and Sciences Bachelor of Arts degree, including general education requirements and a foreign language.

Program in Philosophy with Emphasis in Ethics, Social and Political

Prerequisites. PHL 101 *or* 309, 202 *or* 302, one from: PHL 103, 115, 160, 162, 163, 167.

Requirements. Twenty-seven credits in philosophy beyond the prerequisites, including the following:

- A. Value Theory. PHL 360 or 361, 368 (6 credits).
- B. History. One from: PHL 312, 340, 341, 342, 343, 380, 484 (3 credits).
- C. Metaphysics and Epistemology. One from PHL 321, 322, 323, 325 (3 credits).

- D. Seminar. One from: PHL 438, 467, 479, 480, 485, 486, or with consent of advisor: PHL 385, 484 (3 credits).
- E. Electives. Three courses not used to satisfy prerequisites or requirements above, and at least one numbered 300 or higher, from: PHL 115, 160, 162, 163, 167, 264, 267, 269, 271, 272, 311, 360, 361, 362, 365, 372, 373, 376, 438, 467, 479, 480, 485, 486, or with consent of advisor: PHL 385, 484 (9 credits).
- F. Any other course in philosophy (3 credits).
- G. All requirements of the College of Arts and Sciences Bachelor of Arts degree, including general education requirements and a foreign language.

Honors Program in Philosophy

Prerequisites. A grade point average of at least 3.5 in four courses in philosophy, including PHL 101, and 202 or 302.

Requirements.

- A. Twenty-four credits in philosophy beyond the prerequisites, including:
 - 1. Value Theory. PHL 360 or 361 or 368 (3 credits).
 - 2. History. PHL 340 *or* 342; one additional from: PHL 312, 340, 341, 342, 343, 380, 484 (*6 credits*).
 - 3. Metaphysics and Epistemology: One from: PHL 321, 322, 323, 325 (3 credits).
 - 4. Seminar. Two from PHL 385, 438–489 (6 credits).
 - 5. Electives. PHL 309 is highly recommended. (6 credits).
- B. Completion of a seminar course in philosophy from PHL 438 through 489, by the end of the first semester of the junior year, and concurrent election of PHL 491, Research Methods. Completion of a second directed readings course, Independent Research, must be completed by the end of the second semester of the junior year. At the end of the junior year, the student's qualifications to write an honors thesis will be determined by the department.
- C. Twelve credits in a related program outside philosophy to be planned with an advisor from the Philosophy Department.
- D. PHL 495 and 496, Honors Thesis I and II (4 credits each). May be taken as HON 495, 496 to avoid violating university credit limit requirements.
- E. All requirements of the University Honors Scholar Program.
- F. All requirements of the College of Arts and Sciences Bachelor of Arts degree, including general education requirements and a foreign language.

Prospective Honors Program students are urged to acquaint themselves as early as possible with the requirements above as well as with the particular procedures for acceptance into the Philosophy Department's Honors Program. See the departmental honors advisor or the Honors Program Director for this information.

Program in Philosophy and Psychology

Faculty Advisors: Consult the Department Chairs in Philosophy and in Psychology.

The Joint Program in Philosophy and Psychology is designed to

emphasize study of areas of concern to both disciplines while the student is preparing for advanced work in either one. Course selections should be made in consultation with an advisor from each department.

Requirements.

- A. All requirements of the College of Arts and Sciences Bachelor of Arts degree, including general education requirements and a foreign language. General education requirements in the natural sciences may not include courses in psychology.
- B. Philosophy (21 credits)
 - 1. Logic. PHL 202 or 302.
 - Value Theory. One from PHL 264, 266, 360, 361, 368, 376.
 - History of Modern Philosophy. One from PHL 342, 343, 484
 - Philosophy of Social Sciences. Two from PHL 311, 312, 314, 335.
 - Seminar. One from PHL 438, 467, 479, 481, 482, 483, 486, 489.
 - 6. An additional course from those listed above.
- C. Psychology (24 credits)
 - 1. PSY 100, 201, 301.
 - 2. PSY 384 or 386.
 - 3. Three from: PSY 326 or 337, 309, 328, 335, 336, 345.

Minor in Philosophy

Requirements. Eighteen credits, distributed as follows:

- A. PHL 101; PHL 202 or 302.
- B. A course in the history of philosophy from: PHL 312, 340, 341, 342, 343, 380, 484.
- C. One from: PHL 385, 438-489.
- D. Two additional courses selected in consultation with an advisor from the Philosophy Department.

Courses in Philosophy

101. Introduction to Philosophy. (3)h.

Examination of some of the main questions of philosophy, how they arise, and methods of answering them, based on the works of selected authors. Relationships between philosophical themes and other facets of cultural expression. Presentation of simpler problems in nontechnical language designed to introduce the student to philosophical inquiry.

103. Critical Thinking. (3)h.

Nontechnical course. Methods of analyzing and evaluating arguments from a variety of sources, e.g., newspaper articles, advertising, and political speeches. Emphasis on exercises and on the writing of short critical papers.

115. Mortal Questions. (3)h.

Theoretical and practical understanding of fundamental issues concerning the meaning, nature and value of human life. Questions of life and death, values, sexuality, and the self and one's relationships to others; answers within and outside the philosophical tradition; views and theories that address these questions, and their philosophical significance.

140. Ancient Philosophy in its Cultural Context. (3)h.

Study of selected Ancient Greek philosophical themes from the classical period, emphasizing their connection to related disciplines such as literature, drama, art, politics and history.

160. Values in Contemporary Life. (3)h.

Discussion of selected moral, political, or aesthetic issues in contemporary life. Analysis, criticism, and defense of alternative positions.

162. Introduction to Ethics. (3)h.

Critical exploration of issues of value which may include the question "why be moral" and claims that morality is "all relative" or "everyone's opinion." Introduction to classic texts in philosophy that may include Aristotle, Kant, Bentham, Mill, Hume. Presentation of moral philosophy as an ongoing debate.

163. Rhetoric of Hate and Fear. (3)h.

Examination of appeals to hate, fear, and related emotions and the place of such appeals in moral, political and ideological reasoning and persuasion. Critical analyses of assertions and arguments of individuals and groups active in contemporary American society, including paramilitary groups, radical religious movements and cults, anti-Semitic organizations, and extremist black and white supremacy groups. Theoretical analyses of the thinking of such groups and the place of such thinking in modernism and postmodernism. Emphasis on conspiracy theories, religious fanaticism, racism, misogyny and extreme anti-homosexuality. *Also listed as COM 163*.

165. Philosophy of Religion. (3)h.

Analysis of religious concepts and the possible justification of religious beliefs. Exploration of such questions as: Does God exist? Is there life after death? Does the existence of evil disprove the existence of God? Is divine foreknowledge compatible with human freedom?

167. Race, Gender and Sexuality. (3)h.

Critical analysis of theories of race, gender, sexual identity. Gender and sex roles; racism, sexism and hetero-sexism; concepts of beauty; racial and sexual stereotypes; social issues such as affirmative action, violence, racial and sexual harassment, pornography. *Also listed as WGS 167*.

168. Introduction to Bioethics. (3).h.

Introduction to classical ethical theories and their application to contemporary medical issues. Emphasis on acquisition of critical reasoning skills essential to providing ethical solutions to problems healthcare personnel encounter. *Does not count as a prerequisite for any philosophy major or minor. Also listed as NSC 168.*

202. Introduction to Logic. (3)h.

Study of reasoning with emphasis on features that distinguish good (or valid) reasoning from bad (or invalid) reasoning. Examination of ways of evaluating deductive reasoning with focus on techniques of formal, symbolic logic. May also include informal logic and fallacies. *Beginning level class, no previous expertise required. Graded ABCDD->N.*

203. Origins of Modern Racism. (3)h.

Survey of the development of modern Western ideas of racism in the period 1492-1800, with particular attention to moral and political philosophies that developed in conjunction with the colonization and enslavement of African and Native American peoples in the New World. Figures studied may include Columbus, Las Casas, Montaigne, Locke, Rousseau and Jefferson. *Also listed as AFA 203 and ANT 203*.

205. African Religions and Philosophy. *A course in philosophy numbered 100 or higher.* (3)h.

Examination of some African religions and African philosophy, to gain greater insight and understanding of traditional African religions and African philosophy such as Yoruba and Akan. The role of these traditional African religions and philosophies in the lives of continental and diaspora Africans, as well as non-Africans. Also listed as AFA 205 and ANT 205.

[251. Philosophical Foundations of the World's Religions. A course in philosophy. (3)h.]

264. Introduction to Feminist Theory. At least sophomore standing. (3)h.

Introduction to some of the main perspectives in feminist thought, including liberal feminism, Marxist feminism, radical feminism, socialist feminism. Application of these theories to one or more social issues of particular interest to feminists, such as affirmative action, procreative freedom, motherhood. Also listed as WGS 264.

266. Philosophy of Art. A course in philosophy. (3)h.

Philosophical study of feelings, concepts and judgments arising from the appreciation of art or beautiful things. Classical questions in aesthetics such as "What is a work of art?" and "Is beauty connected to moral virtue?" addressed through works from the Western and Eastern traditions and critiques of the Western tradition.

267. Punishment and Responsibility. *At least sophomore standing.* (3)h.

Ethics of punishment; nature of punishment; philosophical bases for justifying its use (e.g., reform, deterrence, retributive justice); different implications of these bases for the limitation of punishment; alternatives to punishment; determinism and moral responsibility.

269. Philosophy and Culture: Selected Topics. A course in philosophy or consent of instructor. (3)h.

Philosophical inquiry into selected aspects in the study of the nature and forms of human culture. Topics vary. May be reelected with consent of instructor.

271. Ethics in Business. At least sophomore standing. (3)h.

Everyday ethical problems and the moral obligations of business professionals examined in the context of real business situations. Is it ever right to lie? What are my responsibilities to the environment? How do I treat my employees fairly? What are my

ethical obligations to stockholders? Attempts to answer through rational argument.

272. Philosophy and the Environment. At least sophomore standing, (3)h.

Solving environmental problems ultimately involves an analysis of how we see the nonhuman world; our moral obligations to the earth and its other inhabitants depend upon our relation to them. Are animals and plants merely a means to human ends, or must we have "reverence" for all life? Can we call for the liberation of nonhuman animals, yet claim without contradiction that their interests should not outweigh ours?

302. Intermediate Symbolic Logic. A course in logic or junior standing or consent of instructor. (3)h.

Applications of symbolic logic to forms of reasoning more complex than those covered in PHL 202. Relational sentences, multiple quantification, identity, definite descriptions. Properties of formal axiomatic systems, such as consistency and completeness; ways of proving that given systems have or lack such properties. Logical characteristics of reasoning underlying theories and practices in such fields as mathematics, computer science, science, social sciences, philosophy.

309. Philosophical Reasoning. A course in philosophy. (3)h.

Philosophical techniques and reasoning with application to specific problems in philosophy, such as knowledge, freedom, mind and body, the existence of God. Emphasis on the writing of short, critical papers. Recommended for students who contemplate electing advanced courses in philosophy.

311. Philosophy of Social Science. A course in philosophy and three (3) credits in social science. (3)h.

Idea of a science of man; purpose and nature of meaningful human behavior; nature of social sciences and scientific knowledge, freedom and determinism, relationships among social sciences and between social sciences and physical science.

312. History and Philosophy of Science. A course in philosophy. (3)h.

Nature of science; major revolutions in science, especially the Copernican-Newtonian revolution in astronomy and physics in the sixteenth and seventeenth centuries. Aristotle, Ptolemy, Copernicus, Kepler, Descartes, Harvey and Newton. Darwinian revolution and the philosophy of the social sciences. Nontechnical; for nonscientists as well as science students.

314. Philosophy of Sociology. A course in philosophy and a course in sociology; junior standing or consent of instructor. (3)h.

Philosophical issues in sociology. Nature of sociology: goals and methodology; philosophical presuppositions and issues behind some of the controversies in sociological theory. Philosophers and movements that have influenced sociology; important sociological theories. *Also listed as SOC 316*.

320. Computers and Society. Sophomore standing and a course in computer science, or consent of instructor. (3)h.

Social consequences of computerization in a variety of domains.

Economic and organizational aspects of computerization; utopian and anti-utopian visions of computerization; privacy and social control; software reliability in safety-critical contexts; social relationships in electronic communities; ethical issues and professional responsibilities.

321. Metaphysics. A course in philosophy. (3)h.

Consideration of questions such as: What is the ultimate nature of reality? Is the soul real? Does God exist? Do we really have free will? Is time real?

322. Theories of Knowledge. A course in philosophy. (3)h.

Investigation of nature, sources and limits of knowledge, drawing from historical and contemporary sources. Consideration of questions such as: Can our senses ever be trusted? What is knowledge? What is its relationship to belief? Can I know something without realizing I do? Is it really possible to know anything at all?

323. Philosophy of Mind. *A course in philosophy.* (3)*h.*

Survey of basic issues in the philosophy of mind, drawing from both historical and contemporary sources. Topics such as the mind/body problem, dualism vs. materialism, behaviorism, mind as brain, mind as computer, the problem of consciousness.

325. Philosophy of Language. A course in philosophy. (3)h.

Nature of language and its relationship to mind and the world. Concepts such as linguistic rules, linguistic acts, grammar, meaning, truth, reference.

335. Philosophy of Cognitive Science. PSY 100, PHL 101. (3)s.

Philosophers, psychologists, linguists, computer scientists and others have begun a cooperative research effort to explore questions about the mind. Why the computer has become a rallying point for many researchers studying the mind, and the contributions each of these disciplines is making to the interdisciplinary investigation of cognition.

340. Ancient Greek Philosophy. A course in philosophy. (3)h.

Greek thought, the basis of Western philosophy; examination of the earliest philosophers, along with Socrates, Plato, and Aristotle. Consideration of the nature of reality, the problem of permanence and change, the justification of ethical behavior, the nature of society, and the nature and limits of human knowledge.

341. Medieval Philosophy. *A course in philosophy.* (3)h.

Major philosophical developments from the post-Aristotelians through the Scholastics and the sixteenth century; such figures as Plotinus, St. Augustine, St. Anselm, St. Thomas Aquinas, Duns Scotus, and Ockham; effect of Christianity on philosophy; philosophical problems about God, religion, and universals.

342. Early Modern Philosophy. A course in philosophy. (3)h/wc1.

Philosophy in the seventeenth and eighteenth centuries; impact of science and background of contemporary philosophy; Galileo, Descartes, Newton, Leibnitz, Locke, Hume, Berkeley; the mind/body problem, knowledge, perception, skepticism.

343. Late Modern Philosophy. A course in philosophy. (3)h.

From Kant through the nineteenth century; Kant, Mill, Hegel, Schopenhauer, Marx, Kierkegaard, Nietzsche.

350. Mythological Thought. *A course in philosophy or consent of instructor.* (3)h.

Nature of mythological thought and its place in human culture. Expressions of myth in stories, art, rituals and belief systems; theories of myth. Relation of myth to rational thought, truth, science, religion, ideology, imagination, superstition and madness.

360. (261). Metaethics. *A course in philosophy. (3)h.*

Questions about the nature and grounds for ethical beliefs; study of the concepts (such as right, good, free will) and methods of justification found in ethical theories.

361. History of Ethics. *A course in philosophy.* (3)*h.*

The study of goodness and of right action, moral principles, and individual responsibility, focusing on major historical ethical theorists such as Aristotle, Hume, Kant, Bentham, and Mill.

362. Philosophy of Law. A course in philosophy, or consent of instructor. (3)h.

Nature and justification of judicial decision and just law; examination of criminal, civil (tort and property) and constitutional law.

- [364. Philosophy, Work, and Economic Freedom. A course in philosophy. (3)h.]
- **365.** (**363**). **Feminist Ethics.** A course in ethics or consent of instructor. (3)h.

Study of theoretical issues such as differences between "feminine" and "feminist" ethics, and practical issues such as affirmative action, procreative technologies and the environment. Also listed as WGS 365.

368. Social and Political Philosophy. *A course in philosophy.* (3)h.

Philosophical consideration of fundamental social and political questions. Nature of law and the state; the grounds of political authority and the justification of revolution; concepts of justice, freedom, and punishment; philosophical foundations of the political ideologies of fascism, democracy, and communism.

369. The Rhetoric of Violence. A course in philosophy. (3)h.

What is violence and what are its forms? How is violence a part of human life and human discourse and connected to other forms of conflict? What is terrorism and its place in contemporary life? What makes violence and terrorism morally wrong or evil, and how, if at all, can they be morally justified? A philosophical examination of these questions and of how various persuasive concepts of violence, terrorism, and evil are used in public and private forms of rhetorical disclosure.

372. Philosophy in Film. A course in philosophy. (3)h.

Philosophical ideas as expressed in film and literature.

Screenplays, original sources, and analytic articles considered. *Also listed as THE 372*.

373. Philosophy in Literature. A course in philosophy. (3)h.

Examination of philosophical ideas and problems as they occur in works of literature. May focus on major authors such as Dostoevsky and Camus, or on philosophical ideas such as good and evil, freedom or personal identity. *Also listed as ENG 373*.

374. Philosophy and Children's Literature. A course in philosophy; junior standing or consent of instructor. (3)h.

Children's literature as a vehicle for philosophical discussion. Views of the nature of concepts such as the self and self-awareness, life and death, reality and illusion, reason and emotion, and freedom and responsibility. Devices used in philosophical inquiry compared with forms of thinking usually associated with children.

376. Existentialism. A course in philosophy. (3)h.

Subject matter (the subjective, particular, existing individual) approached by such existentialist philosophers as Kierkegaard, Nietzsche, Heidegger, Sartre, De Beauvoir and Camus through consideration of such topics as the nature of values, the meaning of living authentically and inauthentically, the fact of one's own death, and the notions of freedom and responsibility.

380. Contemporary Philosophy. *A course in philosophy.* (3)h.

Major philosophers of the twentieth century and major types of philosophy, both analytic and existential. Such figures as Russell, Moore, Wittgenstein, Austin, the logical positivists, and the existentialists.

385. Philosophy Seminar. Six credits in philosophy. (3)h.

Topics vary and are announced in the course schedule.

390. Special Topics in Philosophy. *A course in philosophy or consent of instructor.* (1-3)h.

Topics to be announced.

391. Directed Readings in Philosophy. Six credits in philosophy, consent of instructor. (1-3)h.

To be arranged. Offered only under special circumstances and when regular course offerings do not cover the material proposed for study.

- [393. Philosophy Research Laboratory. Consent of instructor. (3)h.]
- **438.** Critical Race Theory. PHL 309 or nine (9) credits in philosophy or consent of instructor. (3)h.

Examination of the historical centrality and complicity of law in upholding white supremacy (and concomitant hierarchies of gender, class and sexual orientation). Topics include: segregation and integration legislation, affirmative action, hate speech, hate crimes, antiracism and whiteness. *Also listed as WGS 438*.

[443. American Philosophy. A course in philosophy and at least junior standing, or consent of instructor. (3)h.]

467. Race and Gender. PHL 309 or nine (9) credits in philosophy or consent of instructor. (3)h.

Examination of central issues in gender and race theory including: gender, sex and race identity theories, social construction and essentialism, self and other identity formation. *Also listed as WGS 467*.

479. Selected Topics in Moral Philosophy. *Nine credits in philosophy or PHL 309 or consent of instructor.* (3)h.

In-depth study of selected contemporary accounts of moral philosophy such as communitarianism, ethics and literature, virtue theory, or feminist ethics; or of particular topics such as justice, moral character and happiness.

480. Selected Topics in Legal Theory. Nine credits in philosophy or PHL 309 or consent of instructor. (3)h.

In-depth study of selected contemporary accounts of legal theory such as jurisprudence, criminal law, tort law or constitutional law; or contemporary criticisms of legal theory made by critical legal studies scholars, Marxists or feminists.

481. Contemporary Issues in Metaphysics. Nine credits in philosophy or PHL 309 or consent of instructor. (3)h.

Nature of reality studied through the works of selected modern and contemporary philosophers. Topics or questions arising in contemporary discussions of metaphysics. Possible topics: existence of universals and particulars, use of language in philosophy, nature of existence.

482. Contemporary Issues in the Theory of Knowledge. Nine credits in philosophy or PHL 309 or consent of instructor. (3)h.

Recent work on the analysis of knowledge. Topics such as the Gettier problem and responses to it; contemporary skepticism; memory and perception; knowledge and belief; knowledge, information and computation.

483. Contemporary Issues in Philosophy of Mind. Nine credits in philosophy or PHL 309 or consent of instructor. (3)h.

In-depth study of significant research by one or more contemporary philosophers. Such topics as the mind/body problem; intentionality; the problem of other minds; introspection; consciousness; computational models of mind.

484. Selected Topics in the History of Philosophy. Nine credits in philosophy or PHL 309 or consent of instructor. (3)h.

Selected issues and figures in the history of philosophy. Topic announced in course schedule. May be repeated with consent of instructor if no topic is repeated.

485. Selected Topics in Political Theory. *Nine credits in philosophy or PHL 309 or consent of instructor. (3)h.*

In-depth study, of particular political thinkers (e.g., Hobbes, Locke, Rousseau, Mill, Marx, Rawls) or schools (e.g., social contractarians, Marxists, communitarians), or of particular topics and their treatment in contemporary literature (e.g., political obligation, status of indigenous cultures, justice, liberty, equality).

486. Gender Theory. *PHL 309 or nine (9) credits in philosophy or consent of instructor. (3)h.*

Exploration of major theories about gender. Focus on intersections of race/ethnicity, class and gender in the formation of identities and reproduction of inequality. Theories explored include Marxist-Feminism, Psychoanalytic Feminism, Queer Theory, Post Modern Feminism. *Also listed as WGS 480*.

489. Selected Topics in Contemporary Philosophy. *Nine credits in philosophy or PHL 309 or consent of instructor.* (3)h.

Intensive study of selected philosophers or problems of contemporary interest. Topic announced prior to registration.

491. Directed Readings in Philosophy. *Nine credits in philosophy, consent of instructor.* (1-3)h.

To be arranged. Offered only under special circumstances and when regular course offerings do not cover the material proposed for study. *Graded ABCDE/Y*.

495. Honors Thesis I. Consent of Department Chair. *Open only to Honors Program students in philosophy.* (4).

Credit and grade for PHL 495 is not given until successful completion of PHL 496. Also listed as HON 495. Graded ABCDE/Y.

496. Honors Thesis II. Prior or concurrent election of PHL 495 and consent of Department Chair. Open only to Honors Program students in philosophy. (4).

Also listed as HON 496. Graded ABCDE/Y.

Graduate Courses in Philosophy

538. Critical Race Theory. Graduate standing. (3).

See PHL 438 for description. Not open to students with credit for PHL/WGS 438. Also listed as WGS 538.

- [543. American Philosophy. Graduate standing; a course in philosophy or consent of instructor. (3).]
- **567.** Race and Gender. Graduate standing. (3).

See PHL 467 for description. Not open to students with credit for PHL/WGS 467. Also listed as WGS 567.

586. Gender Theory. Graduate standing. (3).

See PHL 486 for description. Not open to students with credit for PHL 486/WGS 480. Also listed as WGS 580.

Physical Geography

See Earth and Resource Science.

Physics (PHY)

213 William R. Murchie Science Building (810) 762-3131 FAX (810) 766-6780 www.umflint.edu/csesp Chair (Computer Science, Engineering Science, and Physics): Dr. Loretta J. Dauwe

Administrative Assistant: Patricia A. Slackta

Secretary: Kathleen Leist

Supervisor of Science Laboratories: Daniel A. Mitchell

Professors Loretta J. Dauwe, Mojtaba Vaziri; Associate Professor Christopher A. Pearson; Lecturers Marian Aanerud, Alan Grafe

Professors Emeritus: Mary E. Cox, Donald E. DeGraaf Associate Professors Emeritus: Donald W. Boys, Frank E. Rose

Astronomy offerings appear in the Astronomy section of this Catalog.

Physics examines the lasting and universal things we have learned about inanimate nature. Some aspects of nature are neither universal nor permanent--the shape of Cape Cod or even a spiral arm of a galaxy. But the forces that created both Cape Cod and the spiral arm of stars and dust obey universal laws. Discovering that has enabled humans to understand more of what goes on in our universe. As we gain more knowledge, what would have appeared complicated or capricious can be seen as essentially simple and in a deep sense orderly. Understanding natural laws leads to a better accommodation of nature to humans and of humans to nature.

Physics is concerned with questions that cannot be decided by thought alone. Answers have to be sought and ideas tested by experiment. In fact, the questions are often generated by experimental discovery. But there is every reason to believe that some answers, once found, have a permanent and universal validity. All the evidence indicates that the laws of physics are essentially the same everywhere in the observable universe.

The introductory courses in physics are designed to serve students planning to concentrate in any of the natural sciences. A calculus-based sequence is designed to meet the needs of students majoring in chemistry, engineering science or physics. Other courses serve the non-specialist who wishes to gain some understanding of the concepts and methods of physics and their importance in the space age.

The advanced undergraduate courses in physics are designed to provide fundamental training for professional work in physics and for teaching physics in secondary schools. The advanced undergraduate lecture courses are supplemented by laboratory courses, in which the student may investigate problems of special interest.

The general education requirement in laboratory natural science can be satisfied by completing two from: PHY 110, 143, 145, 243, 245; AST 131 *and* 133.

Note that completion of PHY 143, or PHY 143 and 145, or PHY 243 and 245, is prerequisite to certain concentration programs.

Department Mission and Program Assessment

The mission of the Physics program is to prepare students to succeed in their chosen careers after graduation from the University of Michigan-Flint. Recognizing that students will elect many career paths, ranging from elementary teaching, to industry, to graduate education, and others, the Department believes its mission is to help students gain a knowledge foundation based upon fundamental principles of classical and modern physics. This foundation stresses the creative application of physics principles to solving newly posed problems and creative thinking. The program participates in the University-wide effort to assess its academic programs. Information on assessment plans, including goals, methods and outcomes is available at http://assessment.umflint.edu.

Programs in Physics

Four concentration programs are offered: the General Program in Physics (Bachelor of Arts), the General Program in Physics (Bachelor of Science), the Honors Program in Physics (Bachelor of Arts), and the Teacher's Certificate Program (Bachelor of Arts). A Teacher's Certificate Minor in Physics is also available.

General Program in Physics (Bachelor of Arts)

The Bachelor of Arts in Physics is designed to meet the needs of students who are preparing for professional work in physics or allied areas. It is also for students planning to continue their studies in physics or related fields at the graduate level. Students in this program are encouraged to select those courses which offer the best preparation for work or further study in such fields of special interest as engineering, experimental physics, theoretical physics, astronomy, energy development, applied mathematics, chemical physics, biophysics, medicine, law or finance.

Prerequisites. (32 credits).

- A. The student having a strong preparation in high school physics and mathematics and planning to concentrate in chemistry, engineering, mathematics, or physics normally begins the study of college physics with PHY 243 in the second semester. A student lacking this preparation should begin with PHY 143, after consultation with the advisor. The student should begin the sequence MTH 121-122 as a freshman in order to meet the corequisite for PHY 245 without delay.
- B. PHY 243, 245 (10 credits).
- C. CHM 160, 161, 162 (7 credits).
- D. MTH 121, 122, 220, 222 (15 credits).

Requirements. (28 credits).

- A. At least 22 credits in physics beyond PHY 245, including PHY 333, 343, 344, 367, 374, 433. (22 credits).
- B. MTH 305. (3 credits).
- C. At least three additional credits from: MTH 357, 370; EGR 280, 330, 335; CSC/CIS 175, 275. (3 credits).
- D. All requirements of the College of Arts and Sciences Bachelor of Arts degree, including general education requirements and a foreign language.

Students planning to pursue graduate study in physics are urged to elect PHY 470, MTH 357.

General Program in Physics (Bachelor of Science)

The Bachelor of Science in Physics is designed to meet the needs and interest of students planning to continue their studies in physics or related fields at the graduate level. It calls for computer proficiency, more depth in physics than the Bachelor of Arts program, a sequence of cognate courses complementary to physics and an independent research project.

Prerequisites. (32-41 credits).

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- A. The student having a strong preparation in high school physics and mathematics and planning to concentrate in physics normally begins the study of physics with PHY 243 in the second semester. A student lacking this preparation should begin with PHY 143, after consultation with the advisor. The student should begin the sequence MTH 121-122 as a freshman in order to meet the corequisite for PHY 245 without delay.
- B. PHY 243, 245 (10 credits).
- C. CHM 160, 161, 162 (7 credits).
- D. MTH 121, 122, 220, 222 (15 credits).
- E. Proficiency in a high level computer language. CSC/CIS 127, 175 and 275, or a language as approved by the advisor (up to 9 credits).

Requirements. (50 credits).

- A. PHY 333, 343, 344, 351, 367, 374, 433 (the first election for 2 credits), 433 (the second election, a senior research project, for 3 credits), 470 (25 credits).
- B. At least five additional credits from: PHY 291 (may be reelected to a total of 4 credits), 303, 321, 322, 354, 363, 375, 391. (5 credits).
- C. MTH 305 and nine additional credits from MTH 329, 357, 374, 456, 470 (12 credits).
- D. At least 8 credits in a planned cognate sequence, chosen from mathematics, computer science, chemistry, engineering science, physical geography, biology, or another area, proposed by the student and agreed upon by the program faculty. (8 credits).
- E. All requirements of the College of Arts and Sciences Bachelor of Science degree, including general education requirements.

Honors Program in Physics (Bachelor of Arts)

Prerequisites.

- A. PHY 243, 245.
- B. MTH 121, 122, 220, 222.

Requirements.

- A. All requirements of the Bachelor of Arts in Physics, except that PHY 495 substitutes for PHY 433.
- B. PHY 470.
- C. PHY 291, Supervised Study in Physics (2); PHY 391, Independent Study (3).
- D. PHY 495 and 496, Honors Thesis I and II.
- E. All requirements of the University Honors Scholar Program.

Prospective Honors Program students are urged to acquaint themselves as early as possible with the requirements stated above as well as with the particular procedures for acceptance into the Physics Department's Honors Program. See the departmental honors advisor or the Honors Program Director for this information.

Teacher's Certificate Program (Bachelor of Arts)

The Teacher's Certificate Program is designed for students who plan to teach physics in high school.

Prerequisites. (32 credits).

A. PHY 243, 245, 343 (13 credits).

- B. CHM 260, 261 (4 credits).
- C. MTH 121, 122, 220, 222 (15 credits).

Students should begin the sequence MTH 121-122 in the freshman year in order to meet the corequisite for PHY 245 without delay.

Requirements. (28 credits).

- A. PHY 321 or 323, 333, 344, 367, 433 (13 credits).
- B. MTH 305, EDS 344, PHL 312 (9 credits).
- C. Six additional credits from: PHY 291, 322, 354, 363, 374, 375, 391, 433, 470.
- D. Service as a laboratory assistant for one semester in PHY 110 and one other course.
- E. All requirements of the College of Arts and Sciences Bachelor of Arts degree, including general education requirements and a foreign language.

Students in this program are urged to elect PHY 110; AST 131, 133, CHM 162, 163 *or* 165, and CSC/CIS 175 or 275.

Prospective candidates should also study the sections entitled "General Requirements for Teacher Certification" and "Secondary Education Teacher's Certificate Programs," printed in the Department of Education section of this *Catalog*.

Minor in Physics

Requirements. (22 credits).

- A. PHY 243, 245, 333, 343 (15 credits).
- B. At least seven additional credits from: PHY 344, 351, 354, 367, 374, 375, 391 or 433. No more than one credit elected from PHY 391 and 433 may be counted toward the program. (7 cr.).

Teacher's Certificate Minor

Twenty credits in physics and astronomy, including PHY 243, 245, 333, 343. PHY 110, AST 131 and 133 are recommended.

Courses in Physics

- 110. Conceptual Physics by Inquiry Method. One unit of high school algebra and one unit of high school geometry, or consent of instructor. (4)n.
 - Selected topics from motion, energy, electricity, sound, and

optics, presented in a laboratory setting. Useful for students who desire more preparation before taking a standard course in college physics. Material and hands-on learning methods are especially appropriate for students who plan to teach in an elementary or middle school.

122. Science of Sound. MTH 111 with a grade of C (2.0) or better; or equivalents as determined by math placement test. (4)n.

Introduction to acoustics. Focus on conceptual understanding, problem solving and laboratory work. Waves and vibrations, resonance, and the measurement and perception of sound.

143. College Physics I. MTH 111 with a grade of C (2.0) or better, or equivalent as determined by math placement test, one year of high school geometry, one unit of high school trigonometry. (4)n.

Motion in one dimension; Newton's Laws; momentum and impulse; work and energy; rotational motion; mechanical waves. Fluid dynamics; heat; temperature; thermodynamics. Three hours of lecture and two hours of laboratory per week.

145. College Physics II. PHY 143 or 243 with a grade of C (2.0) or better. (4)n.

Electricity, magnetism, direct and alternating circuits, light, optical instruments, and brief introduction to atomic and nuclear phenomena. Three hours of lecture and two hours of laboratory per week.

243. Principles of Physics I. A year of high school physics with a grade of B (3.0) or better or PHY 143 with a grade of C (2.0) or better, MTH 121 with a grade of C (2.0) or better or concurrent election of MTH 121; or consent of instructor. Completion of MTH 121 prior to PHY 243 recommended. (5)n.

Mechanics, heat and sound. Calculus-based course for students concentrating in chemistry, engineering, mathematics or physics. Four lecture-recitation hours and one three-hour laboratory weekly.

245. Principles of Physics II. PHY 243 with a grade of C (2.0) or better, MTH 122 with a grade of C (2.0) or better or concurrent election of MTH 122. (5)n.

Electricity and magnetism, optics, and modern physics. Continuation of PHY 243 for students concentrating in chemistry, engineering, mathematics or physics. Four lecturerecitation hours and one three-hour laboratory weekly.

291. Supervised Study in Physics. Consent of instructor. (1-3).

Laboratory work or study of the literature on designated problems chosen by the student in consultation with a faculty supervisor. May be reelected, to a total of four credits. Graded ABCDE/Y.

303. Data Acquisition and Control. PHY 145 or 245 with a grade of C (2.0) or better; familiarity with a computer system; or consent of instructor. (3).

Introduction to basic structures that make up LabVIEW programs. Build applications for communications and control of instruments using GPIB and plug-in data acquisition boards. Also listed as CSC 303 and EGR 303.

321. Analog and Digital Electronics. PHY 145 or 245 with a grade of C(2.0) or better, or consent of instructor. (3).

Properties of semiconductors; diodes, transistors, and other devices and their characteristics; amplifiers, oscillators, filters, and regulators; logic gates, combinational and sequential circuits; analog and digital ICs. Also listed as EGR 321.

322. Analog and Digital Electronics Laboratory. Prior election of EGR/PHY 321 with a grade of C (2.0) or better or concurrent election of PHY/EGR 321 or consent of instructor. (1).

> Semiconductor device characteristics; rectifiers and amplifiers; logic circuit analysis and design; operational amplifiers and active filters; power supplies; memories, A/D and D/A. Also listed as EGR 322.

323. Practical Electronic Circuit Construction. PHY 145 or 245 with a grade of C(2.0) or better, or consent of instructor. (3).

Design and construction of practical electronic circuits for scientific measurement and control applications using typical prototying tools. Applications of basic semiconductor devices such as thermistors and optoelectric devices, operational amplifiers, logic and control circuits in both analog and digital domains. Required purchase of small set of electronic components, inexpensive multimeter, inexpensive text materials. Assessment based on weekly review of lab book, midterm, final project. Two hours lecture and two hours lab per week; additional work outside scheduled lab time.

333. Advanced Physics Laboratory I. PHY 245, MTH 220, 222, each with a grade of C (2.0) or better, consent of instructor. (2)n.

Advanced experiments and measurement methods chosen from topics in classical and modern physics. In consultation with the instructor, students select from a variety of experiments. Lectures on data handling. Lecture and laboratory weekly. Graded ABCDE/Y.

343. Modern Physics. PHY 245, MTH 220, each with a grade of C(2.0) or better. (3).

Topics selected from: special relativity, Rutherford-Bohr atom, black body radiation, pair production, Compton effect, deBroglie waves, complementarity, uncertainty principles, Schrödinger equation and applications, Zeeman effect, atomic and molecular spectra, X-ray spectra and diffraction; nuclear properties, forces, and models, radioactivity, nuclear transmutations, accelerators, elementary particles.

344. Classical Mechanics. PHY 245, MTH 220, 222, 305, each with a grade of C(2.0) or better, or consent of instructor. (3).

> Newtonian and Lagrangian mechanics in one, two, and three dimensions. Motion under a central force; damped and undamped harmonic oscillators; conservation laws of mechanics; inertial and accelerated reference frames; introduction to Hamiltonian mechanics.

351. Thermal Physics. PHY 343 with a grade of C (2.0) or better, or consent of instructor. (3).

Thermal properties of matter; equations of state; first and second laws of thermodynamics; entropy; kinetic theory; statistical mechanics; quantum statistics.

354. Optics. PHY 245, MTH 220, 222, each with a grade of C (2.0) or better. (3).

Geometrical and wave optics. Topics selected from: refraction, reflection, polarization, dispersion, interference, diffraction, birefringence, scattering, and absorption and emission of photons. *Also listed as EGR 354*.

- [363. Electronic Measurements for Scientists. PHY 145 or 245, with a grade of C (2.0) or better, or consent of instructor. (4).]
- **367.** Intermediate Electricity and Magnetism. PHY 245, MTH 220, 222, 305 each with a grade of C (2.0) or better; or consent of instructor. (3).

Electrostatics and magnetostatics. Time-dependent electromagnetic fields. Behavior of dielectric and magnetic media. Introduction to Maxwell's equations and electromagnet radiation. *Also listed as EGR 367*.

374. Quantum Mechanics. PHY 343, MTH 220, 222, 305 each with a grade of C (2.0) or better, or consent of instructor. Prior or concurrent election of MTH 357 recommended. (4).

Development of the mathematical formalism and application of Schrodinger's equation in one, two, and three dimensions. Quantum mechanical treatment of angular momentum and spin. Approximation techniques.

375. Solid State Physics. PHY 343; MTH 220, 222, 305 each with a grade of C (2.0) or better; or consent of instructor. (3).

Crystal structure, diffraction by crystals, thermal properties, dielectric properties; free electron theory of metals, band theory, semi-conductors, magnetism, magnetic resonances, defects, superconductivity. *Also listed as EGR 376*.

391. Independent Study. *Consent of instructor.* (To be arranged).

Laboratory study or study of current literature on a special problem. *Graded ABCDE/Y*.

433. Advanced Physics Laboratory II/III. Consent of instructor. (1-3).

Original problems selected and pursued in consultation with the instructor. For two credits, one four-hour laboratory weekly. May be reelected once, to a maximum of five credits. Also listed as EGR 433. Graded ABCDE/Y.

470. Advanced Topics in Physics. See course schedule for prerequisites. (2).

Topics of interest in physics that are not offered on a regular basis, announced in the course schedule. Various offerings of the course may treat different topics.

495. Honors Thesis I. *Consent of Department Chair. Open only to Honors Program students in physics.* (4).

Credit and grade for PHY 495 is not given until successful completion of PHY 496. Also listed as HON 495. Graded ABCDE/Y.

496. Honors Thesis II. Prior or concurrent election of PHY 495

and consent of Department Chair. Open only to Honors Program students in physics. (4).

Also listed as HON 496. Graded ABCDE/Y.

Political Science (POL)

310 David M. French Hall (810) 762-3470 http://www.flint.umich.edu/departments/polsci/Main.htm

Chair: Derwin Munroe

Principal Secretary: Suzanne Shivnen

Professors Peggy Kahn, Albert C. Price; Assistant Professors Stephen Rockwell, Bill Laverty; Lecturer Derwin S. Munroe. Professors Emeriti: Peter Gluck, Ellis Perlman.

Political Science includes both the study of political institutions and the study of power relations in society. It is the study of political life; that is, those activities which involve the making of binding collective decisions for societies or other social groups. A number of approaches may be involved: institutional, legal, historical, behavioral, philosophical, sociological, or political-economic. The study of politics may focus on a particular society or on particular institutions and processes; it may be comparative in nature; it may emphasize international relations; or it may scrutinize particular political theories.

Department Mission and Program Assessment

The Political Science Department's mission is to help students develop the skills of critical thinking and analysis, understand political institutions and processes in the US, other nations, and globally, and develop the interest and skills required for active and responsible citizenship. The Department participates in the University-wide effort to assess its academic programs. Information on assessment plans, including goals, methods and outcomes is available at http://assessment.umflint.edu.

Programs in Political Science

Four concentration programs are offered, all leading to a Bachelor of Arts degree: the General Program in Political Science; the Honors Program; the Teacher's Certificate Program; and the Joint Program in Social Sciences with an emphasis on Political Science (see Social Sciences). A Minor in Political Science and a Teacher's Certificate Minor are also available. In addition, the department contributes to the Bachelor of Arts degree in public administration.

Students interested in internships should consult the department about POL 390, the Academic Internship in Public and Community Affairs. Students interested in pre-law should consult the "Law Studies Information" section of this *Catalog*.

The Department expects Political Science majors to participate in the assessment of learning outcomes. A copy of the Assessment Plan in Political Science is available from the department office and web site.

General Program in Political Science

The General Program in Political Science is intended to meet the needs of students planning to continue their studies in political science or related fields at the graduate level, or planning to prepare for professional work in such fields as government, law, education and journalism.

Prerequisites. Three introductory-level social sciences courses, taken in two different disciplines, and including one of the following sequences: a two semester introductory sequence in either American History (HIS 220, 221) or History of Western Civilization (HIS 110, 111) or World Civilizations (HIS 112, 113) or Principles of Economics (ECN 201, 202).

Requirements.

- A. POL 120 and 190, to be completed before election of political science courses numbered above 200.
- B. POL 301.
- C. Six credits in political theory from POL 222 or 401, 261, 360, 361, 365, 380.
- D. At least two courses above the introductory series selected from each of the following groups:
 - 1. American politics and public administration. POL 304, 305, 309, 311, 312, 316, 321, 322, 323, 326, 327, 329, 331, 375, 381, 387, 420, 422, 428, 430.
 - 2. Comparative politics and international relations. POL 230, 245, 333, 340, 343, 344, 345, 346, 351, 359, 437, 441.
- E. Electives in political science to complete a total of 33 credits in political science courses.
- F. Nine credits at the 300 level or above in related social sciences chosen in consultation with the advisor, including at least three credits of POL/PUB 390.
- G. All requirements of the College of Arts and Sciences Bachelor of Arts degree, including general education requirements and a foreign language.

Honors Program in Political Science

Prerequisites. Three introductory level social sciences courses, taken in two different disciplines, and including one of the following two-semester sequences: World History (HIS 112, 113), History of Western Civilization (HIS 210, 211), American History (HIS 220, 221), or Principles of Economics (ECN 201, 202).

Requirements.

- A. All requirements for the General Program in Political Science. (Note: With the agreement of the Department, students may be permitted to substitute another course for the required internship in a public or community agency.)
- B. One of the following courses in research methods chosen in consultation with the honors advisor: SOC 210 or 215 or a course in statistics, normally taken in the first semester of the junior year.
- C. POL 494/HON 393, normally taken in the junior year as preparation for the honors project.
- D. POL/HON 495 and 496, taken during the senior year. Credit and grade for POL/HON 495 are not normally given until completion of POL 496 and the honors thesis.

Honors Program students with an interest in Political Science are urged to acquaint themselves with the faculty and discipline as early as possible and to apply formally to the Department for the Honors Program in Political Science no later than their sophomore year. The Department will meet with individual Honors applicants to work out the details of their course work and honors project.

Teacher's Certificate Program

Faculty advisor: Dr. Peggy Kahn

The Teacher's Certificate Program in Political Science is designed for students preparing to teach politics or government in a secondary schools. For teaching certification, the State of Michigan Department of Education also requires a minor. A minor in another social science, such as history or economics, chosen in consultation with the advisor, is strongly recommended. Students may not complete both an interdisciplinary social studies major or minor and a political science major or minor for teaching.

Prerequisites. Completion of prerequisites for the General Program in Political Science. These are three introductory-level social sciences courses, taken in two different disciplines, including one of the following sequences: a two-semester introductory sequence in American History (HIS 220,221), History of Western Civilization (HIS 210, 211) or Principles of Economics (ECN 201, 202).

Requirements. A minimum of 30 credit hours in political science, as follows:

- A. POL 120; 190; 230 or 437; 311 or 312 (12 credits).
- B. A course in comparative politics from: POL 340, 343, 344, 345, 351, 359, 441 (3 credits).
- C. At least two courses in American politics, one from each category:
 - 1. U.S. national institutions: POL 323, 326, 327, 329 (3 credits).
 - 2. U.S. political processes: POL 303, 309, 321, 322, 380 (3 credits).
- D. A course in political theory from: POL 222, 261, 360, 361, 365, 401. (3 credits). POL 261, 361, 401 highly recommended.
- E. A course with a primary emphasis upon politics, society and racial-ethnic, class, and gender diversity: POL 304 or 331. (3 credits).
- Electives to complete a total of at least 30 credit hours in Political Science.
- G. All requirements for Secondary Teacher Certification, to include EDS 343.
- H. All requirements of the College of Arts and Sciences Bachelor of Arts degree, including general education requirements and a foreign language.

Prospective students should study the Department of Education section of this catalog, particularly the statements titled, "General Requirements for Teacher Certification" and "Secondary Education Teacher's Certificate Programs."

Minor in Political Science

Requirements. Eighteen credits distributed as follows:

- A. POL 120 and 190 to be completed before election of political science courses numbered 200 or above.
- B. A course in political theory selected from: POL 222, 261, 360, 361, 365, 380, 401.
- C. A course in American government selected from: POL 311, 321, 323, 326, 327, 329, 331, 375, 428, 430,.
- D. A course in public administration or urban politics selected from: POL 309, 312, 316, 390.
- E. A course in comparative politics and international relations selected from: POL 230, 245, 333, 340, 343, 344, 345, 351, 359, 437, 441.

Teacher's Certificate Minor

Requirements. Twenty-one credits including:

- A. POL 120, 190; POL 311 or 312 (9 credits).
- B. A course in comparative politics or international relations from: POL 230, 340, 343, 344, 345, 351, 359, 437 (3 credits).
- C. A course in American national politics or political processes from: POL 303, 309, 321, 322, 323, 326, 327, 329 (3 credits).
- D. A course with primary emphasis upon politics, society and race, gender and class diversity: POL 304 or 331 (3 credits).
- E. Additional courses in political science to bring the total to at least 21 credits.
- F. At least one course from POL 261, 361, 401 (recommended).

Courses in Political Science

120. American National Government and Politics. (3)s.

Theory and practice of democratic government in the United States and the institutions and processes of American government as manifestations of democratic values. Representative democracy, federalism, the Presidency, Congress, the Courts, political parties, interest groups and voting as expressions of, and at times contradictions to, democratic values.

190. (100). Introduction to Comparative Politics. (3)s.

Study of political systems from different parts of the world; institutional components of political systems (such as government and political parties); evaluation of the relationship between social structure and political activity; and introduction to concepts, approaches, and methods used in political science.

222. American Constitutional Development. (3)s.

American Constitution within the framework of philosophical, political, social and economic developments. Historical and analytical approach, emphasizing the Constitution as a document and constitutionalism as a concept. Constitutional change due to court decisions, legislation, and political philosophy.

230. International Relations. (3)s.

Introduction to major concepts and theories of international relations. The role of the state and non-state actors in international affairs. Problems of war and peace, globalization, and development. *Also listed as INT 230*.

245. Political Movements. (3)s.

Comparative and historical analysis of social and political movements in industrialized and developing world. Theories of social movements, state-society relations and the causes and consequences of protest.

261. Introduction to Political Theory. (3)s.

Introduction to the thinking about political issues from a theoretical perspective. Canonical texts such as Plato's *Republic* and Machiavelli's *The Prince*, read in juxtaposition with contemporary texts illuminating their contemporary relevance.

301. Research Seminar in Politics and Policy. Junior standing; POL 120, 190; at least one 300-level POL course; or consent of instructor. (3)s.

Development and completion of a research project on politics and public affairs. Critical reading and writing skills, constructing research problems and questions, the identification of relevant source materials, assessment of the analytic strategies and methods used in systematic research, and the development of appropriate research designs and strategies. *Also listed as PUB 301*.

303. Politics and Public Policy. POL 120 or consent of instructor. (3)s.

Examination of the policy process: how public policy is made, which problems and conditions are selected for consideration, and what approaches are used to address issues of public concern. Policymaking examined from a variety of perspectives including the roles of public and private institutions, interest groups, and grassroots movements.

304. Black Social and Political Movements. AFA 101 or a course in political science or consent of instructor. (3)s.

Strengths and weaknesses of past and current movements seeking social and political change on behalf of African-Americans from an interdisciplinary perspective. The Civil Rights movement, Back to Africa movement, spiritual movements, resistance movements, and independent political movements. *Also listed as AFA 304*.

305. Public Policy and Health Care. HCR 300, a course in political science; or consent of instructor. (3)s.

Health care policies and policy-making processes; trends in health care policy and their political, economic and social implications; the ideological basis for United States health care reform efforts. *Also listed as HCR 305*.

306. Politics of Aging. POL 120. (3).

Examination of political institutions and policy making processes that impact legislation affecting the aged, including

legislators, interest groups, political parties, voters. Analysis of entitlement programs for the aged, including federal and state level regulation and implementation of Medicare, Medicaid, social security. Political attitudes of baby boomers and the aged toward the health care system. *Also listed as HCR 306*.

309. The Political Environment of Public Administration. *POL 120 or consent of instructor.* (3)s.

Political components of modern public administration. Politics of federalism, bureaucracy, budgeting, planning, research, evaluation, and implementation. Viewing public administration as politics. *Also listed as PUB 309*.

311. American State and Local Government. A course in political science or consent of instructor. (3)s.

States in the federal system; state policies and policy information; state-local relations; local problems, policies and politics.

312. Urban and Metropolitan Politics. POL 120 or consent of instructor. (3)s.

Historical development of cities and their role in American political life. Problems of race, economic development, fragmentation, and polycentricity.

316. Introduction to Public Administration. POL 120 or consent of instructor. (3)s.

Critical examination of basic concepts of public administration and of alternate approaches to public organization. Also listed as PUB 316.

320. Politics and Film. POL 120 or 190 or consent of instructor. (3)s.

Examination of political issues and themes related to domestic and international films and documentaries. Relationship of films and documentaries to public opinion, public policy, social issues, social movements, and race and gender studies in domestic and comparative contexts. Relationship of images and stereotypes to public policy and public opinion; examination of film depictions of government actors and activities.

- [321. Political Parties and Pressure Groups. POL 120 or consent of instructor. (3)s.]
- **322.** Public Opinion and Political Processes. POL 120 or consent of instructor. (3)s.

Origin, measurement, and impact of public opinion in American politics. Public opinion polling and the effect that polls have upon the behavior of voters. The role public opinion can and should play in a democratically organized political system.

323. The U.S. Congress. POL 120 or consent of instructor. (3)s.

Examination of ways that members of Congress reach office, the effects of Congressional structure on member behavior, and outside institutional influences that affect Congressional outputs.

326. The U.S. Supreme Court. POL 120 or consent of instructor. (3)s.

American judiciary, with special reference to the Supreme

Court as an adjudicator of legal disputes and as a participant in the policy-making process.

327. The American Presidency. POL 120 or consent of instructor. (3)s.

Policy-making process in the federal executive. Various roles of the President, especially in relations with Congress and executive agencies.

329. Civil Liberties and the Constitution. POL 120 or consent of instructor. (3)s.

Civil liberty issues confronting American society. Rights of freedom of speech, assembly, and press; the religion clauses of the First Amendment; the equal protection clause of the Fourteenth Amendment as it is concerned with rights of minorities. Students deliver oral arguments and prepare briefs of pending and simulated court cases.

331. Women and Work. POL 120 or SOC 100 or WGS 200; or consent of instructor. (3)s.

Women's paid employment and job segregation by sex: relation of women's paid work to women's family work, nature of women's jobs and occupations, and a variety of state policies that influence women's employment (e.g. anti- discrimination law, maternity and parental leave). White women and women of color in the advanced capitalist economy of the United States. *Also listed as SOC 362 and WGS 331*.

333. International Law and Organizations. POL 190 or consent of instructor. (3)s.

Development of international law and its relation to international organizations. Role of international law and organization in global problems of conflict and war, development and economy, and human rights and intervention.

340. African Politics. A course in political science or consent of instructor. (3)s.

Traditional African political structures, the changes occasioned by colonial rule, and the political processes of independent African states. *Also listed as AFA 340*.

342. (441). The Welfare State in Comparative Perspective. One from: POL 190, SOC 100, ANT 100, HIS 113, 211, 221, WGS 200; or consent of instructor. (3).

Historical and contemporary social policy in the U.S. and Europe. Historical development of welfare states, different types of welfare regimes across countries; relations between gender, race and social policy; possible futures for social provision. Specific atention to areas such as unemployment and training policy; family policy; health care policy; old age pensions. *Also listed as PUB 342*.

343. Conflict and Development in Southern Africa. Two courses in social sciences or consent of instructor. (3)s.

Contemporary development and social change in Southern Africa; discussion of U.S. foreign policy towards the area with an analysis of western investment strategies and human rights violations. *Also listed as AFA 360*.

344. Latin American Politics. POL 190 or consent of instructor. (3).

Contemporary politics in South and Central America. Evolution of political insitutions, parties and social movements, in comparative perspective and particular casse studies. Economic, social and cultural context for political change and diversity. Transitions to democracy and market reform. Problems of democracy and political change.

345. European Politics. POL 190 or consent of instructor. (3)s.

Economic and political developments, state institutions and policy, political parties and new social movements (such as the green and women's movements) in countries of western and east-central Europe. Patterns of continuity and discontinuity in the postwar period, emphasizing whether the early "postwar compromise" has been maintained or abandoned in individual countries. Political, economic and social integration in Europe.

349. Politics of the European Union . POL 190; consent of instructor. (3)s.

Exploration of development, structure, policies and impacts of the European Union, understood as an ongoing political, economic and social project. Thematic focus on state sovereignty and its modification in the light of interdependencies, trade and economic liberalization, and resistance. Policy areas include the internal market, agriculture and environment, cultural diversity, and external relations of trade development, peace and security.

351. Political and Legal Anthropology. ANT 100 or POL 190. (3)s.

Study of comparative political systems, forms of authority, legitimacy and power in societies at different levels of social complexity and in different ecological contexts. Political organization and process analyzed in terms of their relationships to economics, religion, kinship, and other aspects of culture and society. *Also listed as ANT 351*.

359. Comparative Revolutions. POL 190 or consent of instructor. (3)s.

Comparison and analysis of revolutionary change in the Twentieth Century. Theoretical explanations of the causes and processes of revolutions; reasons for success and failure. Political consequences for revolutions on social and economic organization. International dimensions of social revolutions. *Also listed as INT 359*.

360. Ancient and Medieval Political Thought. One course in political science or consent of instructor. (3)s.

Theories associated with the Greek city state, the Roman Empire, medieval constitutionalism, and the early modern period.

361. Modern Democratic Political Thought. One course in political science or consent of instructor. (3)s.

Review of the philosophical traditions of liberal democracy from the Enlightenment to the present. Ideas of natural law, social contract, individualism, constitutionalism, and popular rule through law.

365. Marxist Political Thought. *At least one course in the social sciences or consent of instructor.* (3)s.

Examination of Marx, and Marxisms after Marx, in historical context. Continuity and diversity in the Marxist tradition. Philosophical positions of various theorists, their views of the nature and development of capitalism, analysis of social class, discussion of the revolutionary party and process, analysis of the state in capitalism and after, and treatment of the nature and importance of culture.

[375. Politics and American Labor. One social science course or consent of instructor. (3)s.]

Political environment shaping the US labor movement since the Great Depression and strategies used to meet the challenges presented by this environment. Discussion of federal laws to regulate the labor movement, tactics used to further its agenda in the institutional realm and the public at large, and methods employers invoke to thwart that agenda.

380. The American System of Law. POL 120 or consent of instructor. (3)s.

Role of law in American society. Legal reasoning, precedent, theories of law, common law, juries, and legal socialization. Political nature of law and the extent to which the American system of law is reflective of basic value, moral, and ethical considerations.

[381. The Bill of Rights. POL 120 or consent of instructor. (3)s.]

385. Women and the Law. POL 120, 190 or WGS 200 or consent of instructor. (3).

Examination and analysis of the role of law in the social, economic, political and private lives of women in the U.S. Historical overview as well as intensive study of legal problems of current concern to women. Areas of focus: women and work, women and the family, women and their bodies, women and the criminal justice system, role of women in the legal system (including theory as well as case law). Also listed as WGS 385.

387. Sex, Drugs, and Politics. POL 120 or consent of instructor. (3)s.

Conflict surrounding public policies related to sexual behavior and drug use. Government response to prostitution, pornography, homosexuality, and legal and illegal drug use critically evaluated to illuminate the underlying value conflicts.

390. Internship in Public Agencies and Community Organizations. Consent of instructor. (3-6)s.

Students intern in selected public agencies under supervision of agency personnel and faculty. On-the-job experience combined with seminars and individual consultations. May be elected for three to six credits, of which three are applicable to the political science concentration. Enrollment generally limited to juniors and seniors. Also listed as PUB 390. Graded Pass/Fail/Y.

391. Directed Reading in Political Science. Junior standing, 9 credits of Political Science and consent of instructor. (1-3).

Individual course of studies arranged with a faculty member. For advanced students to explore areas beyond the regular curriculum.

394. Special Topics in Political Science. *POL 120 or 190 and at least one upper-level course in political science, history, sociology, or anthropology; or consent of instructor. (3)s.*

Exploration of varying special topics in political science. Topic will be announced before each offering of the course. May be repeated to a total of six credits.

420. Law and Administrative Processes. At least junior standing. (3)s.

Legal foundations of public administration. Development of regulatory agencies, right to a hearing, delegation of power, judicial review, rulemaking and adjudication, efforts to reform administrative regulation, zoning, and land use planning. Also listed as PUB 420.

422. Environmental Law and Public Policy. POL 120 or consent of instructor. (3)s.

Political and administrative aspects of environmental regulation, including major legislation, administrative regulations, and litigation involving environmental issues. Actions of the Environmental Protection Agency (EPA) and the Occupational Safety and Health Administration (OSHA) involving the internal environment of the workplace. Also listed as PUB 422.

428. Criminal Justice and the Constitution. POL 120 or consent of instructor. (3)s.

Constitutional questions involving the process of law and the procedural rights of the accused. Court decisions related to searches and seizures, wire-tapping and electronic eavesdropping, the law of arrest, police interrogations and confessions, right to counsel, double jeopardy. Students deliver oral arguments and prepare briefs of pending and simulated court cases. Also listed as PUB 428.

430. The Administration of Justice. At least junior standing, a course in American government. (3)s.

Criminal justice as public administration. Policy outputs of the major actors of criminal justice including police, prosecutors, judges, defense attorneys, parole boards, and the legislature. Topics of public administration as organization theory, bureaucratic decision-making, political environment, and budgetary constraints. Also listed as PUB 430.

437. Problems in American Foreign Policy. POL 190, at least junior standing; or consent of instructor. (3)s.

Major trends in United States foreign policy; the role of the President, Congress, public opinion, and pressure groups in the policy-making process; special emphasis on post-war policy developments.

494. Honors Research and Proposal Development. Acceptance into Honor Program in political science; consent of Honors Council or its designate; consent of Department chair. (3)s.

Designed for honors students to read discipline-based literature in the area in which they are pursuing their honors project and to design their honors project. Students work closely with one or more faculty members. Also listed as HON 393.

495. Honors Thesis I (Off-Campus Study). POL 494; acceptance into Honor Program in political science; consent of Honors Council or its designate; consent of Department chair (4).

Course used to grant credit towards off-campus work on the honors project and thesis. Credit and grade not given until completion of POL 496 and submission of the Honors Thesis. Also listed as HON 495. Graded ABCDE/Y.

496. Honors Thesis II. Prior or concurrent election of POL 495 and consent of Department Chair. Open only to Honors Program students in political science. (4).

Also listed as HON 496. Graded ABCDE/Y.

Graduate Courses in Political Science

501. American Political Thought. Graduate standing. (3).

See POL 401 for description. Not open to students with credit for POL 401.

510. Intergovernmental Relations. *Graduate standing.* (3).

Current developments and trends in intergovernmental relations. Legal and political opportunities and constraints affecting administration in state and local governments. Impact of intergovernmental relations on public policy and delivery of services. Also listed as PUB 510.

520. Law and Administrative Processes. *Graduate standing.* (3).

See POL 420 for description. Not open to students with credit for POL/PUB 420. Also listed as PUB 519.

522. Environmental Law and Public Policy. Graduate standing; POL 120 or consent of instructor. (3).

See POL 422 for description. Not open to students with credit for POL/PUB 422. Also listed as PUB 522.

523. The U.S. Congress. *Graduate standing.* (3).

See POL 323 for description. Not open to students with credit for POL 323.

526. The U.S. Supreme Court. *Graduate standing.* (3).

See POL 326 for description. Not open to students with credit for POL 326.

527. The American Presidency. *Graduate standing.* (3).

See POL 327 for description. Not open to students with credit for POL 327.

528. Criminal Justice and the Constitution. Graduate standing; POL 120 or consent of instructor. (3).

See POL 428 for description. Not open to students with credit for POL/PUB 428. Also listed as PUB 528.

529. Civil Liberties and the Constitution. *Graduate standing. (3)*.

See POL 329 for description. Not open to students with credit for POL 329.

530. The Administration of Justice. Graduate standing; a course in American government. (3).

See POL 430 for description. Not open to students with credit for POL/PUB 430. Also listed as PUB 530.

531. Women and Work. Graduate standing. (3).

See POL 331 for description. Not open to students with credit for POL 331/SOC 362/WGS 331. Also listed as WGS 531.

533. International Law and Organizations. Graduate standing. (3).

See POL 333 for description. Not open to students with credit for POL 333.

537. Problems in American Foreign Policy. Graduate standing; a course in political science or consent of instructor. (3).

See POL 437 for description. Not open to students with credit for POL 437.

541. The Welfare State in Comparative Perspective. Graduate standing; POL 190 and one HIS, POL or SOC course numbered 200 or higher; or consent of instructor. (3).

See POL 342 for description. Not open to students with credit for POL/PUB 342. Also listed as PUB 541.

544. Latin American Politics. Graduate standing. (3).

See POL 344 for description. Not open to students with credit for POL 344.

545. European Politics. Graduate standing. (3).

See POL 345 for description. Not open to students with credit for POL 345.

549. Politics of the European Union. *Graduate standing.* (3).

See POL 349 for description. Not open to students with credit for POL 349.

551. Political and Legal Anthropology. *Graduate standing.* (3).

See POL 351 for description. Not open to students with credit for ANT/POL 351. Also listed as ANT 551.

559. Comparative Revolutions. *Graduate standing.* (3).

See POL 359 for description. Not open to students with credit for POL/INT 359. Also listed as INT 559.

Psychology (PSY)

411 William R. Murchie Science Building (810) 762-3424

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Website: http://www.flint.umich.edu/departments/psy

Chair: Dr. Thomas A. Wrobel Principal Secretary: Sharon Mittan

Professors Thomas A. Wrobel, Eric Freedman; Associate Professors Susan Gano-Phillips, Marianne P. McGrath; Assistant Professors Terrence Horgan, Michael Jarvinen, Jeannette Whitmore; Lecturers Allen Bellamy, Harriett Nordstrom.

Professors Emeriti: Paul M. Bronstein, Harry Frank, Donald M. Pollie, Alfred C. Raphelson, Ronald E. Silverman, Harriet M. Wall.

Psychology is the branch of knowledge concerned with the study of behavior and mental processes. Modern psychology is rooted in a variety of traditions including philosophy, medicine, and biology, and therefore covers a wide area of study and involves a great diversity of activities. It is an academic discipline with a long and productive tradition of scholarship and scientific research. It also is a profession that conducts and applies the products of research in the arena of human services. In addition, fields such as education, law, medicine, social services, management, advertising, industrial engineering, environmental design, and public administration draw upon psychological principles.

Psychology examines behavior and mental processes at a variety of levels from the molecular (e.g., the role of particular chemicals in brain function) to the global (e.g., the role of cultural factors in promoting achievement motivation). Students of psychology have the opportunity to learn how people sense and perceive their environment, process and remember information, experience emotions, and cope with the difficulties they encounter. In addition, they learn how all of these processes vary from person to person, from age to age, and from one social context to another. Through an understanding of basic mental processes, a deeper understanding of people's problems and procedures for dealing with these problems can be gained.

Department Mission and Program Assessment

The Psychology Department offers degree programs that serve a variety of constituencies, including students with a broad general interest in human behavior, students who are preparing for graduate programs in academic or professional psychology, students preparing for pre-professional employment in human services, and students who wish to teach psychology in secondary schools. The Department participates in the University-wide effort to assess its academic programs. Information on assessment plans, including goals, methods and outcomes is available at http://assessment.umflint.edu.

Programs in Psychology

Seven concentration programs are offered: the General Program in Psychology (Bachelor of Arts), the Program in Research Psychology (Bachelor of Science), the Clinical/Community Program in Psychology (Bachelor of Science), the Honors Program in Psychology (Bachelor of Arts or Bachelor of Science), the Joint Program in Social Sciences with an Emphasis on Psychology (see "Social Sciences, Joint Program"), the Joint Program in Philosophy and Psychology (see "Philosophy"), and the Teacher's Certificate Program (Bachelor of Arts). Also offered is a Joint BS/MPA program. (See the "Graduate Study" section of this Catalog.) A Minor in Psychology and a Teacher's Certificate Minor are also available.

General Program in Psychology (Bachelor of Arts)

The General Program in Psychology is designed for the student who is preparing for advanced study in professional psychology or a related field, as well as for the student with a general interest in human behavior.

Prerequisite. MTH 111 or equivalent preparation determined by the mathematics departmental placement test.

Requirements.

A. All requirements of the College of Arts and Sciences

Bachelor of Arts degree, including general education requirements and a foreign language. General education requirements in the natural sciences may not include courses in psychology.

- B. Thirty-four credits in psychology including:
 - 1. PSY 100, 201, 301 (11 credits).
 - Laboratory Core. Two from: PSY 306, 310, 327, 351, 380, 384, 386 (8 credits).
 - 3. Non-Laboratory Core. Three from: PSY 309, 328, 335, 336, 345, 346 (*3 cr.*) (9 credits).
 - 4. Advanced Study. Six additional credits in psychology from: courses listed above not used to meet another requirement; PSY 326, 340, 347, 350, 362, 363, 375, 381, 382, 389, 391, 392, 394, 427.
- C. Satisfactory performance on departmental comprehensive educational evaluation.

Program in Research Psychology (Bachelor of Science)

Designed for the student who is preparing for doctoral level study in areas such as animal behavior, biological psychology, clinical psychology, cognition, developmental psychology, learning, social psychology, personality, and other areas emphasizing empirical research. The curriculum is intended to develop in the student the general skills and knowledge of psychology principles expected in research-oriented graduate programs.

Prerequisites. BIO 104 or 167; MTH 111 (MTH 118 or 121 strongly recommended for those planning to attend graduate school).

Requirements.

- A. All requirements of the College of Arts and Sciences Bachelor of Science degree, including general education requirements. General education requirements in the natural sciences may not include courses in psychology.
- B. Core courses. PSY 100, 201, 301 (11 credits).
- C. Topic Requirements. At least one course from six of the following groups, including at least two laboratory courses (20 credits).
 - Biological and physiological foundations. PSY 380 (lab), 386 (lab).
 - 2. Learning, motivation and emotion. PSY 310 (lab), 351 (lab).
 - 3. Remembering, language, and thought. PSY 306 (lab), 335, 362, 384 (lab).
 - 4. Personality and individual differences. PSY 328, 336.
 - 5. Psychopathology. PSY 309.
 - 6. Social psychology. PSY 326, 327 (lab).
 - 7. Developmental psychology. PSY 345.
- D. Department assessment requirement. Satisfactory performance on departmental comprehensive educational evaluation.
- E. Completion of one of options A, B or C below (14-15 credits).

Note: Each course can be used to satisfy only one program requirement.

Option A, General Psychology

- A. Advanced topics. Two courses each with at least one core course as a prerequisite (6 credits).
- B. Research. PSY 394 or a lab course listed above (4 credits).
- C. Elective. An additional course in psychology (3-4 credits).

Option B, Developmental Psychology

- A. Developmental core. PSY 345, 346 (3 credits), 347, 350 (12 credits).
- B. One from: PSY 244, 363, 375; PHL 374; POL 306; SOC 354, 359 (3 credits).

Option C, Cognitive Science

Prerequisites. LIN 200; CSC 175.

- A. Advanced cognitive lab course. PSY 306, 384, 386 (4 credits).
- B. Psychology core. One from: PSY/PHL 335; PSY 362, 380, 381 (3-4 credits).
- C. Allied discipline cognates. One from: CSC 275, 286 (may be reelected), 375, 445; LIN 351; PHL 322, 323, 325, 482, 483 (3-4 credits).
- D. Cognitive science project. PSY 395 (3 credits).

Clinical/Community Program in Psychology (Bachelor of Science)

The Program in Clinical/Community Psychology is designed to provide intensive pre-professional training to prepare the student for direct application of principles and practices of psychology to community problems or for graduate education in human service areas of psychology or other applied disciplines. It offers a balance between theoretical and practical skills.

Students with a 2.5 GPA overall and a 2.7 GPA in psychology may apply to the Psychology Department for admission in the sophomore year (or thereafter) after completing PSY 100 and 309.

Prerequisite. MTH 111 or equivalent preparation as measured by mathematics placement exam.

Requirements.

- A. All requirements of the College of Arts and Sciences Bachelor of Science degree, including general education requirements. General education requirements in the natural sciences may not include courses in psychology; courses in biology are recommended.
- B. At least 44 credit hours in psychology including:
 - Methodology (12 credits). PSY 201, 301; a laboratory course selected from PSY 306, 310, 327, 351, 380, 384, 386.
 - 2. Core (9 credits). PSY 336, 340, 382.

- Theoretical Issues (6 credits). Two from: PSY 326; PSY 334 or BUS 341; PSY 345 or 346 (3 credits) or 347; PSY 362
- Practical Issues (6 credits). Two from: PSY 328, 350, 375, 381, 389.
- 5. Experiential/Thesis (11 credits). PSY 360 (taken twice), 396, 397, 398.
- Satisfactory performance on departmental comprehensive educational evaluation.

Appropriate courses outside psychology are selected in conjunction with the academic advisor. To best prepare students consistent with their individual career goals, attention of students is directed to: Political Science, Economics, Public Administration, Criminal Justice, Sociology, Anthropology, Social Work, Substance Abuse Treatment, and Health Care.

Honors Program in Psychology (Bachelor of Arts or Bachelor of Science)

The Honors Program in Psychology is designed for the student who has completed the Freshman/Sophomore Honors Program and wishes to continue that program in the field of psychology or students who have been accepted to the Junior/Senior University Honors Scholar Program. Students choosing to elect an Honors Concentration in Psychology may select the General Program in Psychology (Bachelor of Arts or Bachelor of Science) or the Program in Clinical/Community Psychology (Bachelor of Science).

Prerequisite. PSY 201 (taken in the freshman or sophomore year).

Requirements.

- A. All requirements of the General Program in Psychology (Bachelor of Arts or Bachelor of Science) or the Program in Clinical/Community Psychology (Bachelor of Science).
- B. PSY 494 taken in the junior year. This course serves as the junior year on-campus research project.
- C. PSY/HON 495, 496.
- D. All requirements of the University Honors Scholar Program.

Prospective Honors Program students are urged to acquaint themselves as early as possible with the requirements above as well as with the particular procedures for acceptance into the Psychology Department's Honors Program. See the departmental honors advisor, or the Honors Program Director for this information.

Joint Program, Social Sciences with an Emphasis on Psychology

See Social Sciences, Joint Program.

Joint Program, Philosophy and Psychology

See Philosophy.

Teacher's Certificate Program (Bachelor of Arts)

Prerequisite. MTH 111 or equivalent preparation determined by the mathematics departmental placement test.

Requirements.

- A. Thirty-four credits in psychology including:
 - 1. PSY 100, 201, 301.
 - 2. PSY 306 or 384.
 - 3. One of the following: PSY 310, 327, 351, 380, 386.
 - 4. PSY 345. (Students in this program should not elect PSY 237.)
 - 5. Two courses from: PSY 309, 326, 328, 336.
 - Six additional credits in psychology from: courses listed above not used to meet another requirement; courses with a prerequisite of two courses in psychology; or any of: PSY 391, 392, 394.
- B. All requirements of the College of Arts and Sciences Bachelor of Arts degree, including general education requirements and a foreign language requirement. General education requirements in the natural sciences may not include courses in psychology.

A minor in social studies or another social science is strongly recommended.

Prospective candidates should also study the sections entitled "General Requirements for Teacher Certification" and "Secondary Education Teacher's Certificate Programs," printed in the Department of Education section of this *Catalog*.

Minor in Psychology

Prerequisite. PSY 100; MTH 111 or equivalent preparation determined by the mathematics departmental placement test.

Requirements. Completion of at least 21 credits beyond PSY 100 distributed as follows:

- A. PSY 201 and 301.
- B. One of: PSY 306, 310, 327, 351, 380, 384, 386.
- C. Two courses from: PSY 309, 326, 328, 336, 345.
- D. One 300-level elective in psychology not used to meet another requirement.

Minor in Gerontology

An interdisciplinary minor in Gerontology is also available. See the Health Care section of this *Catalog* for a full description and a listing of the requirements.

Teacher's Certificate Minor

Prerequisite. MTH 111 or equivalent preparation determined by the mathematics departmental placement test.

Requirements. Twenty-four credits including:

A. PSY 100, 201, 301; 306 or 384.

- B. PSY 345. (Students in this program should not elect PSY 237.)
- C. One of: PSY 309, 310, 326, 327, 328, 336, 351, 380, 386.
- At least three additional credit hours of 300-level courses in psychology.

Courses in Psychology

100. Principles of Psychology. (3)s.

Introduction to the scientific study of behavior, covering such topics as perception, motivation, emotion, learning, problem solving, personality, and individual differences. *Open to all students. Graded ABCC->N.*

200. General Experimental Psychology. PSY 100. (4)n.

Laboratory course in psychology for non-majors. Introduction to general laboratory methodology and techniques and applications to the science of psychology. Experiences in experimental measurement, conclusion drawing from data analysis, and introduction to scientific reporting. Laboratory experiments using animal and/or human subjects chosen from areas of: psychophysics, perception, conditioning, learning, memory, and problem solving. Students engage in data collection, evaluation and reporting using standard formats. Three hours lecture, two hours lab per week.

201. Principles of Research Design. PSY 100; ENG 112 with a grade of C (2.0) or better. (4).

Basic research methodology in the social sciences. Use of reference material, design of experiments, representation of data, and preparation of research papers. Conceptual understanding of the use of quantification and statistics.

219. Psychology of the Black Experience. PSY 100 or consent of instructor. (3)s.

Experience of Blacks examined from the psychological point of view. Focus on the psychological consequences of being black in the United States; however, world-wide perspective included. Empirical and theoretical views. *Also listed as AFA 219*.

230. Psychology of Adjustment. PSY 100. (3)s.

Alternative conceptions of adjustment in East and West (focusing on differences as a function of culture and religion). Value systems, their origins, and approaches to actualization. Development of the self and awareness in a format which intersperses didactic presentations with experiential exercises.

237. Introduction to Developmental Psychology. PSY 100. (3)s.

Human development from the prenatal period through old age. Social-emotional, cognitive and physical aspects of development. Theory and current research applied to contemporary issues facing infants, children, youth and adults. *Not applicable to a major or minor in psychology*.

244. Psychology of Death. PSY 100 and one other psychology class. (3)s.

Psychological factors, processes and adjustments associated with death and dying, grief and bereavement, suicide, aging, and life-threatening illness.

301. Basic Statistics and Probability. Recent completion of MTH 111 with a grade of 2.0 or better, or equivalent competency determined by mathematics departmental placement test, or consent of instructor. (4).

Descriptive and inferential statistics. Appropriate use and interpretation of statistics in the behavioral sciences, including measures of central tendency and variability, standard scores, t-tests, correlational techniques, ANOVA, chi-square and other nonparametric tests. Laboratory emphasis on applications using calculators and computer software.

306. Human Memory and Performance. PSY 201 with a grade of C- (1.7) or better, PSY 301. (4)n*.

Laboratory approaches to the study of learning and memory. Principles of attention, short and long term memory, skill acquisition, and concept learning. Lecture and laboratory. *Applicable to the general education requirement in the natural sciences, except by some students whose concentration is in psychology.

309. Abnormal Psychology. PSY 100. (3)s.

Disorders of personality and behavior. Definition, description, classification, and certain theories of these disorders.

310. Animal Behavior. PSY 201 with a grade of C- (1.7) or better, PSY 301. (4)n*.

Animal behavior studied through the use of comparative and ethological methods. Discussion of species-specific behaviors, ontogeny of behavior, motivation, perceptual processes, learning, social behavior, communication and evolution. Lecture and laboratory. *Applicable to the general education requirement in the natural sciences, except by some students whose concentration is in psychology. Also listed as BIO 446.

326. Advanced Social Psychology. PSY 100 or consent of instructor. (3)s.

Current theory and research in selected areas of social psychology, such as aggression, altruism, attitudes and beliefs, attribution theory, interpersonal attraction, conformity, group processes, equity theory, persuasion, etc. Topics may vary semester to semester.

327. Laboratory in Social Psychology. PSY 201 with a grade of C- (1.7) or better, PSY 301. (4)s.

Classroom and laboratory examination of social influence and attitudinal processes with emphasis on multiple techniques for their measurement and analysis. Special attention to implicit (indirect) measurement of stereotypes and prejudice.

328. Psychological Assessment. PSY 301 and a course in the area of personality, or consent of instructor. (3)s.

Introduction to the theory and practice of psychological

assessment. Emphasis on intelligence, personality and neuropsychological testing.

[334. Organizations and Organizational Change. PSY 100 and a course in statistics or research design, or consent of instructor. (3)s.]

335. Introduction to Cognitive Science. PSY 100. (3)s.

Philosophers, psychologists, linguists, computer scientists and others have recently begun a cooperative research effort to explore questions about the mind. Why the computer has become a rallying point for many researchers studying the mind, and the contributions each of these disciplines is making to the interdisciplinary investigation of cognition.

336. Psychology of Personality. PSY 100. (3)s.

Personality as a concept and as a field of study; specimen theories of personality such as dynamic theories, trait theories, and learning theories of personality.

340. Introduction to Community Psychology. PSY 309 or 336, or consent of instructor. (3)s.

Community psychology is an application-oriented discipline in which knowledge of psychology and the social sciences is applied to the problems of individuals living in and dealing with social systems. Alternatives to traditional models for conceptualizing disorder and providing service; levels of prevention of psychological dysfunction; consultation; planned change; mental health workers and their training; assessment and program evaluation in community settings. Social criticism and the role of values in human services.

345. Developmental Psychology. PSY 100, 201; or consent of instructor. (3)s.

Social-emotional, cognitive and physical aspects of development across the lifespan. Classic and current theory presented and debated, scientific and popular readings critiqued. Research methodology emphasized in assignments, including an interview to be conducted with at least. two individuals at different levels of development For students intending to complete psychology major or minor.

346. Advanced Topics in Developmental Psychology. PSY 100, 201; consent of instructor. (1-3)s.

Developmental theory and research on topics chosen by professor and/or students. (Past topics include father's role in child development, child abuse prevention, socialization of empathy and prosocial behavior.) Students review current scholarly articles and interview at least two individuals at different developmental levels. PSY 237 and 346 fulfill the developmental psychology requirement for psychology majors and minors. Open to PSY 345 students with consent of instructor.

347. Psychology of Aging. PSY 100 and, either PSY 309 or 345, or consent of instructor. (3)s.

Developmental aspects of human behavior in the later years of life. Cognitive and intellectual development; perceptual factors and their environmental design implications; social and personality development.

350. Child Psychopathology. PSY 100, 309, 345; or consent of instructor. (3)s.

Theoretical and empirical aspects of assessment, diagnosis and treatment of disorders prevalent in childhood and adolescence, within their developmental context. Required readings of current psychological literature.

351. Techniques of Behavior Change. PSY 201 with a grade of C- (1.7) or better, PSY 301. (4)n*.

Principles of behavior change based upon learning theories. Associative learning techniques and their applications in both clinical and field settings. *Applicable to the general education requirement in the natural sciences, except by some students whose concentration is in psychology.

360. Internship in Clinical/Community Psychology. Admission to the Bachelor of Science concentration in Clinical/Community Psychology. (3).

Internship in selected agencies oriented toward human services, under supervision of agency personnel and faculty. Periodic seminars. *Graded Pass/Fail/Y*.

362. Psychology of Language. PSY 100, a 300-level psychology course; or consent of instructor. (3)s.

Examination of the role of cognitive processes in comprehension and production of language. Topics may include the role of prior knowledge, word recognition, syntactic analysis, the structure of language, inference, brain and language, language acquisition, language disorders, and computer models of language.

363. Psychology of Gender. *One of: PSY 237, 326, 336, 345.* (3)s.

Psychological, sociological, and cultural factors influencing the development of gender roles and gender differences in cognition, social behavior, personality and motivation. Family and work conflicts and changing gender roles in contemporary American society; similarities of both sexes in the these areas. *Also listed as WGS 363*.

375. Health Psychology. PSY 309 or 336, or consent of instructor. (3)s.

Psychological influence on health, physical disease and disability, the medical environment, diagnosis and treatment, research problems and findings.

380. Physiological Psychology. PSY 201 with a grade of C-(1.7) or better, PSY 301. (4)n*.

Biological basis of psychology. How behavior is affected by the biological activities of the behaving organism, with special focus on the neuroendocrine control of behavior. Lecture and laboratory. *Applicable to the general education requirement in the natural sciences, except by some students whose concentration is in psychology.

381. Neuropsychology. PSY 380 or BIO 332 or consent of instructor. (3).

Introduction to psychological theories of brain and behavior relationships. Emphasis on structures and functions; clinical syndromes and disorders.

382. Introduction to Clinical Psychology. *At least junior standing, PSY 309 and 336; or consent of instructor.* (3)s.

Theory and practice of principles of clinical psychology including the clinical interview, use of diagnostic tests, and techniques of clinical intervention. Four hours combined classroom and practicum per week.

384. Experimental Approaches to Cognition. *PSY 201 with a grade of C- (1.7) or better, PSY 301. (4)n*.*

Psychological processes involved in human thought and decision making. Emphasis on the broad range of experimental techniques used to investigate these processes. Lecture and laboratory. *Applicable to the general education requirement in the natural sciences, except by some students whose concentration is in psychology.

386. Sensation and Perception. PSY 201 with a grade of C-(1.7) or better, PSY 301. (4)n*.

Effect of physical stimulation on experience and behavior. Receptor physiology and the neurological, sensory and perceptual characteristics of the visual system. *Applicable to the general education requirement in the natural sciences, except by some students whose concentration is in psychology.

389. Systems of Psychotherapy. At least junior standing, PSY 336; or consent of instructor. (3)s.

Systematic survey of alternative theories of psychotherapy. Synthesis both within each system and across the various systems of psychotherapy to provide an integrative eelectic framework. Each system's theory of personality, psychopathology, and therapeutic process.

- **391.** Directed Reading in Psychology. Consent of instructor. (1-3)s.
- **392.** Psychology Seminar. At least junior standing and consent of instructor. (3)s.

Reading, discussions, oral and written reports on selected topics from current literature in psychology.

394. Individual Research. Consent of instructor. (1-5)s.

Research study by qualified students under the supervision of the instructor. Problems may involve search of original literature, experimentation, and analysis of results. At least junior standing recommended. Graded ABCDE/Y.

395. Cognitive Science Project. PSY 201, 301, 335; a laboratory course in psychology; at least junior standing; or consent of instructor. (1-5)s.

Research study in cognitive science by qualified students under supervision of the instructor. Problems may involve search of original literature, computer modeling, experimentation, and analysis of results. *Graded ABCDE/Y*.

396. Clinical/Community Psychology Seminar. Admission to the Bachelor of Science concentration in Clinical/Community Psychology. (1).

Seminar of flexible format, for presentation of guest

speakers, specialty skills, and related topics of interest. Graded Pass/Fail.

397. Clinical/Community Psychology Thesis I. PSY 396. (1).

Initiation of major, individually supervised project.

398. Clinical/Community Psychology Thesis II. Admission to the Bachelor of Science concentration in Clinical/Community Psychology and PSY 397. (3).

Completion of major, individually supervised project, to be publicly presented. *Graded ABCDE/Y*.

427. Personnel Selection and Evaluation. *PSY 100; a course in statistics; consent of instructor. (3)s.*

Lecture/seminar. Prediction and evaluation of job performance (with emphasis on reliability and validity), job analysis and criteria development, varieties of selection procedures, including aptitude and achievement measures, personality and motivation measures, interviews and application forms. Includes effect of government regulation and societal values on selection and evaluation. *Also listed as HCR/PUB 427*.

494. Research Project for Psychology Honors. PSY 201, 301; consent of instructor; admission to the Psychology Honors Program; consent of Psychology honors program advisor. (3).

Research project undertaken to prepare the student for the off-campus part of the Psychology Honors Program.

495. Honors Thesis I. Consent of Department Chair. Open only to Honors Program students in psychology. (4).

Credit and grade for PSY 495 is not given until successful completion of PSY 496. Also listed as HON 495. Graded ABCDE/Y.

496. Honors Thesis II. Prior or concurrent election of PSY 495 and consent of Department Chair. Open only to Honors Program students in psychology. (4).

Also listed as HON 496. Graded ABCDE/Y.

Graduate Courses in Psychology

500. Growth and Development of Young Children. *Graduate standing.* (3).

Overview of theory and research in developmental psychology, especially as it applies to the education of young children. Focus on children's cognitive and social-emotional development, and areas of overlap that are particularly relevant to the school setting (achievement motivation, cooperation and competition). Family relationships and home-school relations included.

527. Personnel Selection and Evaluation. *Graduate standing; PSY 100 and a course in statistics. (3).*

See PSY 427 for description. Not open to students with credit for HCR/PSY/PUB 427. Also listed as HCR 527 and PUB 527.

Public Administration (PUB)

310 David M. French Hall (810) 762-3470

Director: Albert C. Price

Principal Secretary: Suzanne Shivnen

Faculty: William Laverty (Political Science), Kristine Mulhorn (Health Care), Tevfik Nas (Economics), Mark Perry (Economics), Albert Price (Political Science), Stephen Rockwell (Political Science), Kathryn Schellenberg (Sociology), Suzanne Selig (Health Care)

Undergraduate Programs

The Bachelor of Arts in Public Administration is an interdisciplinary degree designed to provide students with the conceptual knowledge, analytic and quantitative skills, and practical experience relevant for entry level positions in public and nonprofit organizations.

The interdisciplinary approach of the program is a response to the challenges of the public and nonprofit sector at federal, state and local levels, which require both administrative skill and sensitivity to the currents of social and political change. The program aims to develop a multidimensional understanding of the role of public institutions in meeting the needs of a dynamic and changing society. The program is intended to develop generalists who possess substantive skills of administration and who understand the complexity of social problems, the responsibilities of public institutions, and the impact of those institutions on the everyday activities of the citizenry.

Program Mission and Assessment

The mission of the undergraduate program in Public Administration is to provide students with conceptual knowledge, analytical skills and practical experience relevant for entry level administrative positions in public and nonprofit organizations. The Program participates in the University-wide effort to assess its academic programs. Information on assessment plans, including goals, methods and outcomes is available at http://assessment.umflint.edu.

Programs in Public Administration

Three undergraduate concentration programs in public administration are available, all leading to the Bachelor of Arts degree: the General Program in Public Administration, the Honors Program in Public Administration, and the 2 + 2 Program in Public Administration. A certification program in Environmental Hazards/Risk Management is also offered. A Minor in Public Administration is also available.

General Program in Public Administration

Prerequisites. A course in each of the following: American political institutions, introductory microeconomics, and statistics. Introductory coursework in accounting is strongly recommended and should be considered mandatory for those whose interest is in the area of budgeting and finance. Students should take the prerequisites before electing upper division courses in the concentration.

Requirements.

- A. All requirements of the College of Arts and Sciences Bachelor of Arts degree, including general education requirements and a foreign language.
- B. POL/PUB 301 (3 credits).
- C. Environment of Administration (15 credits). POL/PUB 309 or 316 (election of both strongly recommended); remaining credits from: AFA/HIS 334 or AFA/SOC 373; ECN 372; GEO 342; POL 311 or 312; PUB 400; SOC 340, 470.
- D. Administrative Functions (12 credits). From HCR 421; POL/WGS 331/SOC 362; PSY 334; PUB 425, 440; PUB 450/EDL 410; PUB/HCR 319, 418, 424; PUB/POL 420; PUB/SOC 361, 460.
- E. Analytical Methods (9-10 credits). From CSC 121, 122 or 274; ECN 469; PUB 423; PUB/ECN 470, 480; PUB/GEO/RPL 476; PUB/HCR 403; PUB/HCR/PSY 427; SOC 210.
- F. Practicum (3-6 credits). PUB/POL 390 or ECN 395.
- G. Electives (3-6 credits). To be selected in consultation with the advisor.

Honors Program in Public Administration

Prerequisites. A course in each of the following: American political institutions, introductory microeconomics, and statistics. Introductory coursework in accounting is strongly recommended and is mandatory for those whose interest lies in the are of budgeting and finance. Students must take the prerequisites before electing upper division courses in the concentration.

Requirements.

- A. All requirements of the General Program in Public Administration, to include SOC 210.
- B. POL 392 (normally taken during the junior year) and POL 393 (normally taken the second semester of the junior year).
- C. PUB/HON 495 and 496 (4 each). Credit and grade for PUB 495 is not given until completion of PUB 496.
- D. All requirements of the University Honors Scholar Program.

Prospective Honors Program students are urged to consult with the Public Administration Program Director as early as possible for advice in planning their program prerequisites as well as acceptance into the Honors Program in Public Administration.

2 + 2 Program in Public Administration

The 2 + 2 Program in Public Administration leads to a Bachelor of Arts degree in public administration for graduates of two-year programs in specified areas of public service. These areas include community education directors' curriculum, court reporting, criminal justice, fire protection, food service management, gerontology, paralegal technology, recreation leadership, and social work technician.

Requirements for Admission

Completion of an associate's degree from a two-year college in which at least 16 transferable semester hour credits are applicable to the University of Michigan-Flint general education requirements.

Transfer of Credit

- A. May not exceed 62 semester credits earned in an Associate's degree program approved by the University of Michigan-Flint public administration faculty. Specifically approved professional courses not normally transferable into a liberal arts program may be included in the 62 hours of transfer credit. A list of these courses is available from the Admissions and Recruitment Office.
- B. Is permitted only for courses in which the final grade earned was at least a C.

Degree Requirements. Completion of all requirements for the General Program in Public Administration, with the exception that the practicum is waived for students who have completed a practicum as part of their associate's degree.

Certification in Environmental Hazards/Risk Management

See Earth and Resource Science in this Catalog.

Minor in Public Administration

Prerequisites. A course in American political institutions and a course in statistics. In addition, a number of optional courses have specific prerequisites.

Requirements. A Minor in Public Administration consists of 21 credits distributed as follows:

- A. Environment of Administration (9 credits).
 PUB/POL 309 or 316; six additional credits from List A in the General Program in Public Administration.
- B. Administrative Functions (6 credits).
 From List C in the General Program in Public Administration.
- C. Analytical Methods (3 credits). From List B in the General Program in Public Administration.
- D. Internship in Public Administration (3 credits). From internships PUB/POL 390, or ECN 395.

Graduate Programs

A Master of Public Administration (MPA) program in available. See Graduate Study.

Courses in Public Administration

301. Research Seminar in Politics and Policy. Junior standing; POL 120, 190; at least one 300-level POL course; or consent of instructor. (3)s.

Development and completion of a research project on politics and public affairs. Critical reading and writing skills, constructing research problems and questions, the identification of relevant source materials, assessment of the analytic strategies and methods used in systematic research, and the development of appropriate research designs and strategies. *Also listed as POL 301*.

309. The Political Environment of Public Administration. A course in political science or consent of instructor. (3)s.

Political components of modern public administration. Politics of federalism, bureaucracy, budgeting, planning, research, evaluation and implementation. Viewing public administration as politics. *Also listed as POL 309*.

316. Introduction to Public Administration. POL 120 or consent of instructor. (3)s.

Critical examination of basic concepts of public administration and of alternate approaches to public organization. *Also listed as POL 316*.

319. Public Personnel Administration. At least junior standing. (3)s.

Selection and management of personnel in public organizations; evolution and development of merit systems. Effects of municipal unionization and collective bargaining on personnel relations in the public sector; accountability and productivity of public employees. *Also listed as HCR 319*.

342. (441). The Welfare State in Comparative Perspective.

One from: POL 100, SOC 100, ANT 100, HIS 113, 211, 221, WGS 200; or consent of instructor. (3).

Historical and contemporary social policy in the U.S. and Europe. Historical development of welfare states, different types of welfare regimes across countries; relations between gender, race and social policy; possible futures for social provision. Specific atention to areas such as unemployment and training policy; family policy; health care policy; old age pensions. *Also listed as POL 342*.

361. Work and Occupations. SOC 100. (3)s.

Examination of sociological dimensions of the division of labor in contemporary society. Topics may include: occupational and labor market structures, organizational context of work, the employment relationship, job satisfaction, labor-management relations, implications of technological change and globalization, and effects of gender, age and race/ethnicity on employment. Also listed as SOC 361.

390. Internship in Public Agencies and Community Organizations. Consent of instructor. (3-6)s.

Students intern in selected public agencies under the supervision of agency personnel and faculty. On-the-job experience combined with seminars and individual consultations. May be elected for three to six credits, of which three are applicable to the political science concentration. Enrollment generally limited to juniors and seniors. Also listed as POL 390. Graded Pass/Fail/Y.

391. Directed Reading in Public Administration. At least six credits in public administration, and consent of instructor. (1-3).

Assigned study of topics in public administration outside of the scope of regular course work. **400.** Ethical Issues in Public Administration. At least junior standing; a course in public administration; or consent of instructor. (3)s.

Examination of ethical issues in administrative decision making and administrative actions, with emphasis on administrative processes in a democratic political system.

403. Evaluation of Services and Programs. At least junior standing; and a course in statistics. (3)s.

Formulation, implementation and evaluation of the programs of public agencies. Role and conduct of research in the program process; techniques of effective evaluation and report presentation. *Also listed as HCR 403*.

410. Healthcare Strategic Planning. HCR 300, 376; or consent of instructor. (3).

Theory, skills and applications of health planning. Health planning in the public sector and strategic planning in the private sector. Health insurance reform, stakeholder analysis, conditions, quality management, and survival strategies. *Also listed as HCR 410.*

418. Budgeting in Public and Nonprofit Organizations. At least junior standing. (3)s.

Budgetary process in the public sector and nonprofit organizations, with emphasis on application to policy problems. Budgeting as a management and policy-making tool. Planning-programming-budgeting system and costbenefit analysis. *Also listed as HCR 418*.

420. Law and Administrative Processes. At least junior standing. (3)s.

Legal foundations of public administration. Development of regulatory agencies, right to a hearing, delegation of power, judicial review, rulemaking and adjudication, efforts to reform administrative regulation, zoning, and land use planning. Also listed as POL 420.

- [421. Entitlement Program Law and Policy. At least junior standing. (3).]
- **422.** Environmental Law and Public Policy. POL 120 or consent of instructor. (3)s.

Political and administrative aspects of environmental regulation, including major legislation, administrative regulations, and litigation involving environmental issues. Actions of the Environmental Protection Agency (EPA) and the Occupational Safety and Health Administration (OSHA) involving the internal environment of the workplace. *Also listed as POL 422*.

423. Accounting in Government and Non-Profit Organizations. BUS 201 or consent of instructor. (3).

Accounting practices of government and not-for-profit entities. Accounting cycle; government accounting; budget process; principles of fund accounting; accounting for educational institutions, health care and welfare organizations; use of accounting data.

424. Employment, Law, and Public Policy. At least junior standing. (3)s.

Federal and state statutes and Supreme Court decisions relative to employee rights, civil rights and equal employment opportunity examined from the perspective of employers, employees and public policy. Progressive discipline, wrongful discharge, sexual harassment, discrimination, and EEO compliance for supervisors and managers. Also listed as HCR 424.

425. Legal and Regulatory Issues in Nonprofit Administration. At least junior standing. (3)s.

Analysis of principal legal issues affecting nonprofit organizations, including liability, contracts, personnel procedures, labor-management relations, incorporation and bylaws, tax exemption and reporting requirements, and political advocacy. Examination of legal issues in relations with federal, state and local government and in negotiation of government contracts.

426. Staffing Public Sector Organizations. At least junior standing. (3).

Staffing as a process and function with a prominent role in a public sector organization's Human Resource Management (HRM) system. Description and prescription of various staffing activities such as job analysis, recruitment, interviewing, assessment centers, planning, selection, performance appraisal, discipline conducted in regulated atmosphere.

427. Personnel Selection and Evaluation. *PSY 100; a course in statistics; consent of instructor. (3)s.*

Lecture/seminar. Basic concepts of prediction and evaluation of job performance (with emphasis on reliability and validity), job analysis and criteria development, varieties of selection procedures, including aptitude and achievement measures, personality and motivation measures, interviews and application forms. Government regulation and societal values on selection and evaluation. Also listed as PSY 427 and HCR 427.

428. Criminal Justice and the Constitution. POL 120 or consent of instructor. (3)s.

Constitutional questions involving the process of law and the procedural rights of the accused. Court decisions related to searches and seizures, wire-tapping and electronic eavesdropping, the law of arrest, police interrogations and confessions, right to counsel, double jeopardy. Students deliver oral arguments and prepare briefs of pending and simulated court cases. *Also listed as POL 428*.

430. The Administration of Justice. At least junior standing, a course in American government. (3)s.

Criminal justice as public administration. Policy outputs of the major actors of criminal justice including police, prosecutors, judges, defense attorneys, parole boards, and the legislature. Organization theory, bureaucratic decision-making, political environment, and budgetary constraints. *Also listed as POL 430*.

432. Policing Contemporary Society. CRJ 185. (3)s.

Administrative and operational aspects of modern policing such as organization and development of police, recruitment practices, socialization processes, and community relations (including community policing). Political and economic nature

of policing as the foundation for critical review of policy and societal issues related to policing. Also listed as CRJ 432.

433. Incarceration, Community Corrections, and Public **Policy.** At least junior standing. (3)s.

Review of law, policy, administrative practices, value assumptions and expectations regarding corrections; examination or prison and jail policies and their impact; examination and assessment of alternatives to incarceration.

434. Administration of Trial Courts. At least junior standing.

Concepts and issues in administration of trial courts. Examination of performance standards, judicial independence, court financing, court reform, access to justice and other issues.

438. Multicultural Education: Concepts and Strategies. At least junior standing. (3).

Designed to prepare certified and pre-certified teachers in multicultural education. Emphasis on design, development, and practical implementation of teaching strategies, theoretical constructs, and curriculum. Also listed as EDE 432. Graded ABCD>N.

440. Volunteerism and the Independent Sector. At least junior standing. (3)s.

Origins of nonprofit organizations; their social, political, economic, cultural and ideological roles in American society. Major types of nonprofit organizations and their characteristics; current trends in the independent sector.

446. Formal Organizations. Background in social research and statistical methods and social theory recommended. (3).

Introduction to theories, processes and problems of organizations, their impact on society, relationships between organizations and individuals. Classical and contemporary perspectives on issues related to organization design, control, change and effectiveness. Also listed as SOC 446.

449. Community Development. At least junior standing. (3)s.

Examination of the role and structure of local community development efforts. Community Based Development Organizations (CBDO) examined with special emphasis on housing. Administration of Community Development Block Grants; intergovernmental aspects of community development including Federal/State/County linkages.

450. Leadership Theory and Practice. At least junior standing. (3).

Theory and practice related to supervision and management functions in public administration; attention to private sector management practices. Traditional and innovative group leadership and motivation techniques. Relationships with superiors, subordinates, peers, clients, customers. Computerassisted and group practice of skills which induce rather than coerce productivity, including skills of conflict resolution and negotiation. Highly clinical. Not open to students with credit for EDE 440 (EDU 400). Also listed as EDL 410.

472. Water Resource Policy and Regulation. Junior standing and completion of natural science distribution requirement in GEO, ENV, BIO or CHM. (3).

Federal and state laws pertaining to water resources and their regulation. Major areas of legislation, administrative policies and agency responsibilities. Relationship to land use, development, hazardous waste, groundwater, surface water, pollution abatement and polluter responsibilities. Also listed as RPL 472.

475. Cost-Benefit Analysis. ECN 202 or consent of instructor.

Comprehensive, theoretical overview of cost-benefit analysis. Emphasis on theoretical framework for identification and assessment of costs and benefits from society's perspective. Welfare economics and microeconomic foundation of cost benefit analysis; analytical tools and concepts to identify, measure, and compare all possible allocational outcomes in project evaluation; analysis of distributional effects; project evaluation under risk and uncertainty. Also listed as ECN 475.

476. Environmental Planning. GEO 203, 331; or consent of instructor. (3).

Environmental analysis for landscape planning and design. Data generation for land use plans, environmental inventories, impact statements. Sources of data, mapping techniques, graphic formatting, dissemination methods. Also listed as GEO 476 and RPL 476.

477. Financial Management in Health Care. HCR 376 or consent of instructor. (3).

Financial workings of hospitals, including third party payor reimbursement methods and requirements; budgeting; working capital analysis; analysis of financial positions; capital requirements and budgeting; external reporting requirements. Also listed as HCR 477

479. Economics of Health Care. ECN 202; HCR 300; or consent of instructor. (3)s.

Economic analysis of the health care industry and governmental policies in health care. Use of economic tools to determine the probable effects of various proposals on the pattern of health care produced and on the allocation of resources both within the industry and in the economy generally. Also listed as ECN 479 and HCR 479.

480. Quantitative Methods for Public Administration. At least junior standing. (3).

Application of statistical techniques to problem-solving. Forecasting and timeseries; regression; correlation; variance; cost-benefit analysis. Computer methods used in solving problems of public policy and of health care administration. Also listed as ECN 480.

482. Schools and Communities. At least junior standing. (3).

The role of schools in building community. Emphasis on interplay between schools and community agencies in provision of educational and social services to youth, parents and community members. Concrete programs and policies for connecting schools and communities. Also listed as EDE 402 and SWR 402.

485. Environmental Emergency Management. GEO 285 or consent of instructor. $(\bar{3})$.

Planning and management for emergencies such as chemical releases, hazardous waste mishaps, earthquakes, hurricanes, floods and tornadoes. Disaster relief, planning, response programs and remediation at local, regional, national and international levels. *Also listed as RPL 485*.

487. Legal Issues In Health Care. HCR 300 or consent of instructor. (3)s.

Legal issues, restraints, and problems arising from the organization and delivery of health care services. Liability and malpractice; definitions of death; informed consent; and health care personnel in court. Also listed as HCR 487.

495. Honors Thesis I. *Consent of Program Chair. Only open to Honors Program students in Public Administration.* (4).

Credit and grade for PUB 495 is not given until successful completion of PUB 496. Also listed as HON 495. Graded ABCDE/Y.

496. Honors Thesis II. Prior or concurrent election of PUB 495 and consent of Program Chair. Only open to Honors Program students in Public Administration. (4).

Also listed as HON 496. Graded ABCDE/Y.

Religious Studies

Advisors: Drs. Judith Kollmann (English), L. Nathan Oaklander (Philosophy), Simon Cushing (Philosophy), and Charles Thomas (Sociology).

Courses in religious studies are designed to contribute to a liberal education, one that emphasizes the ability to think independently and critically, to express oneself effectively in writing and speaking, to make careful judgments on the basis of explicit goals and values, and to understand Western traditions and their relation to other traditions.

Programs in Religious Studies

A Minor in Religious Studies is available.

Minor in Religious Studies

The interdisciplinary minor in religious studies offers courses that explore some of the major western and non-western religious traditions in terms of their major historical movements and figures, dominant conceptual concerns, and central ethical and social implications. The complexity of religious belief is approached comparatively, from sociological, historical, literary and philosophical perspectives, in terms of traditional and contemporary perspectives.

A minor in religious studies is selected by students who see the study of religion as a doorway to understanding human nature and history, and hence an appropriate focus for a liberal education. Other students choose the minor as a background and preparation for a career, generally in fields such as social work, education, youth work, law, or seminary.

Requirements. Twenty-one credits, including at least nine from each of the following groups:

- A. AFA/ANT 369; AFA/ANT/PHL 205; ANT 355; ENG/CPL 205, 206; PHL 165, 251; SOC 458.
- B. AFA 357; AFA 358/HIS 368; HIS 215, 216, 283, 387; PHL 341, 350, 376.

In consultation with a member of the program faculty, and by arrangement with the instructor, a directed readings course may be taken in any of the above disciplines or in Psychology. The prerequisite for such a directed readings course is one course from requirement A above. Directed readings courses may be taken for a maximum of 3 credits, and these credits will apply only to requirement B.

Science (SCI)

Please refer to *Physics* for departmental contact information.

This area of offerings is designed to house interdisciplinary courses in science (biology, chemistry, earth science, and physics).

Courses in Science (SCI)

125. Scientific Inquiry I. Prior or concurrent election of MTH 112 or 115. (4)n.

A discovery-based interdisciplinary course which integrates concepts from biology, chemistry, earth science, and physics. Presented in a laboratory setting. *Designed for elementary education concentrators*.

126. Scientific Inquiry II. Prior or concurrent election of MTH 112 or 115. (4)n.

A discovery-based interdisciplinary course which focuses on energy, integrating concepts from biology, chemistry, earth science, and physics. Presented in a laboratory setting. Designed for elementary education concentrators.

Social Sciences

The program in social sciences is designed to introduce the student to the study of people and their economic, social, and political institutions. These are approached through the data, theories and methods that characterize the disciplines of geography, history, political science, psychology and sociology. Intensive work in at least two of these disciplines gives the student a broad view of the social sciences as a whole while allowing for preparation in areas of special interest.

Programs in Social Sciences

One concentration program is offered, leading to the Bachelor of Arts degree: the Joint Program in Social Sciences.

Joint Program in the Social Sciences

Faculty Advisors: Advisors in the department of major emphasis.

Requirements.

- A. At least 45 credits in the social sciences distributed as follows:
 - At least 21 credits in one discipline selected as the area of special emphasis (history, political science, psychology or sociology). For students emphasizing psychology, 24 credits are required and must include the following: a. PSY 100 or 101, PSY 201.
 - b. One from: PSY 306, 310, 327, 351, 380, 384, 386.
 - c. Three from: PSY 309, 326, 328, 336, 345.

- 2. The remaining credits in two other disciplines (these may include the geography courses which are applicable to the social sciences general education requirement) approved by the advisor, with a minimum of nine credits in each.
- 3. No more than two senior seminars.
- B. A grade point average of 2.0 or better within the concentration, based on the 45 credits of social science required.
- C. All requirements of the College of Arts and Sciences Bachelor of Arts degree, including general education requirements and a foreign language.

Social Studies

The program in Social Studies is the integrated study of the social sciences which prepares students to teach the study of people and their economic, social, and political institutions in their historical and geographic context. Social Studies provides a coordinated, systematic study drawing upon the disciplines of economics, geography, history, and political science, as well as other social sciences, and appropriate content from the humanities, mathematics, and natural sciences. The primary purpose of Social Studies is to help people develop the ability to make informed and reasoned decisions for the public good as citizens of a culturally diverse, democratic society in an interdependent world.

Programs in Social Studies

One concentration program is offered, leading to the Bachelor of Arts degree: the Teacher's Certificate Program in Social Studies.

For current program requirements, contact the faculty advisor.

Teacher's Certificate Program

Faculty Advisor: Dr. Robertson (History).

Requirements.

- A. Thirty-nine credits, to include 12 credits in one of the disciplines below and 9 credits in each of the other three:
 - 1. Economics. ECN 201, 202; additional courses in economics at or above 300-level selected in consultation with an Economics Department advisor.
 - 2. Geography. GEO/INT 116; additional courses selected from GEO 115, 216, 285.
 - 3. History. HIS 220, 221; additional courses in non-U.S. history.
 - 4. Political Science. POL 120, 190; additional courses in political science (POL 230, 311, 345, 380 recommended).
- B. All requirements of the College of Arts and Sciences Bachelor of Arts degree, including general education requirements and a foreign language.

Prospective candidates should also study the sections entitled "General Requirements for Teacher Certification" and "Secondary Education Teacher's Certificate Programs" printed in the Department of Education section of this Catalog.

Sociology (SOC)

522 David M. French Hall (810) 762-3340

Chair: Beverley Smith

Principal Secretary: Lynne McTiernan

Faculty Advisors: Associate Professors Roy Barnes, Larry W. Koch, Joan Mars, Kathryn Schellenberg, Charles B. Thomas, Jr.; Assistant Professors Heather Laube, Kenneth Litwin, Diane Schaefer, Instructor cum Assistant Professor Rudy Hernandez Professors Emeriti: Thomas L. Coffey, Wilfred G. Marston

Sociology is the study of how social life is organized. Specifically, sociology examines the basic structure and functions of human social groups, communities, and societies. Sociologists attempt to identify the forces which hold groups together as well as those which act to weaken them. As a portion of this study, sociologists focus on the basic concepts of social norms and roles as they operate to control and shape human behavior.

Areas of sociological study and expertise are quite varied. Substantive areas in which sociologists specialize include sociology of the family, race and ethnic relations, sociology of religion, social stratification, urban sociology, rural sociology, collective behavior, sociology of knowledge, social gerontology, sociology of medicine, sociology of law, deviant behavior, criminology, population and social ecology, and work and formal organizations.

Department Mission and Program Assessment

The programs of Sociology and Anthropology have a common goal of introducing students to alternative perspectives of their world. Whether through a reexamination of their own society or other cultures throughout the world, the faculty of the Sociology and Anthropology programs strive to develop students' abilities for critical thinking and analytical reasoning. The Department participates in the University-wide effort to assess its academic programs. Information on assessment plans, including goals, methods and outcomes is available at http://assessment.umflint.edu.

Programs in Sociology

Three concentration programs are offered, all leading to the Bachelor of Arts degree: the General Program in Sociology, the Joint Program in Social Sciences with an emphasis on sociology (see "Social Sciences"), and the Honors Program in Sociology. In addition, a Minor in Sociology is also available.

General Program in Sociology

Requirements.

- A. Core requirements. SOC 100, 210, 215, 302 or 303, 499.
- B. Eighteen additional credits in sociology.
- C. Nine credits in upper division courses, to be chosen in consultation with the advisor, from the cognate fields of anthropology, economics, history, political science, psychology, and/or social work.
- D. All requirements of the College of Arts and Sciences

Bachelor of Arts degree, including general education requirements and a foreign language.

Honors Program in Sociology

Faculty Advisor: Dr. Barnes

Requirements.

- A. All requirements of the General Program in Sociology. SOC 210 is ordinarily elected in the sophomore year.
- B. Statistics. SOC 215, PSY 301, or an equivalent approved by the advisor, recommended for the sophomore year.
- C. SOC 495 and 496, Honors Thesis I and II (4 credits each).
- D. All requirements of the University Honors Scholar Program.

Prospective Honors Program students are urged to acquaint themselves as early as possible with the requirements above as well as with the particular procedures for acceptance into the Sociology Department's Honors Program. See the departmental honors advisor or the Honors Program Director for this information.

Minor in Sociology

Requirements.

- A. Core requirements. SOC 100, 210 or 215, 302 or 303 (9 credits).
- B. Twelve additional credits in sociology.

Courses in Sociology (SOC)

100. Introduction to Sociology. (3)s.

Study of human groups, with special attention to analysis of contemporary American society. *Graded ABCDD->N*.

180. Social Issues. (3)s.

Selected issues which challenge today's world at various levels of social complexity. Delinquency and crime, segregation, substance abuse, problems of aging, unemployment, poverty, impact of high technology, and international conflict, from a sociological perspective as to their trends, consequences, and commonly proposed solutions. *Graded ABCDD->N*.

210. Introduction to Social Research. SOC 100 or ANT/INT 100. (3)s.

Social research and techniques used in research. Elements of research design, measurement, sampling, interviewing, and use of computers in data analysis.

215. General Statistics. One college course in mathematics or consent of instructor. Some preparation in algebra desirable but not required. (3).

Techniques and interpretation of statistical measures.

220. Social Psychology. SOC 100 or PSY 100. (3)s.

Interaction among individuals in social systems. Concepts of role, attitude, group membership, and culture as determinants of individual actions. Problems of prejudice, mass phenomena, and group efficiency.

265. Caribbean Society and Culture. (3).

Introduction to social, political, economic and cultural life of the Caribbean, focusing on the English-speaking Caribbean while also addressing important lessons in the experiences of peoples from the wider Caribbean. Social-scientific disciplinary focus combining historical and thematic issues, with particular attention to problems of colonialism, race, inequality, and efforts towards democracy. *Also listed as AFA 265 and ANT 265*.

270. Race and Ethnic Relations. SOC 100 or ANT 100. (3)s.

Implications of racial differences, factors affecting prejudice and discrimination, structural aspects of group conflicts, and possibilities of change in American and other societies. *Also listed as AFA 270.*

302. History of Social Thought. SOC 100 or ANT 100. (3)s.

Development of sociological-anthropological theory from its origins to the present. Selected major theorists; readings chosen from original works. *Also listed as ANT 302*.

303. Contemporary Social Theory. SOC 100 or ANT 100. (3)s.

Critical review of classical and contemporary social theory; problems concerning nature of sociological and anthropological explanations of society and inequality; significance of theoretical concepts in relationship to practice. Survey and comparison of recently articulated theoretical orientations. *Also listed as ANT 303*.

316. Philosophy of Sociology. A course in philosophy and a course in sociology; junior standing; or consent of instructor. (3)h.

Philosophical issues in sociology. Nature of sociology, its goals and methodology; philosophical presuppositions and issues behind some of the controversies in sociological theory. Philosophers and movements that have influenced sociology; some important sociological theories. *Also listed as PHL 314*.

[320. Sociology of Small Groups. SOC 100. (3)s.]

323. Statistical Packages. A course or approved background in probability or statistics; admission to the professional program in physical therapy or consent of instructor. (2).

Introduction to collection and interpretation of data utilizing computer technology. Value and utility of statistical tools and computer technology as a technical adjunct for critical inquiry and decision making in research and practice. Lecture and laboratory. *Also listed as BIO 323*.

325. Culture and Personality. ANT/INT 100 or PSY 100 or SOC 100. (3)s.

Cross-cultural examination of the construction of personhood and relationships between individuals and culture. Critique of psychological interpretations in anthropological texts and of universalizing tendencies in the

field of psychology; the basic Freudian model in contrast with models of self in African, Asian, and Native American cultures. Also listed as ANT/WGS 325.

330. Population Problems. SOC 100. (3)s.

Social causes and consequences of population structure and change. How variations in fertility, mortality and migration arise, and how they affect society. Illustrations from the United States and a variety of developed and less-developed countries.

340. Urban Sociology. SOC 100. (3)s.

Urban areas from sociological and ecological perspectives. Impact of population and spatial characteristics on subcultures, social interaction, and lifestyle. Consideration of prospects for altering the nature of urban life.

354. Sociology of Families. SOC 100. (3)s.

The family as a social institution: its place in the social structure; its internal dynamics. Comparative analysis of evolution of modern family patterns in the United States and other societies. Also listed as WGS 354.

359. The Black Family. SOC 100. (3)s.

Sociological and social-psychological analysis of the Black family in America. Impact of changes in race relations and of urbanization on the Black family. Assessment of various stereotypes existing in mass media and in sociological and psychological literatures. Also listed as AFA 359 and WGS 359.

361. Work and Occupations. SOC 100. (3)s.

Examination of sociological dimensions of the division of labor in contemporary society. Topics may include: occupational and labor market structures, organizational context of work, the employment relationship, job satisfaction, labor-management relations, implications of technological change and globalization, and effects of gender, age and race/ethnicity on employment. Also listed as PUB 361.

362. Women and Work. POL 120 or SOC 100 or WGS 200; or consent of instructor. (3)s.

Women's paid employment and job segregation by sex: relation of women's paid work to women's family work, nature of women's jobs and occupations, and a variety of state policies that influence women's employment (e.g., anti-discrimination law, maternity and parental leave.) White women and women of color in the advanced capitalist economy of the United States. Also listed as POL 331 and WGS 331.

365. Industrial Sociology. SOC 100. (3)s.

Relations among workers, unions and management in cooperation and conflict. Social significance of industrialization of factory and farm. Changing job structure and labor force. Possible implications of automation. Unions and management as bureaucracies.

368. Sociology of Health and Illness. SOC 100. (3)s.

Sociological view of health, illness, and the delivery of care.

Social and social-psychological factors involved in being ill; social relationships and organizations associated with medical treatment; roles of providers and patients; national health care systems. Also listed as HCR 368.

373. Institutional Racism. *SOC 100 or consent of instructor.* (3)s.

Racism within the basic institutions of American society. Emphasis on the way institutional racism affects members of various ethnic minorities. Also listed as AFA 373.

375. Social and Cultural Change. ANT 100 or SOC 100. (3)s.

Institutions and social change. Emphasis on theories, ideologies, social movements and revolutions. Study of colonialism, economic crisis, peasant struggles, nationalism, indigenous rights, independence movements, and struggles over development and underdevelopment. Also listed as ANT 375 and INT 375.

376. Sex, Work, and International Capital. ANT 100 or SOC 100 or consent of instructor. (3).

Analysis of significance of women's labor to international capital in a cross-cultural perspective. Examination of social construction of "third world" and "development," and potential and limits of these categories in understanding ideological and material conditions of lives of women across race, class and national boundaries in the world of work. Also listed as ANT 376, INT 376 and WGS 376.

380. Sociology of Deviance. SOC 100. (3)s.

Sociological factors producing deviance; effect of efforts at social control on the course of deviant development; functional significance of deviance in social systems.

382. Juvenile Delinquency. SOC 100. (3)s.

Delinquency examined from several different perspectives in sociology, such as deviance theory, social psychology, and social organization. Social institutions dealing with delinquency, including police, courts, and penal system.

384. Criminology. SOC 100 or consent of instructor. (3)s.

Criminal behavior in relation to the institutional framework of society. Interaction between criminals, victims, police, and other elements in the system of criminal justice.

391. Directed Reading/Research in Sociology. Consent of instructor and junior standing. (1-3).

Directed reading or research study by qualified students under instructor's supervision. By special arrangement only. Also listed as ANT 391. Graded ABCDE/Y.

398. Special Topics in WGS-SOC. (1-3).

Topics to be announced. Also listed as WGS 390.

445. Ethnicity in American Society. SOC 100, at least junior standing; or consent of instructor. (3)s.

Critical examination of ethnicity as a dynamic and major social process. Ethnicity as identity politics considered both necessary and problematic. Particular emphasis on the American experience in historical perspective, as well as implications for contemporary analyses of American society.

446. Formal Organizations. Background in social research and statistical methods and social theory recommended.

Introduction to theories, processes and problems of organizations, their impact on society, and relationships between organizations and individuals. Classical and contemporary perspectives on issues related to organization design, control, change and effectiveness. *Also listed as PUB 446*.

 Sociology of Education. At least junior standing, consent of instructor. (1-3).

Critical examination of schools and schooling in American society. Contemporary relationship of education to political, economic, and social structures of society. Alternative perspectives on education. *Also listed as EDE 401*.

456. Power and Politics. SOC 100 and senior standing, or consent of instructor. (3)s.

Issues, debates, and research constituting the sub-discipline of political sociology. General overview of such core concepts as power, interests, and the state; additional topics including processes of state formation in historical and comparative perspective, revolutions and peasant revolts, social movements, the problem of collective action, and the sociology of democratic politics.

457. The Family in Historical Perspective in Europe and America. Two courses in history, sociology, or related fields, or junior standing. (3)s.

Evolution of the family between 1600 and the present in Europe and America, including peasant family, pre-industrial urban family, wage-earning nuclear family, and contemporary household. Social, economic and demographic factors that influence the forms families have taken, quality of family life, and ideas about the family. Also listed as HIS 457 and WGS 457.

458. Religion in American Society. SOC 100 and at least junior standing. (3)s.

Sociological treatment of religion both as a social institution and as a significant factor in behavior and attitudes. Role of religion in social change and significance of religious training and commitment compared to social class position and ethnicity.

470. Social Stratification. SOC 100 and at least junior standing. (3)s.

Emergence and perpetuation of social inequalities in societies. Description and assessment of the American class system and effect of class position on life styles and life chances.

471. Social Movements in America. SOC 100, at least junior standing; or consent of instructor. (3)s.

Analysis of social context, goals, internal organization, strategies, and tactics of social movements in American society. Utopias, revolutions, communes, political extremism, civil rights, and student radicalism. Effects of social movements on American society, assessed through sociological literature and anthropological studies, literature, music and films.

474. Gender and Society. *SOC* 100, at least junior standing; or consent of instructor. (3)s.

Nature and causes of sex stratification in society. Cross-cultural

regularities in sex role development. Freudian and neo-Freudian perspectives, Marxist perspectives, structural functionalism, and radical feminism. Interpersonal and institutional processes which operate to keep women and men in their place in American society. Alternatives to structured sexual inequality in societies. *Also listed as WGS 474*.

485. Sociology of Law. At least junior standing or consent of instructor. (3)s.

Law as a system of social control and a mechanism for conflict resolution within society as it has evolved from mores and folkways. Relationship of law to political, economic and social systems as approached from conflict and traditional perspectives.

495. Honors Thesis I. *Consent of Department Chair. Open only to Honors Program students in sociology.* (4).

Credit and grade for SOC 495 is not given until successful completion of SOC 496. Also listed as HON 495. Graded ABCDE/Y.

496. Honors Thesis II. Prior or concurrent election of SOC 495 and consent of Department Chair. Open only to Honors Program students in sociology. (4).

Also listed as HON 496. Graded ABCDE/Y.

499. Senior Seminar. SOC 110, 210, 215; 302 or 303; senior standing; consent of instructor. (3).

Critical review of sociological and anthropological literature, with attention to the interaction of theory and research.

Graduate Courses in Sociology

525. Culture and Personality. Graduate standing; ANT 100 or PSY 100 or SOC 100. (3).

See ANT/SOC/WGS 325 for description. *Not open to students with credit for ANT/SOC/WGS 325 Also listed as ANT 525 and WGS 525.*

545. Ethnicity in American Society. Graduate standing. (3).

See SOC 445 for description. Not open to students with credit for SOC 445.

554. Sociology of Families. *Graduate standing, SOC 100; or consent of instructor.* (3).

See SOC 354 for description. Not open to students with credit for SOC/WGS 354. Also listed as WGS 554.

558. Religion in American Society. *Graduate standing, SOC 100.* (3).

See SOC 458 for description. Not open to students with credit for SOC 458.

566. Work, Occupations and Professions. Graduate standing or consent of instructor. (3).

Examination of sociological dimensions of the division of labor; particular emphasis on professional/managerial occupations.

Topics may include: occupational recruitment and socialization, occupational and labor market structures, organizational context of work, employment relationship, job satisfaction, labor-management relations, implications of technological change and globalization, effects of gender, age and race/ethnicity on the work experience. *Also listed as PUB 572*.

569. Sociology of Education. Graduate standing; SOC 100 or consent of instructor. (3).

See SOC 452 for description. Not open to students with credit for EDE 401 (EDU 452) or SOC 452. Also listed as EDE 501.

570. Social Stratification. *Graduate standing, SOC 100.* (3).

See SOC 470 for description. Not open to students with credit for SOC 470.

571. Social Movements in America. Graduate standing, SOC 100; or consent of instructor. (3).

See SOC 471 for description. Not open to students with credit for SOC 471.

574. Gender and Society. *Graduate standing, SOC 100 or WGS 200; or consent of instructor. (3).*

See SOC 474 for description. Not open to students with credit for SOC/WGS 474. Also listed as WGS 574.

575. Social and Cultural Change. Graduate standing, ANT/INT 100 or SOC 100; or consent of instructor. (3).

See SOC 375 for description. Not open to students with credit for SOC/ANT/INT 375. Also listed as ANT 575 and INT 575.

576. Sex, Work, and International Capital. *Graduate standing, SOC 100 or ANT 100; or consent of instructor. (3).*

See SOC 376 for description. Not open for students with credit for SOC/ANT/WGS/INT 376. Also listed as ANT 576, INT 576 and WGS 576.

585. Sociology of Law. *Graduate standing.* (3).

See SOC 485 for description. Not open to students with credit for SOC 485.

Special Concentration

The Special Concentration, leading to the Bachelor of Arts degree, allows students to follow a program of study not provided within existing concentrations. It may not be a minor variation of an existing program. Students are expected to take the initiative.

Requirements.

- A. A program of study designed by the individual student, endorsed by a board of study, and approved by the College of Arts and Sciences Curriculum Committee.
 - Before the end of the sophomore year, the student must ready a tentative program of study and a rationale which includes a student's specific education objectives. The rationale should describe how it will be determined that

- these objectives will be met (portfolio, internship, research, major paper).
- The board of study is to be composed of professorial members of the faculty, one from each of the three subject areas from which the greatest number of credits will be elected, and one from a discipline clearly outside the general area of the program.
- Both the program and the names proposed for the board of study must be approved by the Curriculum Committee.
- B. All requirements of the College of Arts and Sciences Bachelor of Arts degree, including general education requirements and a foreign language.

Substance Abuse Treatment

See Social Work.

Theatre and Dance

Dance (DAN)

238 Theatre
Dance Studio in Northbank Center
(810) 762-3230 Theatre
(810) 238-7771 Dance Studio

Theatre and Dance Chair: Lauren Friesen Dance Program Advisor: Beth Wielinski

Lecturer Beth Wielinski; Lecturers Susan Baldiga, Lindsay DeCamp, Mary Bennett, Terry Council

Programs in Dance

A major in Theatre with a Dance emphasis (Bachelor of Arts); a minor in Dance and Movement.

Minor in Dance and Movement

The minor in Dance and Movement provides concentrated study in essential courses in dance technique, history, composition, kinesiology, and performance supplemented by elective options in stage lighting and voice and movement. The minor is geared to attract students who wish to balance their studies with well-rounded formal training in dance.

Prerequisites. BIO 167, MUS 135; two from: DAN 116, 120, 130, 140.

Requirements. Completion of twenty-one credits, distributed as follows:

- A. Required Technique (12 credits). DAN 116/117, 120/121, 130/131, 200 (only 2 credits count toward minor); THE 221; DAN/THE 224.
- B. Electives (11 credits from the following).
 DAN 101 (0-3 cr.), 140/141, 201, 204, 225, 300, 341, 351;
 THE/DAN 333; THE 230, 240, 334.
 (THE majors who minor in DAN must take the DAN courses)
- C. Ensemble (4 credits).Two consecutive semesters of DAN 200.

D. Electives (3 credits).

One from: DAN 204*, 333*, 340, 351; THE 216, 221*. *Students choosing DAN 204, 333 or THE 221 must complete an additional credit in technique.

E. Special independent project (1-3 credits).
 DAN 399. Each student choreographs a group dance or solo 3-7 minutes in length showcasing him or herself, to be presented at the annual spring concert.

Courses in Dance

100. Introduction to Dance. (3)f.

Overview of the art form of dance. Exposure to fundamentals in four disciplines: ballet, modern, jazz, and tap. Exploration of works by classical, contemporary, post-modern and jazz choreographers past and present, through video and lecture presentations. Students analyze, discuss, and critique videos; reaction papers on two professional concert dance presentations in the surrounding Flint area required.

101. Dance Topics. (1)f.

Dance Topics will explore various dance techniques not offered in our other courses. These include modern urban dance, hiphop, pilates, and other forms of stage movement. Students will increase their knowledge of contemporary forms of conditioning and technique. Each semester will focus on a specific style. Students may repeat each style (section) twice.

116. Modern Dance I. (1)f.

Introduction to the free and relaxed movements of modern dance. Includes stretching and strengthening exercises, as well as full, moving combinations. *May be repeated to a total of three credits*.

117. Modern Dance II. *DAN 116.* (1)*f.*

Continuation of DAN 116. May be repeated to a total of three credits.

118. Modern Dance III. DAN 116, 117; or consent of instructor. (1)f.

Continuation of DAN 117. May be repeated to a total of three credits.

120. Ballet I. (1)f.

For students who wish to pursue classical dance. Rudiments of classical ballet, including terminology, body positions, and beginning enchainments. *May be repeated to a total of three credits*.

121. Ballet II. DAN 120. (1)f.

Continuation of DAN 120. May be repeated to a total of three credits.

122. Ballet III. DAN 120, 121. (1)f.

Continued exploration of the art of ballet. Emphasis on pointe techniques as well as further development of vocabulary, control, balance, musicality, and strength of movement.

130. Jazz Dance I. (1)f.

High energy, stylized, creative movement techniques to develop strength and flexibility, through the exploration of modern, popular, and theatrical jazz styles. *May be repeated to a total of three credits*.

131. Jazz Dance II. *DAN 130.* (1)f.

Continuation of DAN 130. May be repeated to a total of three credits.

132. Jazz III: Advanced Jazz. DAN 117, 118 or 121, or 130, 131; consent of instructor; or placement audition. (1)f.

High energy, stylized technique to develop strength and flexibility through the exploration of modern, popular, and theatrical jazz; continuation of DAN 131. For students with advanced dance training, and extensive training in jazz styles.

140. Tap Dance I. (1)f.

Introduction to tap dancing. High energy, stylized, and rhythmoriented movement techniques to develop strength and flexibility. Intensive study of basic steps, terminology, and sequential riffs, as well as full moving combinations. *May be repeated to a total of three credits*.

141. Tap Dance II. *DAN 140.* (1)f.

Continuation of DAN 140. May be repeated to a total of three credits.

200. Dance Ensemble. Consent after audition. (2)f.

Designed for students of dance and movement who want to develop their technical and performance skills. Culminates in a performance at semester's end. *May be repeated to a total of 8 credits*.

201. Conditioning for Dancers, Movers and Shakers: Body Therapies. (2)f.

Intensive conditioning program for dance and athletic students. Emphasis on increasing strength, flexibility, toning, and firming, in addition to injury prevention. Body therapies explored: Pilates, Alexander Technique, Tai Chi, Yoga.

204. World Dance Forms. *Sophomore standing; DAN 116, 117, 118, or 120, 121, or 130, 131; or consent of instructor.* (2)*f.*

Movement and lecture course with emphasis on global cultures and their folk traditions through dance. Specific area of exploration determined a semester prior to course offering. *Also listed as AFA 204 and INT 204*.

223. Dance Practicum. DAN 200. (1).

Participation in a main stage production, a dance ensemble or a main stage dance concert.

224. Alexander Technique. A studio course in acting or dance; a semester of applied music study; or consent of instructor. (2).

Technique for achieving greater ease and grace of movement with special applications for the performing artist. *Also listed as THE 224*.

225. Dance Repertory. DAN 200. (1).

Dance experience with on-campus performance in major productions or concerts. May be repeated, but only two credits count toward minor.

300. Dance History. *At least sophomore standing or consent of instructor.* (3)h.

History of dance including major periods of development, choreographic masterworks, and artists in choreography and performance, explored through lecture, demonstration, discussion and media presentation.

320. Kinesiology for Dancers. BIO 167. (3).

Introduction to scientific principles underlying movement in dance. Skeletal, muscular and neuromuscular systems; physiological support systems; prevention and care of injuries; development of conditioning programs; analysis of movements; common anatomical and muscular imbalances found in ones body. Lecture and movement workshops; applications to training and teaching.

333. Movement for the Theatre. THE 221. (2)f.

Fundamentals of theatre movement; may focus on some or all of the following areas: circus skills, stage combat, fencing, mime, tumbling, juggling, masks, martial arts, Greek choral movement. Lecture and laboratory. May be repeated once for credit. Each election must emphasize a different topic. Also listed as THE 333.

340. Improvisation. A course in dance. (3)f.

Exercises designed to encourage students to explore new ways of moving alone, with a partner or in a group; to develop spontaneity; and to enhance performance through structured improvisation.

341. Musical Theatre Dance and Choreography. (2).

Musical theatre dance styles and noted musical theatre choreographers. Attention to history of musical theatre dance from origins to contemporary forms. Experience in dance, research and demonstration. May be repeated once for credit. Also listed as THE 341.

351. Choreography I: Composition. (3)f.

Exploration of choreographic structure, dramatic and stylistic components involved in the study and creation of movement in the studio and on computer. *Also listed as ART 351.*

352. Choreography II: Form and Motion. DAN 351. (3)f.

Continuation of ART/DAN 351. Also listed as ART 352.

399. Special Project/Internship. Completed UM-F Dance curriculum and/or high proficiency in dance training and/or consent of instructor. (1-3)f.

Supervised advanced study in dance.

Theatre (THE)

238 Theatre (810) 762-3231

Chair: Lauren Friesen

Administrative Assistant: Linda K. Letts

Professors Lauren Friesen, Carolyn M. Gillespie; Assistant Professors Steven Landon, Seunghye Cho; Lecturers Janet Haley, William Irwin, Kimiko Shimoda; Technical Director and Lecturer Doug Mueller; Costume Shop Supervisor and Lecturer Amanda Vanraemdonck; Scene Shop Supervisor Dave Thompson.

A concentration in theatre introduces students to all aspects of theatre art and permits students to specialize in those areas of theatre study which are of primary concern to them. Students are prepared for further study on the graduate or conservatory level. Courses of value to the general student population, such as those in dramatic literature, introduction to the theatre, and public address, are also offered through the Theatre and Dance Department. Students seeking a major in Theatre must have a grade of C or above in all theatre courses. Every theatre major must participate (actor, crew, etc) two mainstage productions a year. Scholarship students need to participate in all mainstage productions.

Both full scale and studio theatrical productions are staged each year. All students of the University of Michigan-Flint are cordially invited to participate in these productions.

The Theatre and Dance Department offers a variety of scholarship opportunities designed to attract and retain students of exceptional talent and promise. They include the Ralph M. and Emmalyn E. Freeman Theatre Scholarship, Jeffrey F. Garfield Scholarship, Brian McDonald Theatre Scholarship, the Carland Sarah Morgan Theatre Scholarship and the Theatre and Dance Scholarship Program. Friends of the Theatre, the Chancellor, and our production program support these scholarship opportunities.

Department Mission and Program Assessment

The Theatre Department is committed to responsible and professional preparation of its students for professional/commercial work in the field, teaching careers in theatre or related areas, further study in graduate or conservatory settings, life-long appreciation of theatre and dance as cultural expression, and leadership roles in the artistic life of their communities. In addition, the department commits itself to liberalizing the perspective of the general college student it encounters through the teaching of its courses, and to enrich the lives of persons in the community by producing challenging, thought-provoking, entertaining experiences which reflect its diversity and which explore vital concerns and issues. The Department participates in the University-wide effort to assess its academic programs. Information on assessment plans, including and outcomes methods is available http://assessment.umflint.edu.

Programs in Theatre

Four specialization programs (Bachelor of Arts) are offered: General Theatre, Performance, Dance, and Literature and History. In addition, three concentration programs are offered: the Honors Program in Theatre (Bachelor of Arts), the Program in Performance (Bachelor of Fine Arts), Design and Technology (Bachelor of Science) and the Teacher's Certificate Program in Speech (Bachelor of Arts). Minors in Theatre, Dance, Music Theatre and a Teacher's Certificate Minor in Speech are also available.

Please refer to the Theatre website for current program requirements: http://www.flint.umich.edu/departments/theater-dance.

General Program in Theatre (Bachelor of Arts)

Requirements.

- A. All requirements of the College of Arts and Sciences Bachelor of Arts degree, including general education requirements and a foreign language. At least 33 credits must be in courses numbered 300 or higher.
- B. Grades of C (2.0) or higher in all theatre courses.
- C. Senior Seminar (1 credit). THE 425.
- D. Participation in at least one major production a year.
- E. Completion of one of the following five options (39 credits).

Option 1. General

- A. Theatre History & Literature (12 credits).
 - 1. THE 150, 300, 301;
 - 2. One from: THE/ART 241, THE/AFA 242, THE 302/ENG 338, THE 303/HIS 323, THE/WGS 350, THE/ENG 434.
- B. Performance (8 credits). THE 221, 230, 339.
- C. Design and Technology (12 credits).
 - 1. Design. THE/ART 271.
 - Technology (9 credits). THE 214, 215, 314 or 315. THE 241, 370, 380, 385 recommended.
- D. Directing (3 credits). THE 320.
- E. Theatre Practica (4 credits in at least 2 areas). THE 121, 122, 123.

Option 2. Literature/History Emphasis

- A. Theatre History & Literature (21 credits).
 - 1. THE 150, 300, 301.
 - Four from: THE/ART 241, THE/AFA 242, THE 302/ENG 388, THE 303/HIS 323, THE/WGS 350, THE/ENG 434.
- B. Performance (5 credits). THE 221, 230.
- C. Design and Technology (7 credits).
 - 1. Design. THE/ART 271.
 - 2. Technology. THE 214 and 314, or THE 215 and 315.
- D. Directing (3 credits). THE 320.
- E. Theatre Practica (3 credits in 2 areas). From: THE 121, 122.

Option 3. Performance Emphasis

- A. Theatre History & Literature (9 credits). THE 150, 300, 301.
- B. Performance (19 credits).
 - 1. THE 221, 230, 339 (8 credits).
 - 2. Two from: THE 339, 345, 352, THE/MUS 334 (6 credits).

- 3. Five credits from: THE 123, 331, 338, THE/DAN 333.
- C. Design and Technology (7 credits).
 - 1. Design. THE/ART 271.
 - 2. Technology. THE 214 and 314, or THE 215 and 315.
- D. Directing (3 credits). THE 320.
- E. Theatre Practica (1 credit). THE 121 or 122...

Option 4. Dance Emphasis

- A. Theatre History & Literature (12 credits). THE 150, 300, 301; DAN 100 or 300.
- B. Performance (14 credits).
 - 1. THE 221, 230 (6 credits).
 - Four from: DAN 116, 117, 118, 120, 121, 130, 131, 132, 140, 141.
 - Four credits in Dance at the 200 level or higher.
- C. Design and Technology (7 credits).1. Design. THE/ART 271.

 - 2. Technology. THE 214 and 314, or THE 215 and 315.
- D. Directing/Choreography (3 credits). THE 320 or DAN/ART
- E. Theatre Practica (2 credits). THE 121, 122, 123.

Program in Theatre Design and Technology (Bachelor of Science)

The BS in theatre design and technology prepares students who are serious, dedicated and gifted for post-gradate opportunities in those fields. The program is designed to offer courses and laboratory experiences for students who wish to excel in this area. The purpose of this concentration is to enable those students who wish to pursue further study or a career in the field.

Requirements. Completion of 120 credit hours and graduation requirements for the Bachelor of Science degree including UM-Flint General Education requirements and at least 60 credits in theatre, distributed as follows:

- A. Design and Technology (36 credits).
 - 1. THE/ART 271 (3); 4 credits from: THE 214, 215, 216 (4); THE 314 or 315 (2).
 - 2. 12 credits from: THE/ARH 241, 251, 380; THE/ART/COM 252; THE/WGS 275; THE 370, 385.
 - 3. 15 credits from: THE 323, 324, 327, 343, 404, 408, 413, 414, 417, 419.
- B. Theatre Practica (3 cr. in 2 areas). THE 121, 122.
- C. Performance (5 credits). THE 221, 230.
- D. Theatre History and Literature (9 credits). THE 150, 300, 301.
- E. Directing (3 credits). THE 320.
- F. Senior Seminar (1 credit). THE 425.
- G. Theatre Elective (3 credits).
- H. Participation in all major theatre productions.

I. All requirements of the College of Arts and Sciences Bachelor of Science degree, including general education requirements, at least 33 credits in courses numbered 300 or above, and electives to bring the credit total to 124 or higher.

Honors Program in Theatre (Bachelor of Arts)

Requirements.

- A. All requirements of the General Program in Theatre.
- B. THE 391, for 1 credit, to be taken in the first semester of the junior year in conjunction with one of the following courses: THE 300, 301, 302, 303, 405.
- C. One upper-level course from: THE 300, 301, 302, 303, 405.
- THE 393, Honors Independent Study, in the second semester of the junior year.
- E. THE 495 and 496, Honors Thesis I and II (4 credits each).
- F. All requirements of the University Honors Scholar Program.

Prospective Honors Program students are urged to acquaint themselves as early as possible with the requirements above, as well as the particular procedures for acceptance into the Theatre Department's Honors Program. See the Departmental Honors Advisor or the Honors Program Director for this information.

Program in Performance (Bachelor of Fine Arts)

The BFA in performance prepares students who are serious, dedicated and gifted for a career in the performing arts. The program is designed to foster the skills and knowledge commensurate with the demands of a life in the theatre. The purpose of the concentration is to develop individual performers equipped to enter the professional arena and to prepare students for further study on the graduate or conservatory level. Admission to the BFA program is by audition after students have completed between 30 and 60 credit hours.

Requirements.

- A. The same requirements as those of the College of Arts and Sciences Bachelor of Arts degree, including general education requirements and a foreign language requirement.
- B. Completion of 126 credit hours, including at least 70 in Theatre.
- C. Acting Sequence (18 credits). THE 230, 339 (elected three times), 345, 352. THE 230 and 339 must be taken in sequence during the freshman and sophomore years. The balance of the acting class sequence may be taken in any order.
- D. Voice and Movement Sequence (12 credits). THE 221, 331, 333, plus six credits in dance technique or ensemble selected in consultation with Dance advisor.
- E. Theatre History (9 credits). THE 150, 300, 301.
- F. Design/Technical (14 credits). THE/ART 251, 271 and nine additional credits from THE 214, 215, 216, 270, 280, 285 or Special Projects.

- G. Directing (3 credits). THE 320.
- H. Theatre Practica (7 credits). Four areas on mainstage productions: THE 120, 121, 122, 123.
- Electives. Twelve additional credits in music, theatre or dance theory or performance chosen in consultation with the BFA advisor.
- J. Senior Seminar (1 credit). THE 425.

In addition, the BFA candidate must audition for and be available to be cast in all four mainstage productions mounted each year by the Theatre and Dance Department. Each BFA candidate is reviewed by the Theatre faculty in audition/interviews at the end of each semester. The BFA candidate is also responsible for completing a reading list (available from the Theatre faculty) by the last semester of the senior year.

Teacher's Certificate Program in Speech (Bachelor of Arts)

Faculty Advisors: See Carolyn Gillespie in Theatre.

Requirements.

- A. Core courses (26 credits). COM 200, 281, 332; COM/THE 204, 210; THE 221, 320; THE/ART 271; THE 368/EDS 348.
- B. Ethics and law (3 credits). COM 301 or 331.
- C. Diversity (3 credits). COM 381 or COM/LIN 284 or THE/WGS 350.
- D. Performance (6 credits). Two from: COM/THE 213, 304; THE 150, 230, 339.
- E. Practicum (2 credits). Two from: THE 110, 111, 112, 113.
- F. Additional courses in Theatre and/or Communication recommended.
- G. All requirements of the College of Arts and Sciences Bachelor of Arts degree, including general education requirements and a foreign language requirement.

Prospective candidates should also study the sections entitled "General Requirements for Teacher Certification" and "Secondary Education Teacher's Certificate Programs," printed in the Department of Education section of this *Catalog*.

Minor in Theatre

Requirements. Twenty-one credits distributed as follows:

- A. One from: THE 214, 215, 216 (3 credits).
- B. THE 150, 221, 230, 271, 320 (14 credits).
- C. One from: THE 120, 121, 122, 123 (1 credit).
- D. Three additional credits from the BA curriculum.

Minor in Music Theatre

See Music.

Teacher's Certificate Minor in Speech

Requirements. Twenty-six credits distributed as follows.

- A. Core courses (15 credits). COM 200, 332; COM/THE 204, 210, 320.
- B. Performance (6 credits). Two from: COM/THE 213; THE 150, 225, 230.
- C. Theatre technology (2 credits). THE 214 or 215.
- D. Teaching Methods (3 credits). EDS 348/THE/COM 368.

Courses in Theatre (THE)

100. Introduction to the Theatre. (3)f.

Exploration of the theatre as a worldwide cultural phenomenon; the collaborative nature of the theatre as a contemporary art form. Non-technical investigations into the work of playwrights, actors, directors, designers, and the processes by which the written text is transformed into an experience to be shared by a live audience. May include interactive strategies and group projects in addition to lecture/discussions, and may require attendance at theatre productions.

111. Theatre Practicum: Scenery/Properties. Consent of instructor. Open to non-theatre majors only. (1)f.

Participation in a Theatre Department mainstage production in the areas of scenery or props. May be repeated to a maximum of three credits. Graded Pass/Fail.

112. Theatre Practicum: Costume/Makeup. Consent of instructor. Open to non-theatre majors only. (1)f.

Participation in a Theatre Department mainstage production in the areas of costuming or makeup. May be repeated to a maximum of three credits. Graded Pass/Fail.

113. Theatre Practicum: Performance. Consent of instructor. Open to non-theatre majors only. (1)f.

Participation in a Theatre Department mainstage production in the area of performance. May be repeated to a maximum of three credits. Graded Pass/Fail.

121. Technical Practicum: Stagecraft. Open to theatre majors only. Prior or concurrent election of THE 215. (1)f.

Participation in a Theatre and Dance Department production in the areas of scenery, props, lighting, sound, or stage management. Lab. May be repeated to a maximum of three credits.

122. Technical Practicum: Costume/Makeup. *Open to Theatre majors only. Prior or concurrent election of THE 214. (1)f.*

Participation in a Theatre Department mainstage production in the areas of costuming or makeup. May be repeated to a maximum of three credits.

123. Theatre Practicum: Performance. Open to Theatre majors only. THE 230, 339; or consent of instructor. (1)f.

Participation in a Theatre Department mainstage production in

the area of performance. May be repeated to a maximum of three credits.

150. Drama as Performance. (3)h.

Performance lies at the heart of dramatic literature. This course combines traditional forms of literary analysis with informal, in-class student readings to develop a critical and imaginative appreciation of drama. No special expertise in acting required, but employs performance as means of understanding the text. Material is drawn from a wide range of periods, styles and cultures.

160. Visual Communications Theory and Process. (3)f.

Introduction to contemporary graphic design. Theory, professional practices, creative workflow, career paths, digital graphics hardware and software usage, copyright, ethics. *Also listed as ART 160 and COM 160.*

204. Fundamentals of Debate and Forensics. (3).

Theories, structure and skills of debate and forensics. Research, library and note-taking skills. Practice of competitive speaking skills and of research and oratorical skills as applied to National Competitive Intercollegiate Debate and Forensics. National debate topics and Michigan Intercollegiate Speech League activities. Students demonstrate abilities in classroom debates and in forensics activities. *Also listed as COM 204*.

207. Modern African Drama and Poetry. (3)h.

Introduction to contemporary African drama and poetry, whose themes reflect socio-cultural, political and religious events prevalent in the societies from which they emanate. The relationship between traditional and modern drama and poetry. Analysis of language in selected poems and plays, including works by Wole Soyinka, Ama Ata Aidoo, Tess Onwueme, Athol Fugard, Dennis Brutus, and Niyi Ozundare. *Also listed as AFA 207 and CPL 207*.

208. Multicultural Drama. (3)h.

Multicultural drama within the context of the modern theatre. Examination of diverse cultures that impact contemporary society. Assimilation, integration, and cultural identity focal areas of scrutiny in a Western context on nonwestern and western authors. *Also listed as AFA 208*.

210. Introduction to Public Speaking. (3)h.

Practical introduction to public speaking, exploring its basic tenets through speeches given in the classroom. *Also listed as COM 210*.

213. Oral Interpretation of Literature. (3)f.

Oral communication of prose and poetry. Analysis of texts, methods of meeting problems inherent in their presentation, group and individual reading before the class, criticism, and possible public performance. *Also listed as COM 213*.

214. Stage Costuming. (2)f.

Introduction to methods and materials of stage costuming, including construction, design rendering, costume history,

make-up, and other costume crafts. Emphasis on continual reference to current departmental productions.

215. Stagecraft. (2)f.

Introduction to the basics of theatrical production including theory and mechanics of scenery and properties construction, production lighting, sound and management. Lecture/discussion.

216. Stage Lighting, Sound and Management. (3).

Introduction to theory and mechanics of lighting and sound for the stage; management techniques necessary in mounting a stage performance.

221. Acting: Voice and Movement. (2)f.

Designed to expand the physical and vocal imagination, promote spontaneity, demand self-extension, break patterns, tap dormant resources, and generate relaxation, self-confidence and trust. Understanding the body and voice through the principles and theories of Alexander, Linklater, Laban, Skinner, Lessac, and others. Lecture and laboratory.

224. Alexander Technique. *A studio course in acting or dance;* a semester of applied music study; or consent of instructor.

Technique for achieving greater ease and grace of movement with special applications for the performing artist. Also listed as DAN 224.

225. Acting for Non-Majors. (3)f.

Exploration of play through theatre games, exercises, and creative problem solving. Investigating the nature of play, how it shapes creative expression, frees the imagination to enhance group interactions and stimulates the flow of fresh ideas. Readings, text study, rehearsal outside of class time. Intended for non-theatre majors. Lecture and laboratory.

230. Acting I: Introduction to Acting. Theatre concentration or consent of instructor; THE 221. (3)f.

Introduction to the process of acting through movement, games, improvisation, monologues and scene work designed to free the actor vocally, physically and emotionally. Fundamentals of text analysis and rehearsal technique. Reading, projects and rehearsals outside of class time. Lecture and laboratory.

239. Drama of the Harlem Renaissance. (3).

Examination of the development of African American drama with emphasis on the major playwrights of the Harlem Renaissance. Exploration of the political, social, and racial climate addressed in their dramatic texts. Also listed as AFA 239.

240. Music and the Theatre. (3)h.

Use of music in theatrical production; major emphasis on the period from the seventeenth century to the present. Music performed in lyric theatre, opera, operetta, music halls, minstrelsy, the American musical, and films. Theatrical history and musical heritage. Also listed as MUS 240.

241. Modernism. At least sophomore standing. (3)h.

Emergence of the modern movement in theatre and art from the end of the 19th century to the present, and the aesthetic characteristics shared by each. Also listed as ARH 241.

242. Contemporary Black Theatre in America. (3)h.

Contemporary Black dramas and dramatists in America since 1950, and the production of Black theatre in America today. First segment includes literature, sociology, mythology, and music behind the plays studied. Theatre segment considers the operation and recent flourishing of Black theatre in America. Attendance at performances and participation in performance activities may be required. Also listed as AFA 242.

243. Telecommunication Performance. (3).

Introduction to performance principles and techniques in the electronic media. Examination of a variety of performance genres such as announcing, interviewing, reporting, and editorial argument. Also listed as COM 242.

251. Fundamentals of Stage Makeup. (2)f.

Theory and practice of both two and three dimensional character makeup for the theatre. Lecture and laboratory. Also listed as ART 251.

252. Introduction to Digital Design. ART 160 or consent of instructor. (3)f.

Introduction to two-dimensional art fundamentals and use of computer software in studio practice. Exploration of visual problem solving and the creative process. Also listed as ART 252 and COM 252.

271. Introduction to Theatre Design. (3)f.

Introduction to basic elements of design and application of these elements to theatrical design. Emphasis on interpreting dramatic text and communicating ideas visually. Also listed as ART 271.

272. Film Genre. (3)f.

Examination of a selected film genre (the gangster film, the western, science fiction, war films, Film Noir, etc.) or selected topical focus. Viewing, discussion and writing about film. Class time may be extended to accommodate screenings.

275. Clothing in Western Culture. (3)h.

Historical examination of fashion and clothing of Western culture as a reflection of social mores, gender roles, and political and economic events from Egyptian times to the present. Also listed as WGS 275.

300. History of Western Theatre I. ENG 112 and at least sophomore standing. (3)h.

The theatre as an institution; the drama, methods, conventions, and physical conditions of the stage as drama's medium. Characteristic types of plays, theatre buildings, theatre organization and management, stage and scenic production, and acting examined in their contemporary philosophical, political and social settings; antiquity to the Renaissance. Lecture/lab.

301. History of Western Theatre II. *ENG 112 and at least sophomore standing. (3)h.*

Continuation of THE 300. Lecture/lab.

302. Modern Theatre. *ENG 112 and at least sophomore standing. (3)h.*

History of the modern theatre, 1875 to present. Plays from European and American theatre: Ibsen, Strindberg, Chekhov, Wilde, Shaw, O'Neill, Eliot, Hellman, Brecht, Wilder, Miller, Williams, Beckett, Churchill, and Wilson. *Also listed as ENG 388*.

United States Theatre History. HIS 221 or consent of instructor. (3)h.

Examination of performance in the United States as an attempt to forge an "American" identity as part of political, national, cultural, social, esthetic and economic developments. *Also listed as HIS 323*.

304. Advanced Public Speaking and Forensics. COM/THE 204 or 210; or consent of instructor. (3)f.

Advanced communication theory related to public speaking with a special emphasis on advanced delivery and presentation techniques applied to a variety of settings. Theories, structure and skills of public speaking and forensics. Practice of competitive speaking skills and of research and oratorical skills as applied to national Competitive Intercollegiate Forensics. Also listed as COM 304. Offered Winter semesters.

311. Summer Theatre Practicum. Consent of instructor. (3)f.

Students working in summer stock companies in performance, technical or design position may apply for credit by securing a department coordinator and an on-site supervisor.

312. Black Arts Movement. *AFA 215 or consent of instructor.* (3)h.

Examination of the Black Arts Movement of the 1960s and early 1970s. Study of the works of the black writers, poets and dramatists of the Arts Movement including those of Larry Neal, Leroi Jones/Amiri Baraka, Harold Cruise, and Nikki Giovanni. *Also listed as AFA 312*.

314. Stage Costuming Lab. THE 214. (2)f.

Application of methods and materials of stage costuming with an emphasis on department productions. Continuation of THE 214.

315. Stagecraft Lab. THE 215. (2)f.

Exploration of theatrical production process through practical application. Topics may include woodworking, metalworking, scene painting, rigging, lighting, sound and special effects. *Lab*.

320. Introduction to Directing: Principles. *At least junior standing and THE 230, 339; or consent of instructor. (3)f.*

Examination of the principles underlying the art of directing: script analysis, staging, audition, and rehearsal techniques. Beginning scene work. Lecture and laboratory.

321. Directing Plays for Young Audiences. THE 230, junior standing, Teacher Certificate Program in Speech concentration. (3)f.

Fundamentals of directing plays for young audiences. Finding appropriate material, securing rights, working in collaboration, analyzing dramatic texts. Issues in casting, budgeting, developing ground plans, creating blocking, coaching actors, generating publicity, working with young performers and/or audiences.

322. Scene Painting. A University-level drawing class; THE/ART 271.(3).

Scene painting techniques including color theory, heightened perspective, stenciling, dimensioning, landscape and architectural styles. Applied work on realized sets. *Also listed as ART 323*.

324. Textiles and Costuming. THE/ART 271. (3).

Qualities of different textiles; how to print, dye and distress textiles. Focus use of fabrics in fashion and costume creation.

327. Patterning and Draping. THE/ART 271. (3).

Patterning and draping for costume construction. Focus on patterns for various historical styles. Applied work on real costumes

331. Voice and Diction. THE 221. (2)f.

Theories and practice designed to equip the student with proper speech for the American stage through a fundamental understanding of phonetics and articulation. Lecture and laboratory.

333. Movement for the Theatre. THE 221. (2)f.

Fundamentals of theatre movement; may focus on some or all of the following areas: circus skills, stage combat, fencing, mime, tumbling, juggling, masks, martial arts, Greek choral movement. Lecture and laboratory. May be repeated once for credit. Each election must emphasize a different topic. Also listed as DAN 333.

334. Music Theatre Workshop. Consent of instructor. (3)f.

Movement and vocal production for music theatre. Basic modes of show dance including ballet, tap, jazz, clogging, and adagio partnering. Speech-level singing, song as monologue, and musical analysis. Examination of rehearsal and audition techniques. Culminates in scene study and performance. May be repeated to a total of 9 credits. Also listed as MUS 334.

336. Creative Learning Experiences. Prior or concurrent election of EDE 360. (3).

Creative activities for early childhood, elementary, and middle school children through the integration of art, music, play and drama. Techniques of planning, presenting, and evaluating creative learning experiences for the classroom. *Also listed as ART 336, EDE 340 and MUS 336.*

338. Dialects for the Stage. *THE* 221, 230, 331. (2)f.

Exercises, projects, drills, and scene study designed to equip the actor with clear, articulate command of the major regional and foreign stage dialects. Lecture and laboratory.

339. Actor's Studio. THE 221, 230; or consent of instructor. (3)f.

Scene study in modern and contemporary texts tailored to meet the needs of individual actors. Lecture and laboratory. Reading and rehearsals outside class time. May be repeated to a total of 9 credits by BFA students; others with consent of instructor.

341. Musical Theatre Dance and Choreography. (2).

Musical theatre dance styles and noted musical theatre choreographers. Attention to history of musical theatre dance from origins to contemporary forms. Experience in dance, research and demonstration. May be repeated once for credit. Also listed as DAN 341.

343. CAD. A University-level drawing class; THE/ART 271. (3).

Development of working knowledge of computers as a tool for theatrical design. Computer techniques and how they are used for design and graphic presentation techniques. Designs may cover various styles. Emphasis on competence in using the CAD program.

345. Classical Styles Workshop. THE 221, 230, 339; or consent of instructor. (3)f.

Team taught by performance and design faculty. Major stylistic periods from a social context which dictates fashion, movement and acting styles. Rehearsal and performance techniques culminate in period scene study. Lecture and laboratory. *Prior or concurrent enrollment in THE 331 recommended but not required*.

350. Scripted: Sex and Gender in the Theatre. *ENG 112. (3)h.*

Examination of the manner in which theatrical works reflect, reenforce, challenge and re-vision sex and gender roles in a variety of periods and cultures. Topics include: the politics of representation, the theatrical tradition of cross-dressing, performance art, and the relationship of theatre art to pornography and voyeurism. *Also listed as WGS 350.*

351. Improvisation for the Theatre. THE 221, 230. (3)f.

Techniques of improvisation explored in exercises, theatre games, scenes, and projects. Lecture and laboratory.

352. Scene Study: Shakespeare. THE 221, 230, 339; or consent of instructor. (3)f.

Scenes, monologues, sonnets, verse study (scansion, music, imagery, diction, rhetoric), historical research. Lecture and laboratory.

368. Teaching Speech in Middle and Secondary Schools. *Prior or concurrent election of EDE 360 or EDS 360. (3).*

Methods, materials and objectives of speech education in middle and secondary schools; modern trends in instruction; problems and procedures in teaching and directing theatre, debate, discussion, and other speech activities. Scheduled for the winter of odd-numbered years. Also listed as COM 368 and EDS 348.

370. Costume Design for the Theatre. THE 271 or consent of instructor. (3)f.

Application of theories and techniques of costume design to specific problems of the play. Student produces renderings for costume designs using various media. Lecture and laboratory. Also listed as ART 370.

372. Philosophy in Film and Literature. One course in philosophy. (3) h.

Philosophical ideas as expressed in film and literature. Screenplays, original sources, and analytic articles considered. *Also listed as PHL 372*.

380. Scene Design for the Theatre. THE 271 or consent of instructor. (3)f.

Three-dimensional design for the stage. Design and execution of three-dimensional scale models, scenic renderings appropriate to the play. Use of various media. Lecture and laboratory. *Also listed as ART 380*.

385. Lighting Design for the Theatre. THE 215 or 216, THE 271; or consent of instructor. (3)f.

Advanced course in the theories and aesthetics of lighting design for theatre, opera and dance. Emphasis on lighting as a theatrical art form, and the method of executing this vision successfully. Lecture and laboratory.

390. Playwriting. Consent of instructor. (3)f.

Principles and practice of modern dramatic composition. Group analysis of characterization, story, plot structure, dialogue, and other dramaturgical elements in the one-act play. Also listed as ENG 309.

- **391.** Directed Reading. To be arranged. (1-3).
- **392.** Collective Playwrights Workshop. Consent of instructor and THE 230. (3)f.

Improvisational techniques, exercises and scenes, culminating in the performance of a script developed by the class through improvisation. Lecture and laboratory.

393. Honors Independent Study. Open only to Honors Students in Theatre. (3).

Independent study in preparation for senior honors thesis. Graded ABCDE/Y.

399. Special Projects in Theatre. To be arranged. (1-3).

Supervised work in any of the performance or design/technical areas. Projects tailored to the academic or aesthetic requirements of the student and, where applicable, to the cooperating external agency.

401. Seminar in Acting Auditions. Consent of instructor and a lower-level course appropriate to the area elected. (1-3)f.

- **402.** Seminar in Acting Classics. Consent of instructor and a lower-level course appropriate to the area elected. (1-3)f.
- **403. Seminar in Theatre History.** *Consent of instructor and a lower-level course appropriate to the area elected.* (1-3)f.
- **404.** Seminar in Scene Design and Technology. Consent of instructor and a lower-level course appropriate to the area elected. (1-3)f.
- **406.** Seminar in Directing. Consent of instructor and a lower-level course appropriate to the area elected. (1-3)f.
- **407. Seminar in Oral Interpretation.** *Consent of instructor and a lower-level course appropriate to the area elected.* (1-3)f.

Also listed as COM 407.

- **408.** Seminar in Lighting Design and Production. Consent of instructor and a lower-level course appropriate to the area elected. (1-3)f.
- **409.** Seminar in Major Theatrical Figures and Associated Styles. Consent of instructor and a lower-level course appropriate to the area elected. (1-3)f.
- **410. Seminar in Dialects.** *Consent of instructor and a lower-level course appropriate to the area elected.* (1-3)f.
- **411.** Special Projects in Acting. Consent of instructor and a lower-level course appropriate to the area elected. (1-3)f.
- **412. Special Projects in Theatre History.** *Consent of instructor and a lower-level course appropriate to the area elected.* (1-3)f.
- **413.** Special Projects in Scene Design and Technology. Consent of instructor and a lower-level course appropriate to the area elected. (1-3)f.
- **414.** Special Projects in Costume Design and Technology. Consent of instructor and a lower-level course appropriate to the area elected. (1-3)f.
- **415. Special Projects in Directing.** *Consent of instructor and a lower-level course appropriate to the area elected.* (1-3)f.
- **416.** Special Projects in Oral Presentation. Consent of instructor and a lower-level course appropriate to the area elected. (1-3)f.

Also listed as COM 416.

- **417.** Special Projects in Lighting Design and Technology. Consent of instructor and a lower-level course appropriate to the area elected. (1-3)f.
- **418.** Special Projects in Improvisational Performance. Consent of instructor and a lower-level course appropriate to the area elected. (1-3)f.
- **419.** Seminar in Costume Design and Technology. Consent of instructor and a lower-level course appropriate to the area elected. (1-3)f.
- **420.** Directing II: Practice. THE 320, consent of instructor. (4)f.

Scene work culminating in a public performance of a final directing project. Lecture and laboratory.

425. Senior Seminar. *Senior standing; Theatre major or minor.* (1-3)f.

Portfolio, resume, audition and interview preparation for students entering the job market.

430. Opera Workshop. *Junior/senior standing and consent of instructor; concurrent election of MUS 151, 152, 251, 252, 351, 352, or 451. (1)f.*

Study of opera through live performance of acts, scenes, or segments of standard operatic repertoire. *Also listed as MUS* 430.

434. American Drama. At least junior standing, a 300-level course in literature or theatre history; or consent of instructor. (3)h.

Development of American Drama with attention to literary and theatrical elements, including historical and cultural influences and theatrical conventions. Emphasis on major playwrights and movements, marginal voices, and the relationship of popular entertainment to serious drama. *Also listed as ENG 434*.

449. Folklore and Storytelling. At least junior standing. (3).

A study of folklore and its relationship to the storytelling process. Emphasis on techniques of preparing and telling stories. Course involves attendance at the Michigan Storytellers' Festival. *Also listed as EDR 435*.

495. Honors Thesis I. *THE 393 and consent of Theatre Department. Open only to Honors Students in theatre.* (4).

Credit and grade for THE 495 is not given until successful completion of THE 496. Also listed as HON 495. Graded ABCDE/Y.

496. Honors Thesis II. Prior or concurrent election of THE 495 and consent of Theatre Department. Open only to Honors Students in theatre. (4).

Also listed as HON 496. Graded ABCDE/Y.

Graduate Courses in Theatre

505. American's Contribution to Theatre. *Graduate standing, THE 303 or consent of instructor. (3).*

Not open to students with credit for THE 405.

534. American Drama. Graduate standing. (3).

See THE 434 for description. Not open to students with credit for ENG/THE 434. Also listed as ENG 534.

549. Folklore and Storytelling. Graduate standing. (3).

See THE 449 for description. Not open to students with credit for EDR 435 (EDU 449) or THE 449. Also listed as EDR 535.

Visual Art (ART)

See "Communication and Visual Art"

Women's and Gender Studies (WGS)

521B David M. French Hall (810) 762-3044

Website: http://www.umflint.edu/wgs

Director: Jami L. Anderson, 540 French Hall, (810) 762-6650

Secretary: Laura Milem

Program faculty: Ananthakrishan Aiyer (ANT), Jennifer Alvey (WGS/ANT), Jami Anderson (PHL), Jjenna Andrews (ART), Bob Barnett (ENG), Jan Bernsten (ENG), Carolyn Campbell (SOC), Rose Casement (EDU), Traci Currie (COM), Simon Cushing (PHL), Mohamed Daassa (HIS), Ernest Emenyonu (AAS), Mary Jo Finney (EDU), Jan Furman (ENG), Susan Gano-Phillips (PSY), Carolyn Gillespie (THE), Rudy Hernandez (SOC), Kazuko Hiramatsu (LIN), Peggy Kahn (POL), Alicia Kent (ENG), Mary Jo Kietzman (ENG), Larry Koch (SOC), Heather Laube (SOC), Adam Lutzker (ECN), Joan Mars (CRJ), Marianne McGrath (PSY), Derwin Munroe (POL), Teddy Robertson (HIS), Randy Repic (ERS), Stephanie Roach (ENG), Judy Rosenthal (ANT), Diane Schaefer (SOC), Heather Seipke (COM), Beverley Smith (ANT), Shelley Spivack (CRJ), Holly Stevens (ART), Traki Taylor (EDU), D.J. Trela (ENG), Mary Wagner (MUS), Steven Wandmacher (PHL), Chris Waters (ART), Kathleen Woehrle (SWK), Jan Worth (ENG), Jackie Zeff (ENG).

Programs in Women's and Gender Studies

A Minor in Women's and Gender Studies is available.

Minor in Women's and Gender Studies

The Women's and Gender Studies minor has two main aims: to analyze the historical and contemporary experience of women in different parts of the world, and to examine how women's and men's lives and identities have been structured culturally, economically, politically and socially. Courses in the minor are concerned with the changing nature and relationship of what society considers "feminine" and "masculine." Women's and Gender Studies also recognize differences among women and men on the basis of class, race, ethnicity and sexual orientation.

The Women's and Gender Studies minor is interdisciplinary. It draws on recent scholarship in many fields. This work demonstrates that traditional scholarship has neglected both the study of women's agency and creativity and the analysis of women's oppression. It also sheds new light on how "masculinities" are constructed in different societies worldwide. Women's and Gender Studies enrich existing disciplines by correcting these omissions and bringing new perspectives to bear.

Systematic knowledge of women's rich and varied traditions and of social structures affecting women and men should help students act more thoughtfully and vigorously in their public and personal lives. The insights and experiences that students bring to these courses constitute an important contribution to this developing body of knowledge.

Women's and Gender Studies provide a strong foundation for

students wishing to undertake work in such areas as education and teaching, medicine and health services, law and politics, personnel and affirmative action, social work and social services, union and community organizing, and writing and the performing arts. The minor also helps prepare students for graduate school in the humanities and social sciences.

Requirements. Twenty-one credits distributed as follows:

- Core Courses (9 credits). WGS 200, 399; SOC/WGS 474.
- B. Courses with focus on women of color or non-Western women (3-9 credits). PHL/WGS 167; AFA/SOC/WGS 359; SOC/WGS 367; ANT/WGS 378; PHL/WGS 467.
- C. Additional electives (3-9 credits). AFA/WGS 216; ENG/WGS 228; PHL/WGS 264; THE/WGS 275; COM/LIN/WGS 284; AFA/CPL/WGS 318; MUS/WGS 321; ANT/SOC/WGS 325; POL/WGS 331/SOC 325; ENG/WGS 337; THE/WGS 350; SOC/WGS 354; PSY/WGS 363; PHL/WGS 365; HIS/WGS 369; HIS/WGS 370; POL/WGS 385; SOC 398/WGS 390; WGS 391; CRJ 398/WGS 392; ART/WGS 410; PHL/WGS 438; EDE 433/WGS 440; HIS/SOC/WGS 457; PHL486/WGS 480. ENG 298 and 299 also may be taken as electives when offered on themes of women's writing.

Courses in Women's and Gender Studies (WGS)

167. Race, Gender and Sexuality. (3)h.

Critical analysis of theories of race, gender, sexual identity. Gender and sex roles; racism, sexism and hetero-sexism; concepts of beauty; racial and sexual stereotypes; social issues such as affirmative action, violence, racial and sexual harassment, pornography. Also listed as PHL 167.

200. Introduction to Women's Studies. (3).

Introduction to the field of women's studies and to scholarly and other writing about women's lives and gender as a social structure and process. Examination of the feminist reconstruction of knowledge; differences among women based upon race/ethnicity, class, sexual orientation; cultural representation of women; divisions of labor based upon gender and race; politics of women's personal lives; women's activism. Focus upon women in the U.S.

216. Afro/Latino/Caribbean Women Writers. Prior or concurrent election of ENG 112. (3)h.

Overview of the major genres, publishing activities, goals and concerns of female writers from the Anglophone, Francophone and Dutch Caribbean. The Caribbean Women Writers' Project; the ways in which anticolonial discourse, issues of exile and sanctuary, and revisions of the literary tradition of the Caribbean are manifested in their literature. Also listed as AFA 216.

220. Special Topics in Women's and Gender Studies. A WGS course or consent of instructor. (1-3).

Topics to be announced.

228. Women and Literature. Prior or concurrent election of ENG 112. (3)h.

Study of writing by women in order to explore the concerns of women writers, recurrent themes in their work, and feminist approaches to literature. Readings include historically important works by women as well as contemporary literature. *Also listed as ENG* 228.

264. Introduction to Feminist Theory. *At least sophomore standing.* (3)h.

Introduction to some of the main perspectives in feminist thought, including liberal feminism, Marxist feminism, radical feminism, socialist feminism. Application of these theories to one or more social issues of particular interest to feminists, such as affirmative action, procreative freedom, motherhood. *Also listed as PHL 264*.

275. Clothing in Western Culture. (3)h.

Historical examination of fashion and clothing of Western culture as a reflection of social mores, gender roles, and political and economic events from Egyptian times to the present. *Also listed as THE 275*.

284. Gender and Communication. At least sophomore standing. (3)s.

Analysis of gender/communication issues, including how women and men use language differently, how women and men are portrayed in language, and how language reflects and recreates social reality. Also listed as COM 284 and LIN 284.

300. Gender, Crime and Justice. CRJ 185 or WGS 200. (3)s.

Exploration of the gendered structure of the legal and criminal justice systems. Examination of the differential impact of flaws and policies on women offenders, the experiences of women in prison, law enforcement and the legal profession, domestic/intimate partner violence, sexual assault, reproductive rights, child abuse, pornography and gender-related hate crimes. Also listed as CRJ 300.

318. (218). Women Writers of the African World. Sophomore standing or consent of instructor. (3)h.

Survey of literature by women from Africa, the Caribbean, North America, and Europe. Focus on the works and experiences of writers and the genres that shaped their experiences. Selected works from genres such as the Buildungsroman, the mature novel, drama, and/or non-fictional prose. *Also listed as AFA 318 and CPL 318*.

321. Women and Music. *ENG* 112. (3)h.

Examination of how values in society have influenced the roles of women in music. Study of women of various periods; how society encouraged, limited or enabled them to fulfill their careers; views of their contributions during their lifetime, in historical documentation, and from a twenty-first century viewpoint. Course designed for, but not limited to, the non-music major. Also listed as MUS 321.

325. Culture and Personality. ANT/INT 100 or PSY 100 or SOC 100.

Cross-cultural examination of the construction of personhood and relationships between individuals and culture. Critique of psychological interpretations in anthropological texts and of universalizing tendencies in the field of psychology; the basic Freudian model in contrast with models of self in African, Asian, and Native American cultures. *Also listed as ANT/SOC 325*.

331. Women and Work. POL 120 or SOC 100 or WGS 200; or consent of instructor. (3)s.

Women's paid employment and job segregation by sex: relation of women's paid work to women's family work, nature of women's jobs and occupations, and a variety of state policies that influence women's employment (e.g. anti-discrimination law, maternity and parental leave). White women and women of color in the advanced capitalist economy of the United States. *Also listed as POL 331 and SOC 362*.

337. Topics in Women's Literature. Sophomore course in literature or consent of instructor. (3)h.

Intensive study of the concerns and achievements of selected women writers as they explore a common theme, genre, or question. Topics may vary (e.g. Life Writings, Portrait of the Artist as a Young Woman, Marriage and the Novel). May be elected twice. *Also listed as ENG 337*.

350. Scripted: Sex and Gender in the Theatre. *ENG 112.* (3)h.

Examination of the manner in which theatrical works reflect, reenforce, challenge and re-vision sex and gender roles in a variety of periods and cultures. Topics include: the politics of representation, the theatrical tradition of cross-dressing, performance art, and the relationship of theatre art to pornography and voyeurism. *Also listed as THE 350.*

354. Sociology of Families. SOC 100. (3)s.

The family as a social institution: its place in the social structure; its internal dynamics. Comparative analysis of evolution of modern family patterns in the United States and other societies. *Also listed as SOC 354*.

359. The Black Family. *SOC 100.* (3)s.

Sociological and social-psychological analysis of the Black family in America. Impact of changes in race relations and of urbanization on the Black family. Assessment of various stereotypes existing in mass media and in sociological and psychological literatures. Also listed as AFA 359 and SOC 359.

363. Psychology of Gender. One of: PSY 237, 326, 336, 345. (3)s.

Psychological, sociological, and cultural factors influencing the development of gender roles and gender differences in cognition, social behavior, personality and motivation. Family and work conflicts and changing gender roles in contemporary American society; similarities of both sexes in these areas. *Also listed as PSY 363*.

365. Feminist Ethics. A course in ethics or consent of instructor. (3)h.

Study of theoretical issues such as differences between

"feminine" and "feminist" ethics, and practical issues such as affirmative action, procreative technologies and the environment.. Also listed as PHL 365.

369. The History of American Women. At least sophomore standing. (3)s.

Examination of the evolution of women's experience in the United States from 1600 to the present, paying particular attention to the economic, reproductive and sexual, familial, and communal roles; participation in public life; and the means by which women have expressed their culture. *Also listed as HIS* 369

370. Women in Western Societies. HIS 111, 113; or consent of instructor. (3)s.

Women in Europe since the seventeenth century; ways in which historical process is illuminated by questions of gender. Women's role in high and low culture, in elite and laboring society, since early modern times, and how the great events and large-scale changes of history affected women's lives and gender relations. Women in a variety of societies from Russia to Spain. *Also listed as HIS 370.*

376. Sex, Work, and International Capital. ANT 100 or SOC 100 or consent of instructor. (3).

Analysis of significance of women's labor to international capital in a cross-cultural perspective. Examination of social construction of "third world" and "development," and potential and limits of these categories in understanding ideological and material conditions of lives of women across race, class and national boundaries in the world of work. *Also listed as ANT 376, INT 376 and SOC 376.*

378. Sex and Gender in Cross-Cultural Perspective. *ANT 100.* (3)s.

Comparison of gender divisions in various societies; social roles of men, women and other categories. African, Asian, and Native American conceptualizations of gender, in comparison with data from Western cultures. Cultural construction of femaleness, maleness, and sexual behaviors and their relationships (or lack of relationship) to gender stereotypes. *Also listed as ANT 378*

385. Women and the Law. POL 190 or WGS 200 or consent of instructor. (3).

Examination and analysis of the role of law in the social, economic, political and private lives of women in the U.S. Historical overview as well as intensive study of legal problems of current concern to women. Areas of focus: women and work, women and the family, women and their bodies, women and the criminal justice system, role of women in the legal system (including theory as well as case law). Also listed as POL 385.

390. Special Topics in WGS-SOC. (1-3).

Topics to be announced. Also listed as SOC 398.

391. Directed Reading in Women's and Gender Studies. *Consent of instructor.* (1-4).

Designed for students wishing to explore particular interests, including community-based projects in women's and gender

studies, not available through other courses. May be reelected to a total of 6 credits.

399. Seminar in Women's and Gender Studies. WGS 200 or consent of instructor. (3).

Advanced seminar engaging students in reading of key texts and development of individual projects within a broadly defined thematic area central to women's and gender studies. Capstone course for the Women's and Gender Studies Program.

410. Women as Artists. At least junior standing. (3)h.

History of the art produced by women artists, from 1550 to the present. Topics include the historical slighting of women artists, feminist imagery, politics and contemporary feminist criticism. Figures include Gentileschi, Vigee-Lebrun, Kauffman, O'Keefe, Cassatt, Chicago, and Nevelson. *Also listed as ARH 410.*

438. Critical Race Theory. PHL 309 or nine (9) credits in philosophy or consent of instructor. (3)h.

Examination of the historical centrality and complicity of law in upholding white supremacy (and concomitant hierarchies of gender, class and sexual orientation). Topics include: segregation and integration legislation, affirmative action, hate speech, hate crimes, antiracism and whiteness. *Also listed as PHL 438*.

440. Girls, Culture and Education. *At least junior standing.* (3).

Interdisciplinary introduction to empirical research and critical inquiry on the education of girls in the U.S. Study of contemporary educational thought on the gendered social and cultural context of schooling. *Also listed as EDE 433*.

457. The Family in Historical Perspective in Europe and America. At least sophomore standing. (3)s.

Evolution of the family between 1600 and the present in Europe and America, including the peasant family, pre-industrial urban family, wage-earning nuclear family, and contemporary household. Social, economic and demographic factors that influence the forms families have taken, the quality of family life, and ideas about the family. Also listed as HIS 457 and SOC 457.

467. Race and Gender. PHL 309 or nine (9) credits in philosophy or consent of instructor. (3)h.

Examination of central issues in gender and race theory including: gender, sex and race identity theories, social construction and essentialism, self and other identity formation. *Also listed as PHL 467.*

474. Gender and Society. *SOC 100, at least junior standing; or consent of instructor.* (3)s.

Nature and causes of sex stratification in society. Cross-cultural regularities in sex role development. Freudian and neo-Freudian perspectives, Marxist perspectives, structural functionalism, and radical feminism. Interpersonal and institutional processes which operate to keep women and men in their place in American society. Alternatives to structured sexual inequality in societies. *Also listed as SOC 474*.

480. Gender Theory. PHL 309 or nine (9) credits in philosophy or consent of instructor. (3)h.

Exploration of major theories about gender. Focus on intersections of race/ethnicity, class and gender in the formation of identities and reproduction of inequality. Theories explored include Marxist-Feminism, Psychoanalytic Feminism, Queer Theory, Post Modern Feminism. *Also listed as PHL 486*.

Graduate Courses in Women's and Gender Studies (WGS)

525. Culture and Personality. Graduate standing; ANT 100 or PSY 100 or SOC 100. (3).

See ANT/SOC/WGS 325 for description. Not open to students with credit for ANT/SOC/WGS 325 Also listed as ANT 525 and SOC 525.

531. Women and Work. Graduate standing. (3).

See WGS 331 for description. Not open to students with credit for POL 331/SOC 362/WGS 331. Also listed as POL 531.

538. Critical Race Theory. Graduate standing. (3).

See WGS 438 for description. Not open to students with credit for PHL/WGS 438. Also listed as PHL 538.

540. Girls, Culture and Education. *Graduate standing.* (3).

See WGS 440 for description. Not open to students with credit for EDE 433 (EDU 440) or WGS 440. Also listed as EDE 533.

554. Sociology of Families. Graduate standing, SOC 100; or consent of instructor. (3).

See WGS 354 for description. Not open to students with credit for SOC/WGS 354. Also listed as SOC 554.

567. Race and Gender. Graduate standing. (3).

See WGS 467 for description. Not open to students with credit for PHL/WGS 467. Also listed as PHL 567.

569. History of American Women. *Graduate standing.* (3).

See WGS 369 for description. Not open to students with credit for HIS/WGS 369. Also listed as HIS 569.

574. Gender and Society. *Graduate standing; SOC 100 or WGS 200; or consent of instructor.* (3).

See WGS 474 for description. Not open to students with credit for SOC/WGS 474. Also listed as SOC 574.

576. Sex, Work, and International Capital. Graduate standing, SOC 100 or ANT 100; or consent of instructor. (3).

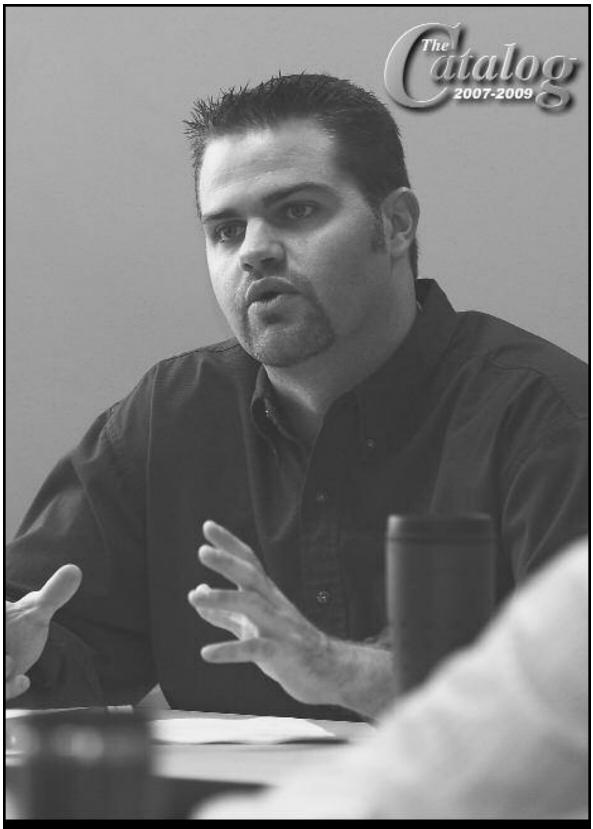
See WGS 376 for description. *Not open to students with credit* for SOC/ANT/WGS/INT 376. Also listed as ANT 576, INT 576 and SOC 576.

578. Sex and Gender in Cross-Cultural Perspective. Graduate standing; ANT/INT 100. (3).

See WGS 378 for description. Not open to students with credit for ANT/WGS 378. Also listed as ANT 578.

580. Gender Theory. Graduate standing. (3).

See WGS 480 for description. Not open to students with credit for PHL 486/WGS 480. Also listed as PHL 586.



School of Education and Human Services

SCHOOL OF EDUCATION AND HUMAN SERVICES

Office of the Dean of the School of Education and Human Services 410 David M. French Hall

(810) 766-6878 FAX (810) 766-6891

Website: http://www.flint.umich.edu/departments/sehs

Dean: Dr. Susanne Chandler

Associate Dean: Dr. Traki Taylor-Webb Budget Analyst: Beatrice Kendall Course developer: Hannah Furrow

Database Manager and Communication Specialist: Janel DePew

Executive Secretary to the Dean: Beulah Alexander

Receptionist: Vacant

Westwood Heights Liaison: Deborah Snow

The School of Education and Human Services prepares students for careers in education and the human services by offering degrees that blend a broad liberal education with preparation for professional roles. The School offers a variety of baccalaureate degrees, master's degrees and certification programs. Currently the School is comprised of a Department of Education and the Department of Social Work. The Department of Education provides basic teacher education preparation and master's degree programs. The Department of Social Work provides baccalaureate level preparation for social work practice.

Mission Statement

The primary mission of the School of Education & Human Services is to prepare and to collaborate with teachers, administrators, social workers, and other professionals to serve the diverse educational and human service needs of Mid-Michigan, particularly the Greater Flint Metropolitan Region.

Academic Regulations and Procedures

All regulations of the University of Michigan-Flint apply to students in the School of Education and Human Services. The student should note these regulations printed in earlier sections of this Catalog. Specific rules and regulations adopted by the faculty of the School of Education and Human Services are presented in the following sections.

Admission

Because of the varied nature of the programs offered through the School of Education and Human Services, admission procedures, as well as many other policies are established by the individual departments. For information on these requirements and procedures, consult the departmental sections of this *Catalog*.

Course Load

A normal undergraduate program consists of approximately 15 credits each semester. With the consent of the faculty advisor, a student may carry up to 18 credits in a semester plus nine in each

spring or summer term. In exceptional cases the Committee on Academic Standards may permit students of superior scholarship to elect more than the maximum number of credits. A student who is employed should so inform the faculty advisor and should limit the course load accordingly. Students working full time should expect to take less than a full time course load.

Advising System

The advising system is based on the premise that students are responsible for maintaining and recording their own progress. However, working closely with a departmental advisor assists students to effectively plan their courses of study.

Grading System

The following grading system is used in the School of Education and Human Services: A, excellent; B, good; C, fair; D, poor; E, failure; P, pass; F, fail; I, incomplete; N, no credit; W, officially withdrawn (without penalty). The following scale is used in calculating grade point averages:

Letter Grade	Honor Points
A	4.0
A-	3.7
B+	3.3
В	3.0
B-	2.7
C+	2.3
C	2.0
C-	1.7
D+	1.3
D	1.0
D-	0.7
E	0.0

Grade point averages are computed by dividing total honor points (course credits multiplied by course grade points) by total credits. The computation is limited to points and credits earned at the University of Michigan-Flint.

The report of I (incomplete) may be made by the instructor if the student is passing but unable to complete the coursework within the specified time. An I may be made up while a student is not enrolled and must be made up by the end of the fifth week of the next semester in which a student is enrolled or one calendar year from when the I was given, whichever is first. If for sufficient reason the student cannot remove the incomplete by one of the above deadlines, the Dean of SEHS may grant an extension of the time upon request from the student and the instructor. It is the student's responsibility to ask the instructor for an extension of time and file the required form with the Registrar prior to the deadline. Failure to make up the grade within the time allotted results in the I being automatically changed to a grade of E, F or N as applicable.

The grade N, which signifies neither credit nor grade point value, is used in some courses. For these courses the lowest grade for which credit is earned is one of the following: C, C-, D, D-. The use of this grading system in a course is indicated in course listings and in the course schedule and is announced at the beginning of these courses. Students should be aware that although N grades do not affect the grade point average, the accumulation of an excessive number of Ns is considered insufficient progress toward a degree. Therefore, N grades in excess of a total of nine credits at the University of Michigan-Flint are recorded as E, and are calculated into the grade point average.

The grade Y indicates "Work in Progress" and is therefore used only for courses designated to extend beyond a single semester. After completion of the work, the Y grade will be removed and replaced by an appropriate grade, or it may also be replaced by an (I) Incomplete.

A grade once reported (with the exception of I) may be changed only to correct a demonstrable clerical error and then only with the approval of the Dean.

Recognition of Superior Scholarship

Graduating seniors with cumulative grade point averages of at least 3.5 but less than 3.75 are recommended for the degree "with honors" and those with cumulative grade point averages of at least 3.75 are recommended for the degree "with highest honors." In computing averages, only courses taken at the University of Michigan-Flint are included, and only complete terms or semesters are counted.

See "Undergraduate Honors" in the "Academic Policies of the University" section of this Catalog for information regarding campus- and system-wide honors recognition.

Distinguished scholarship is also recognized by awards offered by the faculty of the University of Michigan-Flint and by other organizations.

Credit Without Grade (Pass/Fail)

The provision for credit without grade (pass/fail) is intended to encourage students to attempt courses outside their major fields of interest. Subject to the following regulations, a student may elect a limited number of courses without concern for the cumulative grade point average.

The following conditions must be met unless a course is offered only on a Pass/Fail basis:

- A. The student has accumulated 55 or more credits.
- B. The student has a GPA of 2.0 or better.
- C. Only one course may be elected pass/fail per semester.
- D. The election does not put the student over the four class pass/fail election limit.
- E. The course is outside the student's concentration and outside any elected minor.
- F. The course may not be used to fulfill general education requirements (except for a foreign language).

If a student intends to elect a course for credit without a grade, this must be indicated on the course election request form. The decision should be made in consultation with an academic advisor. This option may not be elected after the end of the first two weeks of the semester, nor changed to credit with grade after the announced deadline for dropping classes.

Students choosing the credit without grade option are expected to complete all assigned work and examinations of the course. If in the judgment of the instructor a grade of C or better is earned, the work is reported as "Pass," and the credits for the course are received. If the grade earned is less than C, the report is "Fail," and the course appears on the transcript without grade designation and without credits.

Courses elected for credit without grade are not included in the calculation of the grade point average.

Credit by Examination

A maximum of three courses may be passed by examination,

and only courses offered by the University of Michigan-Flint can be used. Certain courses are excluded, as determined by the departments.

Students who feel that they have the necessary background to pass a course by examination should request an interview with the chair of the appropriate department to assess competence. The department then sets up an examination committee. Having received written approval from the department chair and the committee, the student registers at the Office of the Registrar and thereafter takes the examination. The appropriate letter grade is entered on the student's record as if the course had been taken conventionally.

Credit without grade cannot be earned by this means, and ordinarily a student may attempt credit by examination in a given course only once. Entering freshmen should see also the section on the Advanced Placement Program.

Academic Standing

A student in the School of Education and Human Services is expected to maintain a grade point average consistent with the requirements prescribed by the department or program in which the student is enrolled.

The academic records of all students whose grade point averages fall below a 2.0 are reviewed at the end of each semester by the Committee on Academic Standards. According to individual circumstances, students with deficient academic records may be placed on warning or required to withdraw. Students on warning must make substantial improvement during the following semester in order to continue *in the program or department*. While students may maintain university enrollment with a 2.0 grade point average, higher grade point averages are required for admission to, and completion of, programs offered in the School. Students should consult the specific grade point requirements of their programs noted in the departmental sections of the *Catalog*.

Appeal to the Committee on Academic Standards

Students who believe that they are unreasonably affected by a policy of the School of Education and Human Services may appeal to the Committee on Academic Standards. Petition forms are used to request exceptions in individual cases; information can be obtained from advisors or from the office of the Dean School of Education and Human Services.

Changes in Academic Rules and Degree Requirements

- Changes made in general degree requirements, including general education requirements, and specific major and minor requirements go into effect the Spring term following approval and apply to all students admitted to the University that term or thereafter. In non-Catalog-publication years, these changes will be published in a special addendum of the Catalog, to be made available to all advisors and students through the Academic Advising and Career Center, and through the on-line version of the Catalog.
- All other academic rules and regulations go into effect the term after which they are approved. (Publication may be in the Catalog, the Schedule of Courses, or through the Academic Advising and Career Center.)
- Continuously enrolled students (those who are enrolled for classes *Fall or Winter*) are entitled to fulfill the requirements in effect the first semester in which they were admitted to the University. Others are required when they reenroll to fulfill

the requirements in effect for newly admitted students.

4. Exceptions to these guidelines may be granted in some circumstances, when approved by the governing faculty of the unit affected. If such an exception is approved, it is the responsibility of the department or program requesting the exception to publicize the approved changes by circulating the information to academic advisors and to students affected by the changes.

Student Grievance Procedures

- A. The general procedure for resolving student grievances in matters of dispute between student(s) and instrcutor(s) regarding classroom instruction, arbitrary and/or inconsistent application of classroom policies and procedures, including assignment of grades, or allegations of discrimination shall be as follows. For a discussion of discrimination, see the section of discrimination under Student Rights Policy in this
 - 1. Discussion with Instructor or Appropriate Staff Person. The student will initiate discussion of the issue with the faculty or staff member directly responsible for the decision.
 - 2. Discussion with Department Chair or Program Director. If the concern is not resolved in discussion with the instructor or appropriate staff person, the student may discuss the issue with the appropriate Department Chair or Program Director. This discussion is to be initiated within 30 days of the start of the next regular academic semester (excluding Spring or Summer terms). The Chair or Director shall attempt to resolve the matter.
 - 3. Written Appeal to Department Chair or Program Director. If not resolved in discussion with the Department Chair or Program Director, the student may, whtin 14 school days following the meeting described above, submit a written complaint to the Chair or Director. Upon receipt of a written complaint, the Chair will form an ad hoc committee comprised of three SEHS faculty members of the Academic Standards Committee. One member of the committee will be identified by the student, one member will be identified by the faculty member/staff person and one member will be appointed by the Chair. Responses to the issue will be invited from the student and faculty member/staff member.

The decision of the ad hoc committee will be issued in writing to the student within 30 days of the chair's receipt of the written complaint. If the committee requires and extension, a letter will be sent to the student.

Early Childhood Development Center

1313 William S. White Building (810) 424-5214

FAX (810) 237-6690

Website: http://www.umflint.edu/ecdc

Director: Della Becker-Cornell

Head Teachers: Amanda Baker, Kristyn Fritzsching, Mary Lynn Gottler, Wendee Hooker, Tara Hyatt, Najla Moore Assistant Teachers: Kim Curry, Susan Ford, Rhonda Sevick

Nutrition and Environmental Stewart: Tammi Couture Administrative Assistant: Vickie Redmond-Powell

The faculty and staff of the Early Childhood Development Center (ECDC) is committed to providing a high quality program for young children and their families. The program is designed to promote the development of the total individual by helping each child to develop skills in the physical, social, emotional, and cognitive areas. This is accomplished by providing a balanced program that includes both teacher-directed and child initiated activities, quiet as well as active experiences, and the recognition that learning occurs in both formal and informal settings, especially through play.

Young children are integrally connected to their homes and families, and it is understood that families are and should be the principle influence in their children's lives. The ECDC seeks to be appropriately responsive to families. Parents, teachers, and staff work together toward the goal of nurturing children in an environment where all are respected for their individual differences and provided with the building blocks for a lifelong love of learning.

Mission Statement

The mission of the Early Childhood Development Center is to:

- 1. Promote the development of social, emotional, cognitive, linguistic, physical and creative skills in an environment sensitive to each child's strength and needs.
- Provide opportunities to educate University of Michigan-Flint students in skills relevant to their professions.
- Offer high quality child care to our constituents: students, faculty, staff and community.
- Contribute to the ongoing development and education of early childhood professionals, families, and caregivers in the Flint area through research, collaboration, and teaching.

School of Education and Human Services Courses (EHS)

Note: Because changes are being considered at the time of this publication, undergraduate and graduate students in SEHS majors (Early Childhood Education, Education and Social Work) should contact their academic advisor for current requirement information.

120. Ecology of Teaching and Social Work. Prior or concurrent election of ENG 111. (3).

Writing-intensive introduction to classic and contemporary issues in the education, early childhood and human services professions and to the mission and expectations of the School of Education and Human Services. Fieldwork component provides context. Graded ABCDD->N.

220. Building a Sustainable Community: Teaching and Social Work. EHS 120 or ENG 112. (3).

Critical and analytical reading and writing, focus on problems and contexts in the education, early childhood and human services professions. Fieldwork component included. Graded ABCDD->N.

Early Childhood Education

430 David M. French Hall (810) 762-3260 Fax: (810) 762-3102

Website: http://www.flint.umich.edu/departments/edu

Chair: Linda Pickett

Director of Educational Field Experiences: Barb Walton Coordinator for Academic Advising: Cheryl Godmar Director of Teacher Certification: Vicki Tonda Post-Baccalaureate Program Advisor: Sandra Sepulvedo

Principal Secretary: Coleen Beamish Certification Secretary: Ina Tonks

Receptionist: Roslyn Ivey

Assistant Professors Aviva Dorfman, Linda Pickett, Beverly

Schumer

The Department of Early Childhood Education offers programs designed to assist prospective elementary teachers in acquiring the skills and abilities necessary for excellence in teaching and to meet requirements for Michigan Teacher Certification and the Michigan Early Childhood Specialist endorsement. All programs offered by the Early Childhood Education Department are approved by the Michigan Department of Education, Office of Professional Preparation Services, P.O. Box 30008, Lansing, MI 48909, (517) 373-3310.

The Teacher Certification Program and the Specialization in Early Childhood Education are responsive to changes mandated by the Michigan Department of Education. The Specialization in Early Childhood Education is also responsive to standards established by the National Association for the Education of Young Children in the design of the program and courses. Students should consult the Education website or their advisor for the most current information. announcements, such as orientation meetings and changes in course scheduling, are sent to students' university email accounts and posted outside the Education and Early Childhood Education Department offices.

Department Mission and Program Assessment

The mission of the Department of Early Childhood Education is to prepare teachers and educational personnel who: are prepared to work with young children and their families; understand and value the disciplines they teach; comprehend psychological principles and the variations of human development, behavior, and potential that facilitate student learning; recognize that historical, sociological, political and philosophical factors promote equal educational opportunity; possess the pedagogical-content knowledge necessary to make appropriate instructional decisions that promote reflective thinking, problem solving, and critical inquiry; discern the ethical obligations of professional educators; and can demonstrate their ability to use their knowledge of the academic disciplines, psychology, social foundations, pedagogical-content strategies, and ethics in working with children. The Department participates in the University-wide effort to assess its academic programs. Information on assessment plans, including goals, methods and outcomes is available at http://assessment.umflint.edu.

Programs in Early Childhood Education

A specialization in Early Childhood Education is available.

Specialization in Early Childhood Education

The program is designed for students seeking Michigan elementary education certification with an early childhood specialization.

Requirements.

A. All requirements of the Program in Elementary Education.

B. Early childhood specialization (31 credits). ECE 100, 200, 225, 235, 240, 340, 343, 420, 440, 469.

Specialist Endorsement in Early Childhood Education

Completion of the Program in Elementary Education and the Specialization in Early Childhood Education and passing the MTTC Early Childhood Education and Elementary Education examinations (Test Codes 82 and 83) meets the requirements for Michigan elementary teaching certification with Early Childhood Specialist Endorsement (ZA).

Education (EDU)

430 David M. French Hall (810) 762-3260 Fax: (810) 762-3102

Website: http://www.flint.umich.edu/departments/edu

Chair: Michael Pardales

Associate Dean: Rose Casement

Director of Educational Field Experiences: Barb Walton Coordinator for Academic Advising: Cheryl Godmar Director of Teacher Certification: Vicki Tonda

Post-baccalaureate Program Advisor: Sandra Sepulvedo

Principal Secretary: Coleen Beamish Certification Secretary: Ina Tonks Admissions Evaluator: Michaele Tomrell

Receptionist: Roslyn Ivey

Associate Professors Rose Casement, Mary Jo Finney, Sapna Taggar, Traki Taylor; Assistant Professors Judith Ableser, Sharman Siebenthal-Adams, Wei Cao, Aviva Dorfman, Patricia Gallant, Suzanne Knezek, Jeffrey Kupperman, Michael Pardales, Linda Pickett, Beverly Schumer, Li-Hsuan

Professors Emeriti: Bernice Blamer, Thomas N. Filson, Maxine Perine, Carl H. Rinne, Harold Stahly, Edward E. Sullivan, Sue Woestehoff.

The Department of Education is the basic teacher education unit at the University of Michigan-Flint. Program offerings are designed to assist prospective elementary and secondary teachers in acquiring the skills and abilities necessary for excellence in teaching and to meet requirements for Michigan Teacher Certification. All programs offered by the Education Department are approved by the Michigan Department of Education, Office of Professional Preparation Services, P.O. Box 30008, Lansing, MI 48909, (517) 373-3310. The Teacher Certification Program is responsive to changes mandated by the Michigan Department of Education. Students should consult the Education website or their advisor for the most current information. Special announcements, such as orientation meetings and changes in course scheduling, are sent to students' university email accounts and posted outside the Education Department office.

Department Mission and Program Assessment

The mission of the Department of Education is to prepare teachers and educational personnel who: understand and value the disciplines they teach; comprehend psychological principles and the variations of human development, behavior, and potential that facilitates student learning; recognize that historical, sociological, political, and philosophical factors promote equal educational opportunity; possess the pedagogical-content knowledge necessary to make appropriate instructional decisions that promote reflective thinking, problem solving, and critical inquiry; discern the ethical obligations of professional educators; and can demonstrate their ability to use their knowledge of the academic disciplines, psychology, social foundations, pedagogical-content strategies, and ethics in working with children. The Department participates in the University-wide effort to assess its academic programs. Information on assessment plans, including goals, methods, and outcomes is available at http://assessment.umflint.edu.

Programs in Education

Six programs are available: the General Program for Elementary Teacher Certification (Bachelor of Science), the Bachelor of Music Education, the Program in Visual Arts Education (Bachelor of Science), the Honors Program in Elementary Education (Bachelor of Science), and the General Program for Secondary Teacher Certification (Bachelor of Arts or Bachelor of Science). A specialization in Early Childhood Education is offered by the Early Childhood Education Department.

The Education Department also offers graduate programs in Early Childhood Education, Elementary Education with Certification, Literacy (K-12), Special Education (K-12), and Technology in Education. In addition, a graduate program in Educational Administration is offered in collaboration with the University's Program in Public Administration. Persons interested in these programs should refer to the "Graduate Study" section of this *Catalog*.

Program in Elementary Education (Bachelor of Science)

After this Catalog was prepared for print, the faculty of the School of Education and Human Services were in the process of determining General Education requirements for SEHS students. Students should contact their advisors and visit the Department web page for further information: http://www.flint.umich.edu/departments/edu.

Requirements.

- A. Completion of the requirements for the Bachelor of Science degree from the University of Michigan-Flint.
- B. Completion of 128 credits, of which at least 80 must be in non-education courses, to include:
 - A course in United States history (HIS 220, 221 are recommended). See the Education Department office or website for the complete list of acceptable courses.
 - 2. PSY 100.
 - 3. EDM 120, 121.
 - 4. SCI 125 or 126.

- A course in the history or culture of American ethnic minorities: AFA/SOC 270; AFA 331; AFA/HIS 334; EDE 305; ENG 213, 374; EDE 432/PUB 438. (This list is subject to change. See the Education Department office or website for the current list of acceptable courses.)
- A course in the study of the English language: ENG/LIN 200, 244, 349, 409; LIN 346; LIN/ANT 290, 335; LIN/COM 284; LIN/ENG 351. (This list is subject to change. See the Education Department office or website for the current list of acceptable courses.)
- A teaching major and a teaching minor, or three teaching minors, or two teaching minors and a specialization in early childhood education.
- Approved courses in first aid and adult and child CPR, taken through the American Red Cross or the American Heart Association.
- C. Completion of the following courses in professional education, to be taken in the student's third and fourth years:
 - EDE 300, 302, 360, 469, 499; EDR 343, 344; EDM 341; EDN 410; EDT 401 or 420.
 - 2. Four courses from: EDE 305, 340, 343, 344, 402, 432, 433, 440, 441; EDR 430, 435, 437, 441.
- D. The requirements in the section "General Requirements for Teacher Certification."

Honors Program in Elementary Education

After this Catalog was prepared for print, the faculty of the School of Education and Human Services were in the process of determining General Education requirements for SEHS students. Students should contact their advisors and visit the Department web page for further information: http://www.flint.umich.edu/departments/edu.

Requirements.

- A. All requirements of the Elementary Education Bachelor of Science program, to include:
 - 1. EDE 470 and 480.
 - 2. An education course at the 400 level taken with consent of the Honors Faculty Advisor.
- B. EDE 488 and 489, Honors Thesis I and II.
- C. All requirements of the University Honors Scholar Program.

Prospective Honors Program students are urged to acquaint themselves as early as possible with the requirements above as well as with the particular procedures for acceptance into the Education Department's Honors Program. See the Honors Program Director for this information.

Elementary Education Majors and Minors

For teacher certification, a grade point of 2.75 or better is required in each major and minor. Grades for courses taken at other institutions are also used in the computation.

Fine Arts

A major consists of 36 credits in art, music, dance and theatre, as follows:

 A. Core courses (12 credits).
 ART 120; ART/MUS/THE 336/EDE 340; MUS 100; THE 100 B. Art (6 credits).

From: ART 100, 271; ART 101, 131 (MCC).

C. Theatre/Dance (6 credits).

From: THE 150, 221, 230; DAN 116, 120, 130, 140.

D. Music (6 credits).

From: MUS 115, 117, 124, 125, 126, 127, 128, 129, 130, 135, 141, 151, 180, 185.

E. Electives (6 credits).

Additional courses in a single discipline among Art, Music and Theatre.

A minor consists of 24 credits in art, music, dance and theatre, as follows:

A. Core courses (12 credits).

ART 120; ART/MUS/THE 336/EDE 340; MUS 100; THE

B. Art (3 credits).

From: ART 100, 271; ART 101, 131 (MCC).

C. Theatre/Dance (3 credits).

From: THE 150, 221, 230; DAN 116, 120, 130, 140.

D. Music (3 credits).

From: MUS 115, 117, 124, 125, 126, 127, 128, 129, 130, 135, 141, 151, 180, 185.

E. Electives (3 credits).

Additional courses in a single discipline among Art, Music and Theatre.

Foreign Language

A minor in French consists of 20 credits, as follows:

A. Core (17 credits).

FRN 211, 212, 301, 303, 310.

B. Elective (3 credits).

From: FOR 305 or any FRN courses at 300 level.

A minor in Spanish consists of 20 credits, as follows:

A. Core (17 credits).

SPN 211, 212, 301, 303; SPN 310 or 319.

B. Elective (3 credits).

From: FOR 305 or any SPN courses at 300 level.

Integrated Science

A major consists of 36 credits, as follows:

A. Scientific Inquiry (8 credits).

SCI 125, 126. (Students are encouraged to complete these courses in numerical order and prior to completing the other Integrated Science requirements.)

B. Life science (8 credits).

BIO 103, 104.

C. Earth science (8 credits).

GEO 150, 151.

D. Physical science (12 credits).

AST 131, 133; PHY 110; CHM 130, 131.

E. Science methods.

Students completing the Integrated Science major must elect EDE 344 as part of their Professional Education requirements.

A minor consists of 24 credits, as follows:

A. Scientific Inquiry (8 credits).

SCI 125, 126. (Students are encouraged to complete these

courses in numerical order and prior to completing the other Integrated Science requirements.)

B. Life science (4 credits).

BIO 103 or 104.

C. Earth science (4 credits). GEO 150 or 151.

D. Physical science (8 credits).

CHM 130, 131; AST 131 & 133, or PHY 110.

 Science methods.
 Students completing the Integrated Science major must elect EDE 344 as part of their Professional Education requirements.

Language Arts

A major consists of 36 credits, as follows:

No course may be used to simultaneously fulfill Language Arts requirements listed below, Fine Arts major/minor requirements, or Professional Education requirements.

A. Linguistics (6-9 credits).

1. LIN 200 or 244 (3 cr.).

2. Additional courses from: LIN 200, 244, 284, 313, 335, 349, 351, 409 (3-6 cr.).

B. English (9-12 credits).

1. Two from: ENG 202, 203, 208, 241 (6 cr.).

2. One from: ENG 213, 215, 374, 382 (3 cr.).

3. Additional courses from: ENG 252, 296, 298, 448, 474; any English course listed above (*0-3 cr.*).

C. Theatre (3-9 credits).

1. THE 100 or 150 (3 cr.).

 Additional courses from: THE 100, 150, 213, 230, 390, 449 (0-6 cr.).

D. Communication (6-9 credits).

1. COM 200, 210 (6 cr.).

2. Electives from: COM 204, 213, 241, 242, 281, 301, 340, 342 (0-3 cr.).

E. Philosophy (0-6 cr.).

Electives from: PHL 103, 325, 374.

F. Children's Literature/Adolescent Literature. Students completing the Language Arts major must elect EDR 430/ENG 448, Children's Literature, or EDR 437/ENG 474, Adolescent Literature. These courses can be elected either as ENG 448 or ENG 474, with 3 credits counting

toward the 36 hour Language Arts major, or as EDR 430 or EDR 437, with 3 credits counting toward the EDU Professional Education requirements.

A minor consists of 24 credits distributed as follows:

No course may be used to simultaneously fulfill Language Arts requirements listed below, Fine Arts major/minor requirements, or Professional Education requirements.

A. Linguistics (6 credits).

1. LIN 200 or 244 (3 cr.).

One additional course from: LIN 200, 244, 284, 313, 335, 349, 351, 409 (3 cr.).

B. English (9 credits).

1. Two from: ENG 202, 203, 208, 241 (6 cr.).

2. One from: ENG 213, 215, 374, 382 (3 cr.).

C. Theatre (*3 credits*). THE 100 or 150.

D. Communication. (6 credits). COM 200, 210.

E. Children's Literature/Adolescent Literature. Students completing the Language Arts minor must also elect EDR 430, Children's Literature, or EDR 437, Adolescent Literature, as part of their Professional Education

requirements.

Mathematics

This major and minor are currently under review. Interested students should consult with an advisor in the Academic Advising and Career Center or the Education Department before pursuing this concentration.

Social Studies

A major consists of 36 credits distributed as follows:

- A. Economics (6-12 credits).
 - 1. Core. ECN 201, 202 (6 cr.).
 - 2. Electives. Additional ECN courses (0-6 cr.).
- B. Geography (6-12 credits).
 - 1. GEO 116; GEO 115 or 216 or 285 (6 cr.).
 - 2. Electives. Additional GEO courses listed above (0-6 cr.).
- C. History (6-12 credits).

 - U.S. history. HIS 220 or 221 (3 cr.).
 Non-U.S. history (3 cr.).
 Electives. Additional HIS courses (0-6 cr.).
- D. Political Science (6-12 credits).
 - 1. Core. POL 120, 190 (6 cr.).
 - 2. Electives. Additional POL courses (POL 230, 311, 345, 380, 437 recommended) (0-6 cr.).
- E. Social Studies Methods.

Students completing the Social Studies major must elect EDE 343 as part of their Professional Education requirements.

A minor consists of 24 credits, distributed as follows:

A. Economics (6 credits). ECN 201, 202.

B. Geography (6 credits). GEO 116; GEO 115 or 216 or 285.

C. History (6 credits).

HIS 220 or 221; three additional credits in non-US history.

D. Political Science (6 credits). POL 120, 190.

E. Social Studies Methods.

Students completing the Social Studies minor must elect EDE 343 as part of their Professional Education requirements.

Endorsement in Early Childhood Education

Michigan certification in early childhood education is available through the Department of Early Childhood Education. *See page 229 for requirements.

Secondary Education Teacher's Certificate Programs

Students wishing to qualify for the Michigan Secondary Provisional Certificate should consult the appropriate departmental advisor.

Requirements in non-education coursework for Teacher's Certificate Program majors and minors are stated in the various departmental sections. Programs available and their advisors are:

Biology: G. Pace Chemistry: M. Gebler Earth Science: R. Repic English: J. Bernsten, T. Foster

French (see Foreign Language): J. Lawand, P. O'Donnell

History: R. Hanashiro Mathematics: K. Weller Music (K-12): L. Alexander Physics: A. Grafe (CSESP) Political Science: M. Kahn Psychology: M. McGrath

Social Studies: T. Robertson (History)

Spanish (see Foreign Language): J. Lawand, P. O'Donnell

Speech (see Theatre): C. Gillespie (THE)

Visual Art (K-12): F. Wagonlander (ART), C. Waters (ART)

Requirements.

- A. PSY 100.
- B. A course in United States history (HIS 220, 221 are recommended). See the Education Department office or website for the complete list of acceptable courses.
- C. A course in the history or culture of American ethnic minorities: AFA/SOC 270; AFA 331; AFA/HIS 334; EDE 305; ENG 213, 374; EDE 432/PUB 438. (This list is subject to change. See the Education Department office or website for the current list of acceptable courses.)
- D. The departmental prerequisites for the Teacher's Certificate Program selected.
- E. Completion of a Teacher's Certificate Program major and Teacher's Certificate minor.
- F. Satisfactory completion of at least 124 credits of which at least 100 shall be taken in non-education courses and at least 24 in education courses.
- G. In the student's third and fourth years, the following professional courses are required:
 - 1. EDS 300, 302, 360.
 - 2. Methods. One of the following appropriate to the teaching major: EDS 341, 342, 343, 344, 345, 346, 347,
 - 3. Student Teaching. EDS 469, 499.
 - Reading improvement. ENG 410/EDR 445.
- H. Completion of the requirements listed in the section, "General Requirements for Teacher Certification."

For the teaching of certain subjects, the North Central Association of Colleges and Schools requires a preparation that might be in excess of the requirements for the certification minor. Its requirements, which apply to teachers in any school that is a member of the North Central Association, are revised from time to time.

It is recommended that students request a copy of the North Central Association publication, Policies and Criteria, available from the North Central Association, 950 Victors Way, Suite 50, University of Michigan, Ann Arbor, Michigan 48108-2736; (734) 998-9300.

In exceptional circumstances, modifications in the requirements for certificate programs and for minors may be made with the approval of the student's academic advisor and the Chair of the Education Department.

General Requirements for Teacher Certification

Before they can be considered candidates for teacher certification, students must complete a written application and be admitted formally to a teacher certificate program (TCP). If a teacher education student has been away from the University for one calendar year or more, the student must reapply for admission to the teacher certificate program and must satisfy the admission and degree requirements in effect at the time of readmission.

There are two admission periods each year, in January and in September. Deadlines for applying are January 15th and September 15th. During the admission periods, applications are available online at http://www.flint.umich.edu/departments/edu.

At the time of applying, the student must have formulated a reasonably firm academic plan. The choice of certificate level (elementary/secondary) should be firm, major(s) and minor(s) should be identified, and a probable completion date should be projected.

Students apply and are accepted to the Teacher Certification Program one semester prior to taking EDE/EDS 360 and courses requiring EDE/EDS 360 as a pre- or co-requisite. For example, a student must be admitted to a certificate program before registering to take EDE or EDS 300, 302 and 360 the following semester.

Students not admitted to a teacher certificate program may enroll in education courses which do not have EDE or EDS 300, 302 or 360 as prerequisites. Admission is selective. Enrollment decisions will be based upon student qualifications as well as faculty and program resources.

Requirements for Admission.

- A. Admission to the University of Michigan-Flint.
- B. An overall grade point average (GPA) of 2.75 or better. The GPA will be computed using ALL courses which are potentially transferable to UM-Flint, including courses for which the student has received a grade below a "C."
- C. A grade point average of 2.75 or better in each major and minor teaching area; at least 18 hours *completed* in the major, 12 hours *completed* in the minor (only 9 hours *completed* for the early childhood education specialization).
- D. Mastery of basic skills evidenced by passing the Basic Skills
 Test portion of the Michigan Test for Teacher Certification.
 (See the Education Department for the Michigan Test for
 Teacher Certification registration bulletin.)
- E. Completion of PSY 100 or equivalent with a grade of C (2.0) or better.
- F. Completion of EDM 120 and EDM 121 with a grade of C (2.0) or better (Elementary Education students only).
- G. Completion of SCI 125 or 126 with a passing grade (Elementary Education students only).
- H. Effective Fall 2007, all students must undertake a criminal background check that includes fingerprinting prior to their admission to the Education program. Students are responsible for any cost incurred in undertaking the criminal background check.

Requirements for Completion.

Students must have a 2.75 or better grade point average in education courses and must maintain grade point averages specified above in order to apply for admission to student teaching, to be eligible to enter student teaching, and to apply for certification. At all points in the teacher certification program students must exhibit dispositions appropriate to the teaching profession and remain in compliance with student responsibilities detailed in the "Students Rights and Responsibilities" section of this *Catalog*.

Students should plan to have at least one regular semester between the time of taking EDE/EDS 360 and the time of student teaching to provide an experiential background for the remaining professional education courses.

Any student who elects a required education course more than five years before enrolling in student teaching must take the course again or satisfy a competency evaluation given by the instructor. This policy includes all professional education courses taken as a part of the student's certification program. Students who have been away from the University for one calendar year or more must follow the readmission guidelines noted earlier in this section.

To be eligible for student teaching, students must complete an online application and attend a mandatory first seminar meeting. The application period for Fall student teaching will be in early December. The application period for Winter student teaching will be in late April/early May. Missing the application deadline will result in waiting until the next application period. Dates and times for mandatory first seminar meetings will be in August for Fall semester student teaching and in December for Winter student teaching. Failing to attend the first seminar meeting will result in waiting until the next application period. Announcements for the application periods and first seminar meetings will be posted outside the Education Department, and an email will be sent to UM-Flint email student accounts. Students should regularly check their UM-Flint email accounts and Education bulletin boards or call the Department of Education at 762-3260 for specific dates and times.

Prospective teachers must be of good moral character, have suitable personality traits and aptitude for teaching, and possess good physical and mental health. The Administrative Rules Governing the Certification of Michigan Teachers impose the following conditions on teacher certification:

Rule 101. "The state board may refuse to grant or renew, or may revoke or suspend for a fixed term, or may impose reasonable conditions on, a teaching certificate pursuant to these rules for the following reasons:

- (a) Fraud, material misrepresentation, or concealment in the application for a certificate.
- (b) Failure or ineligibility of the applicant or certificate holder to meet the criteria for eligibility for the certificate.
- (c) Conviction, as an adult, of an act of immoral conduct contributing to the delinquency of a child, or of a felony involving moral turpitude."

Certificate applicants are required to sign a statement declaring that the conditions stated in Rule 101 do not apply to them. They must also take the following oath of allegiance prescribed by the laws of Michigan:

"I do solemnly swear (or affirm) that I will support the Constitution of the United States of America, and the Constitution of the State of Michigan, and that I will faithfully discharge the duties of the office of teacher according to the best of my ability."

To be recommended for a teaching certificate, the student must:

- A. Complete degree requirements in a prescribed curriculum in education for the state elementary or secondary provisional certificate.
- B. Maintain a 2.75 or better overall grade point average; a 2.75 or better grade point average in education courses and a 2.75 or better grade point average in each major and minor teaching area.
- C. Elementary education students must achieve a grade of "Pass" in EDE 360 and earn a grade of C (2.0) or better in each of the following EDE 300, 302; EDM 341; EDR 343,
- D. Secondary education students must achieve a grade of "Pass" in EDS 360 and earn a grade of C (2.0) or better in the required secondary methods course and each of the following: EDS 300, 302; ENG 410/EDR 445.
- E. Pass the Michigan Test for Teacher Certification (MTTC) in Basic Skills prior to admission. Candidates for an elementary teaching certificate must pass the MTTC in Elementary Education prior to certification and may take appropriate subject area tests if they are seeking additional certification areas in grades 6-8. Candidates for secondary teaching certificates must pass the appropriate MTTC subject area examination for each subject area in which they are to be certified prior to certification.
- F. Earn a satisfactory rating in Student Teaching.
- G. Submit proof of completion of an approved course in adult and child CPR and first aid.

Certificate Requirements in Other States

The teacher's certificate issued by the State of Michigan is valid only in the state of Michigan. A student who plans to teach in a state other than Michigan should become acquainted fully with the certification requirements of that state before entering the senior year. The student should then consult an advisor regarding the courses which must be elected in order to meet these requirements.

Many states now require that the applicant pass a test before a teaching certificate is issued. For information, addresses of state departments of education are available from the office of the Director of Teacher Certification.

Certification for Students Holding Bachelor's Degrees

A student who has completed a bachelor's degree at an approved institution may meet state requirements for teacher certification without earning a second degree. Such students should contact the Director of Teacher Certification or the Post-Baccalaureate Program advisor for information concerning a coursework evaluation.

Students with bachelor's degrees may qualify for the MA in Education with Elementary Certification program. Interested students should refer to the "Graduate Study" section of this Catalog.

Institutional Report Card on the Quality of Teacher Preparation for the University of Michigan-Flint

In response to the Title II - Higher Education Act, Section 207,

Accountability for Programs that Prepare Teachers, the University of Michigan-Flint provides the following Institutional Report Card on the Quality of the Teacher Preparation Program.

Pass Rate

The pass rate on the State of Michigan's Teacher Certification assessments for students who are recommended for teacher certification upon completion of a teacher education program at the University of Michigan-Flint is 100% for all certification programs. This pass rate is equal to or exceeds the pass rate for all other Michigan colleges and universities that prepare teachers.

Program Information

There are 1183 students enrolled in the teacher preparation program. Students are required to complete a minimum of fourteen (14) weeks of supervised student teaching as part of the culminating program requirement. The total number of hours required is 490. The faculty-student ratio in the supervised student teacher experience is 1-18 (one full-time faculty member is responsible for supervising a maximum of eighteen student teachers in supervised practice teaching).

Accreditation Statement

The teacher education program at the University of Michigan-Flint is approved by the Michigan Department of Education to offer programs in elementary education, early childhood education, selected secondary education programs, and selected programs that prepare teachers for teaching in all grades.

Courses in Early Childhood Education (ECE)

100. (EDU 235). Foundations of Early Childhood Education.

Focus on underlying principles and philosophies of early childhood education and how children learn. Programs, curriculum, and child development in social, cultural and historical contexts. The teacher as facilitator of learning examined through study of professionalism and reflective teaching, equity in education, and parental involvement. Multicultural education, educational technology, and inclusion of special needs children into the classroom presented in depth.

120. (EDU 185). Music in Early Childhood. (3).

Study of musical growth and development in children from birth through kindergarten. Techniques, materials, and methods for introducing music to children. Highly recommended for early childhood education concentrations. No prior musical experience necessary. Also listed as MUS 185.

200. Child Development and Learning. ECE 100. (3).

Overview of development from pre-natal to age eight, covering a wide range of topics including physical growth patterns, theories of social, emotional, cognitive and language development. Particular attention focused on implications of developmental theories and developmentally appropriate practices for human service professionals and educators working with children birth through 8 years.

[220. (EDU 203). Infant/Toddler Learning Environments. ECE 100; EDE 300, or PSY 237 elected prior to Fall 2006. (3-4).]

225. (EDU 236). Play and Learning in Early Childhood Education. ECE 100. (3).

Exploration of the relationship between play, learning, and development in the lives of young children. Connections between play and developmental theory, integration of play into curricular experiences are studied.

[230. (EDU 202). Health, Nutrition, and Safety in Early Childhood. ECE 100; EDE 300, or PSY 237 elected prior to Fall 2006. (3-4).]

235. Working with Families, Children and Community. ECE 100. (3).

This course explores the child in family and community through an ecological perspective. Prepares students to understand structural and cultural diversity within families. Investigates strategies to effectively communicate and collaborate with families in their children's education. Discuss current legislation and issues affecting families and children, and an overview of resources available in the community.

240. Child Guidance and Classroom Management. ECE 100, ECE 200, ECE 225 or prior or concurrent election of ECE 235. (3).

Emphasis on skills and knowledge needed to create safe, supportive learning communities using principles of developmentally appropriate child guidance and classroom management. Students will learn methods and strategies to set limits, establish classroom routines, guide classroom behaviors, and facilitate young children's pro-social development.

340. (EDU 337). Methods and Materials for Teaching the Young Child. ECE 100, ECE 200, ECE 225, ECE 235. (3).

Exploration of techniques of selecting, planning, organizing, providing, and evaluating educational experiences appropriate to the development level and learning styles of young children. Emphasis on the role of the teacher in providing opportunity and guidance needed for young children to grow and develop.

343. (EDU 362). Emergent Literacy. ECE 100, ECE 200, ECE 225 and ECE 235. (3).

In-depth exploration of young children's literacy development. Oral and written language development, functions of oral and written language, and the connection between oral language and the development of literacy. Focus on methods that support young children's emergent literacy and create language and literacy-rich environments in early childhood programs.

420. (EDU 453). Young Children with Special Needs. ECE 100, ECE 200, ECE 225, ECE 235 and prior or concurrent election of EDN 410. (3).

Introduction to working with young children (birth-8 years old) with special needs. Topics include: Developmental and ecological perspectives on young children with special needs, assessment, identification, IFSPs, IEPs, least restrictive

environments, early childhood special education and intervention programs, strategies and techniques, ancillary supports, family supports, transition to primary grades, and ongoing support in the primary grades. *Also listed as EDN 420.*

440. (EDU 341). Assessment in Early Childhood Education. ECE 100, ECE 200, ECE 225, ECE 235. (3).

Exploration of principles and purposes of assessment in early childhood. Techniques and strategies of ongoing instructional assessment; how to use the information gained to deepen knowledge of children and guide instructional planning. Particular focus is placed upon assessment issues specific to early childhood; the use of assessment to support curriculum standards with children aged 0-8 years.

469. (EDU 451). Fieldwork in Early Childhood Education. *ECE 100, ECE 200, ECE 225, ECE 235, ECE 240 or prior or concurrent election of ECE 340 and ECE 343. (3).*

Important understanding and skills for working with young children and eaching in early childhood settings. Students participate in a weekly seminar and work directly with young children in local preschool settings for 120 hours during the semester. *Graded Pass/Fail/Y*.

480. Independent Study in Early Childhood Education. *Consent of instructor.* (1-3).

Research, readings, or special projects tailored to academic needs and interests of the student in a topic related to early childhood education. May be re-elected to a maximum of four credits.

485. Special Topics in Early Childhood Education. (1-6).

Focus on various topics, including intensive study of specific areas related to early childhood education. May follow a non-traditional university calendar schedule and may be delivered in non-traditional formats. The title for each section varies, based on the topic of study. May not be elected for more than six credits and may not repeat the same topic for credit.

499. (EDU 401). Leadership in Early Childhood Educational Programs. *Prior or concurrent election of ECE 469. (3).*

This course discusses the administrator's role in early childhood programs. It includes a focus on administrative relationships, organizational structures, staff leadership, and developmentally appropriate practice.

Courses in Elementary Education (EDE)

100. (EDU 120). Exploring Teaching as a Career. (3).

Provides the student with an opportunity to explore issues of learning and development; critical issues in education; techniques of selecting, planning, organizing, providing and evaluating educational experiences appropriate to the developmental level of the student; includes field experiences. *Graded ABCDE/Y*.

123. (EDU 180). Music for Elementary School Teachers. (3)f.

Techniques, materials, and methods available to the elementary teacher with little or no musical experience. Provides students with basic understanding of music theory, playing recorder, movement to music, listening activities, simple percussion instruments, and composing. *Also listed as MUS 180*.

300. (EDU 301). Developmental Psychology for Elementary Education. PSY 100; prior admission to K-8 or K-12 teacher education program; at least junior standing; prior or concurrent election of EDE 360. (3).

Exploration of issues of learning and development through a variety of theoretical lenses. Various facets of human development, diversity and motivation, as applied to learning and teaching. Special attention to learning and development issues in the K-8 setting.

302. (EDU 302). Social Foundations of Elementary Education. Admission to K-8 or K-12 teacher education program; at least junior standing; prior or concurrent election of EDE 360. (3).

Critical issues in education. Topics include organization, control and support of schools; problems of culture and race; teacher organizations; and alternatives in education.

305. Understanding Urban School Practice. At least junior standing. (3).

Prepares students to become effective practitioners who understand key issues that impact education in urban systems. Students will learn to develop constructive strategies for achieving PreK-12 student success in urban educational environments.

340. (EDU 336). Creative Learning Experiences. *Prior or concurrent election of EDE 360. (3).*

Creative activities for early childhood, elementary, and middle school children through the integration of art, music, play, and drama. Techniques of planning, presenting, and evaluating creative learning experiences for the classroom. *Also listed as ART 336, MUS 336 and THE 336.*

342. (EDU 300). Methods and Materials. *ART 101 (MCC).* (3).

Application of skills and information learned in studio classes to teaching. Development of sequential art curriculum for elementary, middle, and secondary teaching, production of instructional resource files, assessment of artwork; current issues in art education. Clinical experiences in elementary, middle, and secondary classrooms. *Also listed as ART 300*.

343. (EDU 345). Teaching Social Science in the Elementary and Middle School. *Prior or concurrent election of EDE 360.* (3).

Objectives, materials, organization, and content for instruction in the social sciences in the elementary and middle school grades. Adaptation to special school conditions; contributions of research.

344. (EDU 340). Teaching Science in the Elementary and Middle School. Prior or concurrent election of EDE 360. (3).

Teaching strategies based on how children learn science. Experiences with content and materials drawn from modern elementary and middle school science programs.

346. (EDU 381). Teaching General Music, Grades K-8. *MUS* 130, 241, 242, 243, 252, 261, 262. (3).

Development of essential competencies for teaching elements of music, musical literacy, movement to music, listening activities, and works appropriate for grades K-8. Discussion of current methodologies. Observation by students in various school music situations. *Also listed as MUS 381*.

360. (EDU 303). Elementary Teaching Experience/Seminar. Prior admission to teacher education program; at least junior standing. (3).

Field placement in elementary school, accompanied by a seminar designed as an introduction to the elementary teaching profession. Students learn about teaching by participating in a public classroom under the guidance of a mentor to describe and analyze the role of the elementary classroom teacher in teaching and learning. *Graded Pass/Fail/Y*.

361. (EDU 392). Fieldwork in School and Youth-Work Settings. Consent of instructor. (1-9).

Field assignments to fit student needs and interests; supervised by agency and University personnel. Periodic conferences and written work. *Graded ABCDE/Y*.

401. (EDU 452). Sociology of Education. SOC 100, senior standing; or consent of instructor. (3).

Critical examination of schools and schooling in American society. Contemporary relationship of education to political, economic, and social structures of society. Alternative perspectives on education. *Also listed as SOC 452*.

402. (EDU 482). Schools and Communities. At least junior standing. (3).

The role of schools in building community. Emphasis on interplay between schools and community agencies in provision of educational and social services to youth, parents, and community members. Concrete programs and policies for connecting schools and communities. *Also listed as PUB 482 and SWR 402*.

432. (EDU **438**). Multicultural Education: Concepts and Strategies. *At least junior standing.* (3).

Designed to prepare certified and pre-certified teachers in multicultural education. Emphasis on design, development, and practical implementation of teaching strategies, theoretical constructs, and curriculum. *Also listed as PUB 438*.

433. (EDU 440). Girls, Culture and Education. At least junior standing. (3).

Interdisciplinary introduction to empirical research and critical inquiry on the education of girls in the U.S. Study of contemporary educational thought on the gendered social and cultural context of schooling. *Also listed as WGS 440*.

440. (EDU **400).** Classroom Management. At least junior standing. (3).

Theory and practice. Mastery of fundamentals of classroom discipline and management. Emphasis on low profile techniques to focus student attention on lesson content. *Graded ABCD>N*.

441. (EDU 357). Assessment in Education. EDE 360 or consent of instructor. (3).

Theoretical and practical study of assessment in various educational contexts; emphasis on techniques of assessment as a part of on-going instruction in the classroom.

461. (EDU 398). International & Global Perspectives in Education. Consent of instructor; at least sophomore standing. (1-6).

Graded ABCD>N.

469. (EDU 349). Student Teaching in the Elementary School. EDE 300, 302, 360; EDM 341; EDR 343, 344; all six with grades of C(2.0) or better; concurrent election of EDE 499. Open only to students with 110 or more credits, who are within 8 credits of completing their major and within 8 credits of completing their minor prior to student teaching, and who have been formally admitted to a teacher certification program and completed an application to student teach. (At the time of application, students must have passed the State of Michigan basic skills tests and have grade point averages of at least 2.75 overall, in education courses, and in the major and minor subject areas to be eligible to student teach). Application procedures include an online application and a mandatory orientation meeting. The Application period is in December for Fall student teaching, and in late April/early May for Winter student teaching. Missing the deadline will result in waiting until the next application period. The application site is posted to the Education Department's website and on the Department's bulletin board. The mandatory orientation is held in August for Fall student teaching, and in December for Winter student teaching. Dates and times are listed in the student's eligibility letter and posted on the application site and to the Student Teaching organization in Blackboard. It is strongly urged that students elect only 12 credits while student teaching. (3-10)

Full-time teaching internship in a classroom for 14 weeks under the joint supervision of University and school personnel. Designed to develop the special knowledge and skills required of teachers through supervised full-time participation in classroom work. Weekly seminar provides opportunity for discussion and evaluation of the student teaching experience. Additional clinical experiences and independent study may be required on an individual basis where deemed necessary by University and school personnel. Students should keep other course elections to a minimum during the semester of student teaching. Graded Pass/Fail/Y.

470. (EDU 394). Honors Research Methods. *Open only to Honors Program students in elementary education.* (1).

Individual tutorial course to help the student design, conduct, and analyze educational research appropriate to the honors thesis. *Graded ABC>N*.

480. (EDU 391). Independent Study in Elementary Education. Consent of instructor. (1-3).

Research, readings, or special projects tailored to academic needs and interests of the student. May be reelected to a maximum of four credits. Graded ABCDE/Y.

485. Special Topics in Elementary Education. (1-6).

Focus on various topics, including intensive study of specific areas related to elementary education. May follow a non-traditional university calendar schedule and may be delivered in non-traditional formats. The title for each section varies, based on the topic of study. May not be elected for more than six credits and may not repeat the same topic for credit.

488. (EDU **495**). Honors Thesis I. EDE 470. Open only to Honors Program students in elementary education. (4).

Credit and grade for EDE 488 is not awarded until successful completion of EDE 489. Also listed as HON 495. Graded ABCDE/Y.

489. (EDU 496). Honors Thesis II. *Prior or concurrent election of EDU 495. Open only to Honors Program students in elementary education.* **(4)**.

Also listed as HON 496. Graded ABCDE/Y.

499. (EDU 359). Elementary Student Teaching Seminar. Concurrent election of EDE 469 or EDS 469. (2).

Group discussions, projects, and activities designed by students in student teaching to aid in looking beyond the details of the student teaching experience and in conceptualizing the teaching and learning process. *Graded Pass/Fail*.

Courses in Educational Leadership (EDL)

410. (EDU **450**). Leadership Theory and Practice. At least junior standing. (3).

Theory and practice of supervision and management functions in public administration; attention to private sector management practices. Traditional and innovative group leadership and motivation techniques. Relationships with superiors, subordinates, peers, clients, customers. Computer-assisted and group practice of skills which induce rather than coerce productivity, including conflict resolution and negotiation. Highly clinical. Not open to students with credit for EDE 440 (EDU 400). Also listed as PUB 450.

Courses in Elementary Education Mathematics (EDM)

120. Mathematics for Elementary Education I. *Students must submit a Misdemeanor/Felony Conviction Form and be approved before beginning this course.* (4).

Exploration of content and methods relevant to whole number arithmetic in the K-5 classroom, with emphasis on how children learn. Includes exploration of place value and arithmetic operations and error analysis of children's work. Reflective lesson development via lesson study through guided

discovery-based activities in a cooperative group setting. Portion of the course held in a local elementary school.

121. Mathematics for Elementary Education II. EDM 120. Students who transfer an EDM 120 equivalent must submit a Misdemeanor/Felony Conviction Form and be approved before beginning this course. (4).

Exploration of content and methods relevant to geometry in the K-5 classroom, with emphasis on how children learn. Patterns, classification of shapes, measurement, area and perimeter, volume and surface area. Reflective lesson development via lesson study through guided discovery-based activities in a cooperative group setting. *Portion of the course held in a local elementary school.*

220. Algebraic Thinking for Elementary Education. *EDM* 121. (4).

Algebraic thinking and its application to the K-8 classroom. Focus on the nature of algebraic thinking and how algebraic thinking can be coordinated with the teaching of number and operation; proportional reasoning; geometry and measurement; data analysis and probability. Special focus on the notion of variables and unknowns, the concept of function, and modeling of real world situations using algebraic language. Guided discovery-based activities in a cooperative group setting. Part of the course may involve interaction with school children.

221. Mathematical Reasoning, Proving, and Problem Solving for Elementary Education. *EDM 121.* (4).

Learning and implementing relevant problem-solving strategies; exploring what proof means in the K-8 classroom. Students explore various mathematical contexts: posing problems and problem extensions, developing problem-solving strategies, solving problems, communicating mathematical demonstrations, investigating notions and methods of proof. Examination of the use of resources (media technology, references, colleagues) to engage in problem solving and proof. Guided discovery-based activities in a cooperative group setting. Part of the course may involve interaction with school children.

222. Geometry for Elementary Education. EDM 121. (4).

Topics in Euclidean and non-Euclidean geometry and their application to the K-8 classroom. Topics may include classification of shapes, investigation of basic properties of polygons and polyhedra, concepts of measurement, area and volume, and the notion of proof. Use of technology appropriate to teaching elementary and middle school geometry featured. Guided discovery-based activities in a cooperative group setting. Part of the course may involve interaction with school children. Not open to students with credit for MTH 133.

320. Concepts of Calculus for Elementary Education. *EDM* 121. (4).

One-variable calculus and its relevance to the K-8 classroom. Topics include functions, limits, derivative, integrals, and the Fundamental Theorem of Calculus. Guided discovery-based activities in a cooperative group setting. Part of the course may involve interaction with school children. Not open to students with credit for MTH 124.

321. Discrete Structures for Elementary Education. *EDM* 121. (4).

Discrete mathematics and its application to the K-8 classroom. Topics may include graph algorithms, induction, recursion, and permutations and combinations. Guided discovery-based activities in a cooperative group setting. Part of the course may involve interaction with school children. Not open to students with credit for MTH 240.

322. Probability and Statistics for Elementary Education. *EDM 121.* (4).

Investigation of descriptive statistics and probability directly relevant or transferable to the K-8 classroom or used professionally by working teachers. Guided discovery-based activities in a cooperative group setting. *Part of the course may involve interaction with school children*.

341. (EDU 342). Mathematic Learning and Curriculum for Elementary Education. EDM 121, prior admission to the teacher education program. (4).

Exploration of content and methods relevant to rational number arithmetic in the K-8 classroom, with emphasis on how children learn. Integers, multiplicative structures, fractions, decimals, data representation, probability, percent, ratio and proportion. Reflective lesson developments via lesson study through guided discovery-based activities in a cooperative group setting. Portion of the course held in a local elementary school.

390. Capstone to the Elementary Education Mathematics Minor. *EDM* 121. (4).

Seminar devoted to investigating topics in calculus, discrete mathematics, and probability and statistics with an eye toward developing lessons for the K-8 classroom. Part of the course may involve interaction with school children. Does not count toward the Elementary Education Mathematics Major.

490. Capstone to the Elementary Education Mathematics Major. Completion of 28 credits toward the Elementary Education Mathematics Major, or consent of instructor. (4).

Seminar concerning advanced topics in middle school mathematics. Students develop and present lessons in the areas of calculus, discrete mathematics, and probability and statistics. Part of the course may involve interaction with school children.

Courses in Education of Children with Special Needs (EDN)

410 (EDU 432). Teaching in the Inclusive Classroom. Prior or concurrent election of EDE 300, 360; or consent of instructor.(3).

Introduction to and critique of the theory and practice of inclusion, education of students with disabilities in the regular classroom. Philosophy and goals of inclusive education as they relate to general school and classroom level practices that support the success of all students regardless of ability; skill development in inclusion strategies.

420. (EDU 453). Young Children with Special Needs. ECE 100, ECE 200, ECE 225, ECE 235 and prior or concurrent election of EDN 410. (3).

Introduction to working with young children (birth-8 years old) with special needs. Topics include: Developmental and ecological perspectives on young children with special needs, assessment, identification, IFSPs, IEPs, least restrictive environments, early childhood special education and intervention programs, strategies and techniques, ancillary supports, family supports, transition to primary grades, and ongoing support in the primary grades. *Also listed as ECE 420*.

480. Independent Study in Special Education. Consent of instructor. (1-3).

Research, readings or special projects tailored to academic needs and interests of the student in a topic related to the education of children with special needs. *May be re-elected to a maximum of 4 credits*.

485. Special Topics in Special Education. (1-6).

Focus on various topics, including intensive study of specific areas related to the education of children with special needs. May follow a non-traditional university calendar schedule and may be delivered in non-traditional formats. The title for each section varies, based on the topic of study. May not be elected for more than six credits and may not repeat the same topic for credit.

Courses in Reading & Language Arts (EDR)

343. (EDU 335). Literacy Learning in the Elementary and Middle School. Prior or concurrent election of EDE 360.
(3).

Familiarization of prospective elementary and middle school teachers with important aspects of reading instruction. Emphasis on current views of the reading process as it relates to instructional strategies and techniques for improving student learning.

344. (EDU 333). The Integrated Language Arts: Reading, Writing, and Oral Language. Prior or concurrent election of EDE 360. (3).

Examination of the interrelated nature of reading, writing, speaking, and listening. Includes strategies and techniques for developing language arts skills using an integrated instructional approach in elementary and middle schools.

430. (EDU 448). Children's Literature. At least junior standing.

Survey of content and literary merit of books read by the elementary school child. Common and divergent elements of the various forms of literature. Criteria to be considered in selecting books for children. *Also listed as ENG 448*.

435. (EDU **449**). Folklore and Storytelling. At least junior standing. (3).

Study of folklore and its relationship to the storytelling process.

Emphasis on techniques of preparing and telling stories. Course involves attendance at the Michigan Storytellers' Festival. *Also listed as THE 449.*

437. (EDU 474). Adolescent Literature. At least junior standing. (3).

Survey of the content and literary merit of books read by middle and high school students. Consideration of criteria for the selection of reading material; emphasis on approaches for teaching with such materials in a variety of school contexts. *Also listed as ENG 474*.

441. (EDU 481). Literacy Assessment in the Elementary/Middle School. EDR 343 or consent of instructor. (3).

Examination of the role of assessment in students' reading and writing in the K-8 classroom. Informal assessment mdasures, individualized and small group instructional strategies, standardized testing, and their function in students' literacy development.

445. (EDU 410). Improvement of Reading in the Middle and Secondary School. Prior or concurrent election of EDE or EDS 360, or consent of instructor. (3).

Designed to acquaint middle and secondary school teachers with the nature of the reading process, reading curriculum, methods of teaching reading for special content, classroom diagnostic and remedial procedures, materials and equipment, and current reading programs at the middle and secondary school levels. Should be elected as EDR 445 by English teacher's certificate majors; may be elected as ENG 410 or EDR 445 by English teacher's certificate minors. Also listed as ENG 410.

446. (EDU 412). Writing for Middle and Secondary School Teachers. Prior or concurrent election of EDE or EDS 360, or consent of instructor. (3).

Rationale, theory, and methods for teaching composition to middle and secondary school students in both language arts and content area fields. Concepts of the writing process; techniques for generating, responding to, and evaluating writing; writing across the curriculum; structuring writing courses and programs. Requires field experience in local schools or preparation of an inservice presentation. Also listed as ENG 412.

480. Independent Study in Reading and Language Arts. *Consent of instructor.* (1-3).

Research, readings or special projects tailored to academic needs and interests of the student in a topic related to literacy education. *May be re-elected to a maximum of 4 credits.*

485. Special Topics in Reading and Language Arts. (1-6).

Focus on various topics, including intensive study of specific areas related to literacy education. May follow a non-traditional university calendar schedule and may be delivered in non-traditional formats. The title for each section varies, based on the topic of study. May not be elected for more than six credits and may not repeat the same topic for credit.

Courses in Secondary Education (EDS)

300. (EDU 305). Developmental Psychology for Secondary Education. PSY 100; admission tn secondary teacher education program; at least junior standing; prior or concurrent election of EDE or EDS 360. (3).

Exploration of issues of learning and development through a variety of theoretical lenses. Various facets of human development, diversity and motivation, as applied to learning and teaching. Special attention to learning and development issues in the middle and secondary school setting.

302. Social Foundations of Secondary Education. Admission to secondary or K-12 teacher education program; at least junior standing; prior or concurrent election of EDE or EDS 360. (3).

Critical issues in education. Organizations; control and support of schools; problems of culture and race; teacher organizations; alternatives in education.

341. (EDU 360). Teaching Mathematics in Middle and Secondary Schools. Prior or concurrent election of EDS 360 (EDU 306); or consent of instructor. (3).

Objectives of mathematics programs in relation to (a) recent literature; (b) new instructional materials, methods, and curricular trends; (c) development and improvement of designs and plans for teaching.

342. (EDU 307). Issues, Methods and Materials in K-12 Art. ART 300 or EDE 342 or consent of instructor. (3).

Student participation in art educational experiences and teaching of seminars in a real classroom setting, based on study of course texts and resources addressing K-12 contemporary issues in art education, the history of art education, issues of "special needs" students, classroom management skills, and instructional practices for elementary, middle and high school level courses. *Offered in Winter semesters. Also listed as ART 303*.

343. (EDU 363). Teaching Social Science in Middle and Secondary Schools. *Prior or concurrent election of EDS* 360. (3).

Outstanding problems in the teaching of social science in middle and secondary schools. General and specific objectives; trends in methods, materials of instruction and their uses; provision for individual differences; evaluation of pupil progress; procedures in curriculum construction; contributions of research.

344. (EDU 364). Teaching Science in Middle and Secondary Schools. *Prior or concurrent election of EDE or EDS 360.* (3).

Teaching strategies and objectives of science education as related to the middle and secondary school student, the science curriculum, and the science teacher. Practical experience through peer group interaction.

345. (EDU 365). Teaching Foreign Languages in Middle and Secondary Schools. FRN or GER or SPN 212; prior or concurrent election of EDE or EDS 360. (3).

Designed for prospective teachers of foreign language in the middle and secondary schools. Classroom layout for foreign language instruction. Teaching pronunciation and grammar. Teaching demonstrations by class members. Choosing and using textbooks; various theories of foreign language teaching; testing language skills. *Also listed as FRN 365 and SPN 365*.

346. (EDU **382**). Methods and Materials for Teaching Secondary School Performance Classes. *MUS 130*, *241*, *242*, *243*, *252*, *261*, *262*. *(3)*.

Organization, methods, materials, and testing procedures for secondary vocal and instrumental performance groups. Basic objectives, principles, and minimum standards of music education, teaching-learning environment, relationship of music to total school curriculum, recruiting, and public relations. Laboratory experiences in conducting vocal and instrumental groups. *Also listed as MUS 382*.

347. (EDU 361). Teaching English in Middle and Secondary Schools. Prior or concurrent election of EDS 360. (3).

Outstanding problems in the teaching of English composition, literature, and language in middle and secondary schools. Required of all candidates for the secondary teacher's certificate with a major or minor in English. Strongly recommended that this course be completed prior to student teaching in secondary English. Should be elected as EDS 347 by English teacher's certificate majors; may be elected as EDS 347 or ENG 361 by English teacher's certificate minors. Also listed as ENG 361.

348. (EDU 368). Teaching Speech in Middle and Secondary Schools. *Prior or concurrent election of EDE 360 or EDS 360.* (3).

Methods, materials, and objectives of speech education in middle and secondary schools; modern trends in instruction; problems and procedures in teaching and directing theatre, debate, discussion, and other speech activities. *Also listed as COM 368 and THE 368*.

360. (EDU **306).** Secondary Teaching Field Experience/Seminar. Prior admission to secondary teacher education program; at least junior standing. (3).

Field placement in middle or secondary school, accompanied by a seminar designed as an introduction to secondary teaching profession. Students learn about teaching by participating in a public classroom under the guidance of a mentor to describe and analyze the role of the secondary classroom teacher in teaching and learning. *Graded Pass/Fail*.

361. (EDU 375). Community Building through Educational Involvement. AFA 101 or ANT/INT 100 or SOC 100 or SWR 100; at least junior standing; or consent of instructor. (3).

Participation and observation in schools and community-based organizations, integrated with an interdisciplinary seminar on urban social issues and cultural variation. Skills required for

various forms of community action; techniques including qualitative research methods, assessment, planning, intervention, and evaluation. *Also listed as AFA 375 and SWR 361*.

442. (EDU 411). Middle School Teaching. EDE or EDS 360. (3).

In-depth analysis of the middle school, with special emphasis on the students, curriculum and instruction, and governance issues. Foundation for meeting the challenges of teaching grades 6-8.

469. (EDU 369). Student Teaching in the Secondary School.

EDS 300, 302, 360; all with grades of C (2.0) or better; concurrent election of EDS 499. Open only to students with 110 or more credits, who are within 8 credits of completing their major and within 8 credits of completing their minor prior to student teaching, and who have been formally admitted to a teacher certification program and completed an application to student teach. (At the time of application, students must have passed the State of Michigan basic skills tests and have grade point averages of at least 2.75 overall, in education courses, and in the major and minor subject areas to be eligible to student teach). Application procedures include an online application and a mandatory orientation meeting. The application period is in December for Fall student teaching, and in late April/early May for Winter student teaching. Missing the deadline will result in waiting until the next application period. The application site is posted to the Education Department's website and on the Department's bulletin board. The mandatory orientation is held in August for Fall student teaching, and in December for Winter student teaching. Dates and times are listed in the student's eligibility letter and posted on the application site and to the Student Teaching organization in Blackboard. It is strongly urged that students elect only 12 credits while student teaching. (3-10).

Full-time teaching internship in a classroom for 14 weeks, under the joint supervision of University and school personnel. Designed to develop the special knowledge and skills required of teachers through supervised full-time participation in classroom work. Weekly seminar provides opportunity for discussion and evaluation of the student teaching experience. Additional clinical experiences and independent study may be required on an individual basis where deemed necessary by University and school personnel. Students should keep other course elections to a minimum during the semester in which they take student teaching. Graded Pass/Fail/Y.

Independent Study in Secondary Education. Consent of instructor. (1-3).

Research, readings or special projects tailored to academic needs and interests of the student in a topic related to secondary education. May be re-elected to a maximum of 4 credits.

485. Special Topics in Secondary Education. (1-6).

Focus on various topics, including intensive study of specific areas related to secondary education. May follow a non-traditional university calendar schedule and may be delivered in non-traditional formats. The title for each section varies, based on the topic of study. May not be elected for more than six credits and may not repeat the same topic for credit.

499. (EDU 359). Secondary Student Teaching Seminar. Concurrent election of EDE 469 or EDS 469. (2).

Group discussions, projects, and activities designed by students in student teaching to aid in looking beyond the details of the student teaching experience and in conceptualizing the teaching and learning process. *Graded Pass/Fail/Y*.

Courses in Technology Education (EDT)

220. (EDU 225). Interactive Communications & Simulations. *Consent of instructor.* (3).

Participation in web-based educational project that encourages thoughtful and socially responsible interaction among peers, both online and offline. May be elected twice. Meets online. Does not satisfy Education Department technology requirement.

242. (EDU 223). Investigations in Project Design. Consent of instructor. (3).

Design, creation, and implementation of web-based educational programs. Students enrolled in this course will apply fundamental concepts in teaching and learning while learning to employ sophisticated web-based technologies in constructing online educational environments. Emphasis is given to designing web environments and encouraging thoughtful and socially responsible interaction among peers, both online and offline. Does not satisfy Education Department technology requirement. *Graded ABCDE/Y*.

243. (EDU 224). Advanced Investigations in Project Design. *EDT 242.* (3).

Advanced design, creation, and implementation of web-based educational programs. Students enrolled in this course will apply knowledge of online educational project design to the construction of sophisticated online educational environments. Does not satisfy Education Department technology requirement.

401. (EDU 421). Using Technology in Education. *Prior or concurrent election of EDE 360. (3).*

Introduction to uses of technology in education and technological resources for teaching. Focus on innovative uses of computer and the Internet to support student learning. Students participate in or design an educational project that uses technology, and discuss possibilities and challenges of integrating technology into teaching. Assumes basic word processing skills.

420. (EDU 427). Mentor Seminar for Educational Programs. *Consent of instructor.* (3).

Online mentoring and management of a web-based educational project, while addressing pedagogy and content in social studies, language arts, science, or visual arts. Students taking this course meet in seminar format and interact online with K-12 students in diverse geographic locations.

444. (EDU 415). Tech Application in Science Education. At least junior standing. (3).

480. Independent Study in Technology Education. Consent of instructor. (1-3).

Research, readings or special projects tailored to academic needs and interests of the student in a topic related to technology in education. May be re-elected to a maximum of 4 credits.

485. Special Topics in Technology Education. (1-6).

Focus on various topics, including intensive study of specific areas related to technology in education. May follow a nontraditional university calendar schedule and may be delivered in non-traditional formats. The title for each section varies, based on the topic of study. May not be elected for more than six credits and may not repeat the same topic for credit.

Social Work (SWR)

454 David M. French Hall (810) 762-3390 Fax (810) 237-6541

Chair: Charles W. Bailey Principal Secretary: Ella Moore

Associate Professors Charles W. Bailey, Everett J. Blakely, Kathleen L. Woehrle; Assistant Professor Denise Dedman; Clinical Assistant Professor Jacqueline Harvey; Professors Emeritus Thomas L. Coffey, Charles A. Jones

Social work is a professional art, based on an eclectic, scientific body of theory, incorporating practice, knowledge, and skill, and fused to specific ethics with inherent social value assumptions. The profession is oriented toward helping in the resolution of diverse individual and social problems, the provision for meeting broad human and community needs, and the enhancement of personal or social functioning. The primary goal of the social work program is to prepare students for beginning professional social work practice.

As part of a regional campus of the University of Michigan, the social work program's mission is to prepare students to become generalist social work professionals, by enhancing their commitment to social justice, responsible citizenship, and the value of human diversity. The educational experience the program offers provides students with opportunities to cultivate and develop technical and intellectual foundations necessary for service in the public sector and/or graduate study.

The Social Work Program is fully accredited by the Council on Social Work Education (C.S.W.E.), 1725 Duke Street, Suite 500, Alexandria, VA 22314-3457, (703) 683-8080.

Department Mission and Program Assessment

The Department participates in the University-wide effort to assess its academic programs. Information on assessment plans, including goals, methods and outcomes is available at http://assessment.umflint.edu.

Programs in Social Work

Two concentration programs are offered, both leading to the Bachelor of Arts degree: the Program in Social Work and the Honors Program in Social Work. A minor in Substance Abuse Treatment and an interdisciplinary minor in Gerontology are also available.

Requirements for Admission

Students must show evidence of suitability for the profession of social work and the ability to complete successfully the social work program through:

- A. Application to the program after completion of a minimum of 45 semester hours.
- B. A minimum grade point average of 2.4.
- C. At least two letters of reference provided on letterhead detailing scholarly potential, general character, and potential for social work practice. If the student transfers from another social work program, one letter should be from a faculty member associated with the program.
- D. Satisfactory evidence of pre-established commitment to social welfare, through, for example, appropriate volunteer experience or employment experience.
- E. A two to four page personal statement of interest regarding motivation and goals for seeking undergraduate social work education and evidence of suitability and fitness for the profession of social work and the ability to complete the undergraduate social work program.
- F. Successful completion of SWR 100 and an additional course in social work with a grade of C (2.0) or better.

General Program in Social Work

The concentration in Social Work requires 60 credits of social work and related courses. The program includes several hours of approved cognate and elective courses, which should be selected from the approved list in consultation with a Social Work Departmental Advisor. It is strongly recommended that 300 level courses in social work, substance abuse and criminal justice be taken in the junior year, and that 400 level courses in social work be taken in the senior year.

Prerequisites. SOC 100; PSY 100; BIO 104 or equivalent.

Requirements. A total of 60 credits as follows:

- A. SWR 100, 300, 301, 302, 340, 370; SOC 354 (21 credits).
- B. One course from each of the three groups (9 credits):
 - 1. AFA/SOC 359; ANT/WGS 378; HCR 362; SOC 270, 474.
 - 2. ANT 340: SOC 340.
 - 3. PSY 230; SOC 220, 325; SWR 320, 336.
- C. Professional Block (30 credits).
 - 1. SWR 360, 440, 441, 460, 461, 490. (18 credits).
 - 2. CRJ 185 or SAT 202 (3 credits).
 - 3. One course from SWR 325, 327, 330, 338.
 - 4. Six credits in cognate and elective courses approved by the advisor.
- D. Additional requirements for a University of Michigan-Flint Bachelor of Arts, to include general education requirements of the School of Education and Human Services, and a foreign language requirement.

Approved Cognates and Electives. This list is not complete but may be used as a guide. Substitution should be made only in consultation with a social work advisor.

ANT 271, 310, 314, 325, 330, 340, 355, 372, 470.

CRJ 185, 289, 382, 388, 389.

ECN 201, 479.

ENV 289, 305.

HCR 305, 368, 376, 384, 403, 479, 487.

HIS 250, 318, 329, 333, 334, 335, 430, 435.

POL 120, 305, 309, 313, 329, 375, 428.

PSY 326, 351, 363.

SAT 202, 307, 308.

SOC 220, 325, 330, 359, 368, 372, 380, 382, 384, 458.

Honors Program in Social Work

Prerequisites.

- A. Grade point average of 3.5 or better for the first 55 credit hours.
- B. SWR 100.

Requirements.

- A. All requirements for the Generalist Program in Social Work, including SWR 270, normally elected in the sophomore year.
- B. A course in statistics (SOC 215, PSY 301, or an equivalent approved by the advisor), recommended for the sophomore year.
- C. Completion of SWR 300 and SWR 480 (3 each) in the junior year.
- D. SWR 488 and 489, Honors Thesis I and II (4 each).
- E. All requirements of the University Honors Scholar Program.

Prospective Honors Program students are urged to acquaint themselves as early as possible with the requirements above as well as with the particular procedures for acceptance into the Social Work Department's Honors Program. See the departmental honors advisor or the Honors Program Director for this information.

Minor in Substance Abuse Treatment and Prevention

The minor is organized to complement a concentration and for preparation for entry-level practice in the field of substance abuse and additions.

Requirements. Eighteen credits as follows:

SAT 202, 320, 330, 340, 345, 430.

Minor in Gerontology

An interdisciplinary minor in Gerontology is available. See the Health Care section of this *Catalog* for a full description and a listing of the requirements.

Minor in Corrections

This program has been put on moratorium status. See the Social Work Department for further information.

Courses in Criminal Justice (CRJ)

See the Criminal Justice section of this Catalog.

Courses in Social Work (SWR)

100. (SWK 200). Introduction to Social Work. (3)s.

Historical, philosophic overview of social welfare and professional social work. Survey of traditional areas of social work practice and roles. Basic assumptions in social work treatment. *Graded ABCDD->N*.

270. (SWK 250). Methods of Research and Evaluation. SWR 100. (3)s.

Specific methodologies and procedures available for generation and analysis of information from the social and behavioral sciences. Provides the student with a foundation of research knowledge in three areas: methodology, data interpretation, and research writing. *Graded ABCD>N*.

300. (SWK 310). Social Welfare Policy and Services. SWR 100, junior standing; or consent of instructor. (3)s.

Historical interrelationship of social work, social services, and social welfare with attention to procedures, policy, problems, and issues in financial assistance, poverty, health, leisure, housing, children, family, and drug and corrections programs.

 (SWK 320). Human Behavior in the Social Environment I: Micro Systems. SWR 100, BIO 104; or consent of instructor. (3)s.

Foundation knowledge of human behavior and environment influences. Social systems theory introduced and used to conceptualize interaction between the individual and the social environment. Overview of human development from conception through aging within the context of family and micro social groups.

302. (SWK 325). Human Behavior in the Social Environment II: Macro Systems. SWR 301. (3)s.

Foundation knowledge of human behavior and environment influences. Social systems theory used to explore interactions between and among groups, organizations and communities. Strengths perspective used to further highlight the experience of oppressed populations in American culture.

320. (SWK 314). Death, Dying and Bereavement. SWR 100 or consent of instructor. (3)s.

Death, dying and bereavement in the United States. Analysis of experiences of individuals at different stages of the life cycle; social and cultural variables with American society affecting death-related encounters, attitudes and practices. Assessment of task-based approaches to coping and ritualistic practice. Also listed as HCR 314.

- [321. (SWK 305). Social Work Problems: Vietnam Veterans. SWR 100 or consent of instructor. (3)s.]
- 325. (SWK 350). Patterns of Domestic Violence. SWR 100 or consent of instructor. (3)s.

Nature of human aggressiveness and patterns of interpersonal violence; cultural history of violence in America and impact on early socialization; violence within the family with attention to risk groups: abused children, battered partners, women, the

emotionally and physically disabled, and the aged; professional response as advocacy for intervention.

327. (SWK 388). Introduction to Corrections. CRJ 185, SOC 382 or 384, junior standing; or consent of instructor. (3)s.

Historical development of correctional services including jails, detention, juvenile and adult probation, diversion, training schools, prisons, parole and aftercare. Roles, goals, organization and issues in each service. Also listed as CRJ 388.

330. (SWK 351). Protective Services. SWR 100 or consent of instructor. SWR 325 recommended. (3)s.

Public, legislative, and professional responses to patterns of violence. History of federal, state, and local programs and policies in protective services. Role of social work in the private/public welfare sector, the courts, and community teams. Future of protective services in America.

335. (SWK 321). Social Services in the School. SWR 100 or consent of instructor. (3)s.

The role of the social worker as an intermediary between school, home and the community will be examined. Various factors affecting service provision will be considered including laws and regulations affecting public education, the school as a "host" setting, issues of poverty, hight risk students, minority students, and advocacy for students and their families. Techniques for assessing student behavior and family needs will be presented. Other topics such as special education, consultation with other school personnel and collaboration with child welfare agencies will also be presented.

336. (SWK 300). Mental Illness and Social Work Practice. SWR 100. (3)s.

Social attitudes and cultural values that have determined contemporary legislation and social welfare policies that address the needs of the chronically mentally ill. How social work values have played a significant role in changing social consciousness from that of "asylums" to "moral" treatment.

338. (SWK 313). Social Work with Aged. SWR 100 or consent of instructor. (3)s.

Forces and conditions that contribute to the recognition of aging as a problem in U.S. society, and resultant social welfare policies. Specific social work practice issues in casework, group work, and community organization in relationship to specific social provisions for the elderly.

340. (SWK 311). Introductory Social Work Techniques. SWR 301 with a grade of C (2.0) or better, admission to the Social Work program. (3).

Basic social work concepts and skills: interviewing, rapport, verbal/nonverbal communication, client acceptance, nonjudgmental listening, authority, and interpersonal influence. Assessment of problems, needs, referrals. Social work ethics and professional role performance process integrated throughout the course.

342. (SWK 389). Correctional Practice. SWR 100, CRJ 388/SWR 327, junior standing; or consent of instructor. (3)s.

Analysis of social work skills and concepts in corrections. Emphasis on professional role, values, classification, assessment, and treatment planning in correctional settings. Also listed as CRJ 389.

360. (SWK 399). Field Practicum Planning Seminar. SWR 340 with a grade of C(2.0) or better. (1).

Instructional guidance in preparation for the Practice Skill Instruction courses (SWK 430, 431). Review of basic practice skill techniques to include assessment and intervention theory through a preview exposure to different agency settings. Students round out experience by negotiating and documenting a plan for translating field instruction objectives into the proposed placement activities. Graded ABCDE/Y.

361. (SWK 375). Community Building through Educational Involvement. AFA 101 or ANT/INT 100 or SOC 100 or SWR 100; at least junior standing; or consent of instructor.

Participation and observation in schools and community-based organizations, integrated with an interdisciplinary seminar on urban social issues and cultural variation. Skills required for various forms of community action; techniques include qualitative research methods, assessment, planning, intervention and evaluation. Also listed as AFA 375 and EDS 361.

402. (SWK 482). Schools and Communities. At least junior standing. (3).

The role of schools in building community. Emphasis on interplay between schools and community agencies in provision of educational and social services to youth, parents and community members. Concrete programs and policies for connecting schools and communities. Also listed as EDE 402 and PUB 482.

440. (SWK 420). Social Work Intervention I. SWR 360 with a grade of C (2.0) or better; concurrent election of SWR 460. Open only to students with Social Work concentrations or consent of instructor. (3).

Social work practice skills focusing on processes and techniques in delivering service within the framework of individuals and families.

441. (SWK 421). Social Work Intervention II. SWR 440 with a grade of C (2.0) or better; concurrent election of SWR 461. (3).

Continuation of SWK 420 but with a shift in focus to skills, processes, and techniques appropriate to working with groups and in community organizations and planning. Offered winter semester only.

460. (SWK 430). Field Instruction I. SWR 270, 360; concurrent election of SWR 440. Open only to students with Social Work concentrations or consent of instructor. (4).

Student placement for 16 hours a week in a social service setting, with experience in supervised observation and provision of appropriate service to agency clientele. Students are also required to attend a weekly seminar. Offered fall semester only.

461. (SWK 431). Field Instruction II. SWR 460; concurrent election of SWR 441. (4).

Continuation of SWK 430. Offered winter semester only.

480. (SWK 391). Directed Reading/Research in Social Work. Consent of instructor and junior standing. (1-3).

Directed reading or research study by qualified students under instructor's supervision. *By special arrangement only.*

485. Special Topics in Social Work. (1-6)s.

Focus on various topics, including intensive study of specific areas related to social work. May follow a non-traditional university calendar schedule and may be delivered in non-traditional formats. The title for each section varies, based on the topic of study. May not be elected for more than six credits and may not repeat the same topic for credit.

488. (SWK 495). Honors Thesis I. Consent of Program Director. Open only to Honors Program students in Social Work. (4).

Credit and grade for SWR 488 is not awarded until successful completion of SWR 489. Also listed as HON 495. Graded ABCDE/Y.

489. (SWK 496). Honors Thesis II. Prior or concurrent election of SWR 488. Open only to Honors Program students in Social Work. (4).

Also listed as HON 496. Graded ABCDE/Y.

490. (SWK 400). Integrative Seminar in Social Work. SWR 100, 300, 340; senior standing; concurrent election of SWR 440 and 460 or 441 and 461. Open only to students with Social Work concentration or consent of instructor. (3).

Integration of learning from throughout the total curriculum of the Social Work program. Exploration, integration and assessment of the role of generalist social work.

Graduate Courses in Social Work

500. (SWK 542). Social Welfare Policies and Services. *Graduate standing.* (3).

History of social reform in the United States. Analysis of values underpinning the focus and intent of services. Emphasis on income maintenance, mental health, child welfare, and criminal justice policy. *Also listed as PUB 542*.

502. (SWK 582). Schools and Communities. Graduate standing. (3).

The role of schools in building community. Emphasis on interplay between schools and community agencies in provision of educational and social services to youth, parents and community members. Concrete programs and policies for connecting schools and communities. Not open to students with credit for EDE/SWR 402 (EDU/SWK 482) or PUB 482. Also listed as EDE 502 and PUB 582.

510. (SWK 544). Contemporary Issues in Mental Health. *Graduate standing.* (3).

Examination of mental health policies and services and their historical context, with particular attention to the mentally ill and developmentally disabled populations and community-based treatment. *Also listed as PUB 544*.

520. (SWK 520). Resource Development and Administration. *Graduate standing.* (3).

Principles and practices in fundraising and development; proposal writing and presentation; long-range development planning; membership recruitment and retention; fees and pricing of services; special event fundraising; operation of profit-making ventures by nonprofit organizations. *Also listed as PUB 520.*

521. (SWK 521). Entitlement Program Law and Policy. *Graduate standing.* (3).

Examination of regulations and policies that guide federal and state agencies in the implementation of entitlement programs, including Social Security, Medicare, Medicaid, Supplemental Security Income, and Workers' Compensation. Eligibility requirements and termination procedures, court challenges to these processes, and recent reform proposals. *Not open to students with credit for PUB 421. Also listed as PUB 521*

523. (SWK 525). Legal and Regulatory Issues in Nonprofit Administration. *Graduate standing.* (3).

Analysis of principal legal issues affecting nonprofit organizations, including liability, contracts, personnel procedures, labor-management relations, incorporation and bylaws, tax exemption and reporting requirements, and political advocacy. Examination of legal issues in relations with federal, state and local government and in negotiation of government contracts. *Not open to students with credit for PUB 425. Also listed as PUB 525.*

525. (SWK 543). Substance Abuse Policies and Services. *Graduate standing.* (3).

Analysis of policies concerning substance abuse in the United States. Examination of politics and economics of drug and alcohol industries. Control legislation, funding priorities and remediation models. *Also listed as PUB 543*.

527. (SWK **540**). Volunteerism and the Independent Sector. *Graduate standing.* (3).

Origins of nonprofit organizations; their social, political, economic, cultural and ideological roles in American society. Major types of nonprofit organizations and their characteristics; current trends in the independent sector. *Not open to students with credit for PUB 440. Also listed as PUB 540.*

580. Independent Study in Social Work. *Graduate standing; consent of instructor and advisor.* (1-3).

Research, readings or special projects tailored to academic needs and interests of the student in a topic related to social work. *May be re-elected to a maximum of 4 credits*.

Courses in Substance Abuse Treatment (SAT)

202. Problems of Substance Abuse. (3)s.

Definitive description of drugs of dependency. Historical origins of multiple-drug usage. Aspects of alcohol, opiate, stimulant and depressant abuse. Trends in the efforts of society to solve the problems of substance abuse. Related social,

philosophical and cultural issues. Recommended for sophomore year. Graded ABCDD->N.

320. (307). Drug Substance Abuse: Cause and Effects. SAT 202; at least junior standing. (3).

The problem of substance abuse; factors contributing to its likelihood. Effects of abuses of alcohol, opiates, barbiturates and amphetamines from psychological, physiological, sociocultural and pharmacological viewpoints. *Graded ABCDD*>*N*.

330. Substance Abuse Among Special Populations. SAT 202. (3)s.

Examination of differential effects of substance abuse and addiction on special populations in the US, including African-Americans, Hispanics, and females. Socio-cultural aspects of addiction and abuse assessed along with the move to cultural competence. *Graded ABCDD->N*.

340. Intervention Strategies and Methods in Substance Abuse. SAT 202. (3)s.

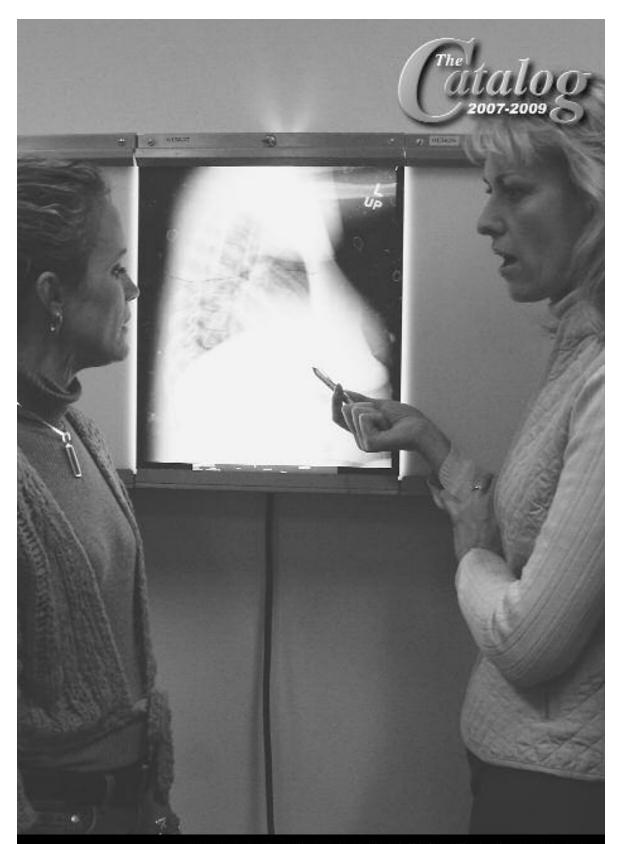
Theoretical and empirical aspects of assessment, diagnosis and treatment of addictive and substance disorders. Examination of historical development of strategies and programs that treat substance abuse. Residential, therapeutic communities, hospital-based and pharmacological strategies; the continuum of care in addiction treatment. *Graded ABCDD->N*.

345. (308). Social Prevention of Substance Abuse. SAT 202 or consent of instructor. (3).

Strategies for preventing substance abuse. Health education approaches to alcoholism, drug dependency, and addiction. Roles and skills needed in agencies working to prevent substance abuse. Recommended for junior year. Graded ABCDD->N.

430. Special Studies in Alcohol Abuse and Alcoholism. *SAT* 202. (3)s.

History of the role of alcohol in American society; physical, psychological and social consequences of abuse; social, philosophical and cultural issues related to alcohol use and abuse. *Graded ABCDD->N*.



School of Health Professions and Studies

SCHOOL OF HEALTH PROFESSIONS AND **STUDIES**

2205 William S. White Building (810) 237-6503 (810) 237-6532 (Fax) http://www.umflint.edu/departments/shps/

Dean: Dr. Augustine O. Agho Executive Secretary: Terry Baryo Secretary: Sandra Etherly

Development Officer: Shelly Hoffman

Associate Directors, Urban Health and Wellness Center (UHWC): Lora Kalkman, Bryan Spencer, Edgar Torres, and Diane Towers

Administrative Assistant (UHWC): Joyce Brown Medical Assistant/Receptionist: Suzanne Cummings Program Coordinator, UM-FIND: Danielle Brown Site Coordinator, UM-FIND: Jamila Harris Evaluator, UM-FIND: Janet Zimmerman Administrative Assistant, UM-FIND: Annette Patterson

The School of Health Professions and Studies prepares students for careers in health related fields by offering degrees that blend liberal education and professional preparation leading to the Bachelor of Science in Health Care Administration, Health Education, Health Science, Medical Technology, Nursing and Radiation Therapy; the Master of Science in Anesthesia, the Master of Science in Health Education, the Master of Science in Nursing, and the Doctor of Physical Therapy. Professional preparation in the disciplines comprising the School of Health Professions and Studies is provided, with attention to societal issues, health care delivery models, and factors influencing the relationships among health care professionals and clients. The school strives to provide the highest quality education in collaboration with all campus instructional units and health care professionals in the community who provide clinical experiences for students. A director oversees each of the departments in the school. The Office of the Dean for the School of Health Professions and Studies provides required administrative services.

Admissions

Because of the varied nature of the programs offered through the School of Health Professions and Studies, admission procedures, as well as many other policies and procedures, are established by the individual departments/programs. Admission to the School of Health Professions and Studies is accomplished by successful application to a specific program within the School of Health Professions and Studies.

Academic Regulations and Procedures

Grading System

The following grading system is used in the School of Health Professions and Studies: A, excellent; B, good; C, fair; D, poor; E, failure; I, incomplete; Y, work in progress; W, officially withdrawn (without penalty). The following scale is used in computing gradepoint averages:

Letter Grade	Honor Points
A+	4.0
A	4.0
A-	3.7
B+	3.3
В	3.0
B-	2.7
C+	2.3
C	2.0
C-	1.7
D+	1.3
D	1.0
D-	0.7
E	0.0

Grade point averages are computed by dividing total honor points by total credits. The computation is limited to points and credits earned at the University of Michigan-Flint and to credits transferred from other schools and colleges of the University of Michigan.

The report of I (incomplete) may be made by the instructor if the student is unable to meet the course requirements within the specified time. An (I) incomplete may be made up while a student is not enrolled and must be made up by the end of the fifth week of the next semester (fall or winter) in which a student is enrolled. If, for sufficient reason, a student cannot remove the incomplete within the five-week period, an extension request form must be approved by both the course instructor and the Department Director and forwarded to the Office of the Registrar. Failure to either make up the grade within the allotted time or to have an extension approved will result in the I being automatically changed to a grade of E.

The grade Y indicates "Work in Progress" and is therefore used only for courses designated to extend beyond a single semester. After completion of the work, the Y grade will be removed and replaced by an appropriate grade, or it may also be replaced by an

A grade once reported (with the exception of I and Y) may be changed only to correct a demonstrable error.

Credit Without Grade (Pass/Fail)

The pass/fail option applies only to specific courses so designated in the course schedule by individual SHPS departments. Courses elected for credit without grade are not included in the calculation of the grade point average.

Changes in Course Elections (Drop/Add)

Prior to the first official day of the semester the student must drop/add on the SIS Web site. Once classes begin, the student must obtain a Drop/Add form, have it signed by the instructor, and submit the form to the Office of the Registrar.

New courses may be elected before the end of the second week of the semester with the consent of the instructor; a course may not be dropped without a final grade after the Friday of the seventh full week of classes. Any student who seeks an exception to these deadlines must do so by a petition to the Academic Standards Committee of the School of Health Professions and Studies. A request to drop a course without a final grade after the deadline is considered only on medical grounds or for other compelling reasons.

Permission to drop a course after the deadline is not granted merely because the student is doing unsatisfactory work. If a student drops a course without official approval, the grade of E is recorded.

Granting withdrawal from a SHPS program (with intention to return) is a prerogative of the individual SHPS departmental faculty.

Recognition of Superior Scholarship

For those students with 45 graded hours or more completed at UM-Flint, graduating seniors with a cumulative grade point average of 3.5 or higher are recommended for the degree "with honors," and students with a cumulative grade point average of 3.75 or higher are recommended for the degree "with high honors." For students in the Physical Therapy Program, the grade point average is computed on the basis of all courses taken after admission to the professional preparation program.

Students who have completed less than 45 graded credit hours, but have met the requirements for graduation and have a cumulative grade point average of 3.5 or higher, will receive the Academic Distinction Award.

See "Undergraduate Honors" in the "Academic Policies of the University" section of this *Catalog* for information regarding campus- and system-wide honors recognition.

Distinguished scholarship is also recognized by awards offered by the faculty of the University of Michigan-Flint and by other organizations.

Academic Standing

A student in the School of Health Professions and Studies who maintains a grade point average of at least 2.0 for courses elected while enrolled in the University is generally considered to be in good academic standing. However, individual program standards may be higher. Grade point average requirements for graduation also vary.

The academic records of all students whose grade point average falls below C (2.0) are reviewed at the end of each semester by the Academic Standards Committee of the School of Health Professions and Studies. According to individual circumstances, students with deficient academic records may be placed on warning or required to withdraw. Students of individual programs which have established policies and procedures to determine academic discipline do not normally come before the Academic Standards Committee unless the grade point falls below C (2.0).

Appeals Procedure

Students in the School of Health Professions and Studies who believe they have been unfairly treated may appeal to the School of Health Professions and Studies Student Appeals Committee. For problems involving a faculty member, the appeal procedure should be initiated after consultation with the faculty member whenever possible.

Students in programs with written policies and procedures related to academic performance, clinical competency, and ethical standards should follow procedures established by the program prior to contacting the School of Health Professions and Studies Student Appeals Committee.

Anesthesia (ANE)

See Graduate Study.

Health Sciences and Administration (HSA)

2102 William S. White Building (810) 762-3172 FAX (810) 762-3003 http://www.umflint.edu/hsa Director: Dr. Suzanne Selig Senior Secretary: Brenda Jencks

Professor Suzanne Selig; Associate Professors Kristine Mulhorn, Shan Parker; Assistant Professors Arlesia Mathis, John Sonnega; Lecturers Augustine Agho, Kimberly Barber, Sherri Berry, Minnie Bluhm, Dan Borton, Chris Clolinger, Dan Coffield, Marc Dedenbach, Lisa Engelstein, Len Fleck, Larry Hrinik, Theresa Landis, Tammy Rees, Lauren Shirey, Bryan Spencer, Christopher Swanson, Mark Valacak.

The health sciences and administration programs are designed to meet the needs of a wide range of student interest; including: (1) community health education or the education or training of others in health care; (2) administration, management or supervision in provision of health services; (3) preparation for professional programs in health sciences including environmental health and the University of Michigan-Flint Doctor in Physical Therapy program.

Department Mission and Program Assessment

The overall mission of the Health Sciences and Administration programs is to promote the health and well-being of the community by preparing our students, many of whom are part-time working adults, to become culturally competent health care leaders who will contribute to the knowledge base of their respective fields and be advocates for fairness and equity in health among diverse populations. The program participates in the University-wide effort to assess its academic programs. Information on assessment plans, including goals, methods and outcomes is available at http://assessment.umflint.edu.

Programs in Health Sciences and Administration

Three concentration programs are offered, leading to the Bachelor of Science degree: Health Care Administration, Health Education, and Health Sciences. All programs require a minimum of 124 semester credit hours for graduation. For some programs as specified below, up to 30 credit hours may be earned for students who have achieved professional status through a previous degree or certification in a health care profession. This typically involves previous study at a community college leading to an associate's degree or certification through a hospital-based training program. However, previous certification is not required. Students preparing for entry-level positions who are new to the health field are encouraged to consider either a second major or a program minor outside of health care to complement the focus of their selected major. The minors in Health Care Administration, Health Education and Behavior, Gerontology, and Environmental Health are primarily intended for students outside the department. Students must have a grade point average of at least 2.0 overall and 2.0 within their major to graduate with a degree in a Health Sciences and Administration Program.

The faculty of the Health Sciences and Administration Department strongly encourages active student participation and engagement in professional organizations as a foundation for continued professional growth and development. Such involvement exposes students to current issues in their field, assists in the development of professional networks, and allows for participation in professional conferences at a pivotal point in the development of their careers. The Department of Health Sciences and Administration sponsors two student organizations: Eta Sigma Gamma and the Health Care Administration Student Organization. Eta Sigma Gamma, the national honorary society for health education, acknowledges student scholarship and provides opportunities for student professional development in health

research, service and advocacy. The Health Care Administration Student Organization is designed to provide students within the health care administration program an opportunity to develop effective leadership skills, access to information on careers and job opportunities, as well as the opportunity for networking within the healthcare industry.

Program in Health Care Administration

The Bachelor of Science in Health Care Administration is intended for students preparing for a career in health care administration and is designed to serve those preparing for general or specialized administrative responsibilities in health care.

Requirements.

A. General Education program (course selection must include

ENG 111-112 (6), Fine Arts (3), Humanities (9), Social Sciences (9), Natural Sciences (8), Cultural and Values/Ethics Selection (6), additional electives to complete 50 credits in general education.

- B. Health Administration Foundation (18 credits). HCR 300, 304, 305, 376, 479, 487.
- C. Public Health Foundation (9 credits). HCR 315, 368, 385.
- D. Functional Areas of Health Administration (12 credits). HCR 301, 377, 410, 477.
- E. Managing Diversity (3 credits). HCR 362.
- F. Electives in Health Care (6 credits). To be selected with advisor.
- G. Applications (3-6 credits). HCR 390 or 392.
- H. Allied Health Credits (if applicable, up to 30 credits by transfer). If not applicable, students should select a minor or second major. Recommended minors are: communication, general business, marketing, organizational behavior and human resources management, computer science or gerontology.
- I. Completion of departmental knowledge test for assessment purposes.

Program in Health Education

The B.S. in Health Education is designed for those who are interested in community health education as well as credentialed health professionals who are preparing to train others in their own specialty.

Requirements.

- A. General education requirements. ENG 111-112 (6), Fine Arts (3), Humanities (9), Social Sciences (9), Natural Sciences (8), Cultural and Values/Ethics Selection (6), additional electives to complete 50 credits in general education.
- B. Foundations (18 credits).

HCR 300, 304, 315, 362, 368, 377.

- C. Health Education Core (21 credits). HCR 203, 204, 379, 380, 384, 385, 386.
- D. Electives in Health Care (6 credits). To be selected with advisor.
- E. Applications (3-6 credits). HCR 390 or 392.
- F. Allied Health Credits (if applicable, up to 30 credits by transfer). If not applicable, students should select a minor or second major. Recommended minors are: communication, general business, marketing, organizational behavior and human resources management, computer science or gerontology.
- G. Completion of departmental knowledge test for assessment purposes.

Program in Health Sciences

The Bachelor of Science in Health Sciences is designed for students with an interest in human health leading to graduate study, or career advancement. The minimum 124 credit hour interdisciplinary curriculum provides a sound academic base in general education, biological and physical sciences, and health sciences. Three tracks are available: pre-physical therapy, environmental health and safety, and general health sciences. The pre-physical therapy track is uniquely designed for entry into the University of Michigan-Flint's Doctor of Physical Therapy program. The track in environmental health and safety prepares graduates for positions in public sector settings, including local and state health departments; and in private sector positions such as chemical waste management, and workplace safety. The general health sciences track is available for students pursuing other health sciences professional programs (e.g., physician assistant, dentistry, medicine). For this track, careful course selection beyond B.S. in Health Sciences requirements should be made after consulting current, available information from the specific university professional program of interest.

The health sciences curriculum has four basic components: a) general education, b) biological/physical sciences, c) health sciences, and d) a track in pre-physical therapy, environmental health and safety or general health sciences.

Requirements.

- A. General education requirements (40 credits). 1. Writing. ENG 111, 112, 345.

 - 2. Humanities. COM 210; PHL 162 or 168.
 - 3. Fine Arts. (three credits to be selected by student).
 - Social Sciences. PSY 100, 237; POL 120.
 - 5. Mathematics. MTH 111, 120.
 - 6. Computer Literacy. CIS 128; CSC 121, 151.
- B. Biological/Physical Sciences (20 credits).
 - 1. BIO 111, 113, 167, 168.
 - 2. PHY 143.
- C. Health Sciences (23-24 credits). HCR 200, 300, 302, 304, 315, 420, 421; MTP 320 or 321.
- D. Pre-physical therapy, environmental health and safety, or general health sciences track.

Pre-Physical Therapy Track (30 credits)

- 1. HCR 119, 350, 362, 376, 379.
- 2. CHM 260, 261, 262, 263.
- 3. PHY 145.
- 4. PSY 309.
- Electives to complete 124 credit hours.

Environmental Health and Safety Track (50-52 credits).

- 1. BIO 326.
- 2. Two from: BIO 328, 425, 435, 436.
- 3. CHM 220, 260, 261, 262, 263, 350, 380, 381, 382.
- 4. ENV 289; GEO 151, 285, 303; RPL 485, 486.
- 5. PUB 422.

General Health Sciences Track (42 credits).

- 1. HCR 119, 350, 362, 376, 379.
- 2. BIO 326, 328.
- 3. CHM 260, 261, 262, 263, 330, 331, 332, 333.
- 4. PHY 145.

Final course selection should be based on requirements of specific university professional program of interest; (e.g., physician assistant, dentistry, medicine). Additional consultation with UM-Flint biology/chemistry advisors is encouraged.

Minors in Health Care

Minors are available in Gerontology, Health Care Administration, and Health Education and Behavior. These minors provide coursework in the basic program components and are available to all UM-Flint students. However, if either the minor in Health Care Administration or Health Education and Behavior is combined with another health care concentration, *only* nine credits may be credited toward both the concentration and the minor.

Minor in Gerontology/Specialist in Aging Certificate

An interdisciplinary selection of courses designed to: 1) provide a minor in conjunction with any major within UM-Flint; 2) provide a transcript designation: Specialist in Aging Certificate to professionals and practitioners who have already graduated and are involved or interested in the field of aging.

Requirements. At least 19 credits, as follows:

- A. Sociology. HCR 202 (3 cr).
- B. Health. HCR 350, 352 (6 cr).
- C. Psychology. PSY 347 (3 cr).
- D. Policy and Administration. HCR 306 or 378 (3 cr).
- E. Work. SWK 313 or HCR/SWK 314 (3 cr).
- F. Practicum/Internship or Independent Research (1-3 credits, depending on experience):
 HCR 388, 390 or 392.

Minor in Health Care Administration

Requirements. Eighteen credits distributed as follows:

- A. HCR 300, 305, 376 (9 cr.).
- B. Three from: HCR 301, 377, 378, 385, 410, 420, 421, 477, 479, 487 (9 cr.).

Minor in Health Education and Behavior

Requirements. Eighteen credits distributed as follows:

- A. HCR 300, 379, 380, 384 (12 cr.).
- B. HCR 362 or 368 (3 cr.).
- C. One from: HCR 203, 204, 385, 386 (3 cr.).

Minor in Environmental Health

The Minor in Environmental Health provides a basic introduction to the field of environmental health. It is designed to supplement degree work in fields such as chemistry, biology, health care, earth and resource science, or public administration.

Requirements. Twenty to twenty two credits as follows:

- A. HCR 315, 420, 421; RPL 486; PUB 422.
- B. Completion of 1, 2, 3 or 4 (5-7 credits).
 - 1. CHM 302, 380, 381.
 - 2. GEO 272; RPL 485.
 - 3. GEO 304; RPL 370.
 - 4. BIO 335, 436.

Graduate Courses in Health Education (HED)

See the Graduate Study section of this Catalog.

Courses in Health Care (HCR)

101. Physical Fitness. (1).

Lecture and physical activity focused on cardiovascular endurance, muscular strength, flexibility and body composition following American College of Sports Medicine guidelines. Proper warm-up/cool-down techniques, contraindicated exercises, overuse injury treatment, caloric intake and expenditure, proper nutrition, stress management techniques, exercise motivation, and various modes of activity. May be repeated to a total of three credits.

102. Weight Training. (1).

Lecture and physical activity focused on development of muscular strength and endurance following American College of Sports Medicine guidelines. Weight machines and free weight used along with information of proper warm-up/cooldown techniques, major muscle groups and functions, movement terminology, planes of motion, and high-risk exercises. May be repeated to a total of three credits.

103. Aerobic Conditioning. (1).

Introduction to aerobic conditioning as a component of overall health and physical fitness. Students participate in aerobic activities including walking, running, swimming, biking, aerobic dance and use of cardiovascular exercise equipment. American College of Sports Medicine guidelines for quality and quantity of exercise followed. *May be repeated to a total of three credits*.

104. Volleyball. (1).

Provides students with an opportunity to learn about, experience and play volleyball. Skill techniques and tactics taught and practiced in drills; recreational and competitive rules taught and applied. May be repeated to a total of three credits.

105. Basketball. (1).

Provides students with an opportunity to learn about, experience and play basketball. Skill techniques and tactics taught and practiced in drills. Recreational and competitive rules taught and applied to various play situations. May be repeated to a total of three credits.

106. Beginning Golf. (1).

A step-by-step process for learning basic swing fundamentals for the game of golf. Lectures and practice for different aspects of golf including putting, chipping, full swing fitness, rules and etiquette. Proper selection and club fitting. May be repeated to a total of three credits.

107. Stress Management. (1).

Identification of stressors, stress responses, and stress management strategies including relaxation techniques for coping to minimize the negative effects of stress (e.g., loss of ability to adjust, fatigue, anxiety, lower productivity). Students learn to create a sense of personal power and balance through a holistic approach to well-being May be repeated to a total of three credits.

108. Introduction to Wellness. (1)

Identification and exploration of the seven basic dimensions of wellness - social, physical, spiritual, environmental, mental, emotional, and occupational. Self-assessment and evaluation along with health promotion activities assist in the process of learning how to balance these dimensions for optimal wellbeing. May be repeated to a total of three credits.

109. Swimming Skills and Conditioning. (1).

Development and refinement of swimming skills and stroke mechanics; swimming as an aerobic conditioning activity. American Red Cross and American College of Sports Medicines guidelines followed. Open to non-swimmers and swimmers of all levels. May be repeated to a total of three credits.

110. Racquet Sports. (1).

Provides students opportunity to learn about, experience and play various racquet sports with the emphasis on racquetball. Skill techniques and tactics taught and practiced in drills; recreational and competitive rules taught and applied. May be repeated to a total of three credits.

111. Foundations in Coaching. (1).

Presents the principles underlying effective coaching including code of ethics, coaching styles, teaching methods, understanding the coach's role, and creating trust and respect. In addition, how to effectively communicate with athletes, recognizing over training and how to reduce risk of injury will be covered.

112. Martial Arts. (1).

Students learn fundamentals of self-defense skills in a structured and progressive manner while increasing physical fitness and flexibility. Includes full range of skills including punches, kicks, joint locks and grappling; emphasis on practical applications for self-defense. Designed for the beginner, but open to students with previous experience for reinforcement of fundamental skills taught in most martial arts.

113. Flint River Trail. (1).

Active lifestyle course. Students participate in fitness activities such as walking, running and biking while becoming familiar with the natural attributes of the Flint River Trail (FRT). The FRT is a linear park extending from the UM-Flint campus to Bluebell Beach and Stepping Stone Falls, with a popular 3-mile loop through Kearsley Park. Students who do not own a bicycle or have one available for use should contact the instructor. May be repeated to a total of three credits.

116. Intermediate Golf. (1).

Designed to provide information and enhance skills to achieve greater fundamentals for learning and playing the game of golf-short-game, bunker play, full swing, target and mental awareness, ball trajectory, videotape and 9 hole playing lesson.

119. First Aid: Responding to Emergencies with Community CPR. (2).

Provides knowledge and skills to help sustain life and minimize pain and consequences of injury/illness in an emergency situation. Lectures and hands-on practice of techniques (CPR-AED certification). Not open to students with credit for HCR 120.

120. Medical First Responder. ENG 112. (4).

Introduction to technical knowledge and skills required to effectively perform basic emergency medical care (first aid and CPR). Lectures and in-class hands-on practice of techniques. Successful completion of the course results in certification in Emergency Response First Aid with CPR for the Professional Rescuer through the American Red Cross. Not open to students with credit for HCR 119.

201. Introduction to Health Careers. (1).

Overview of health careers including job functions and responsibilities, academic prerequisites; designed to assist students in making appropriate health field career choices.

202. Introduction to Gerontology. (3).

Introduction to gerontology as a multidisciplinary field and profession. Characteristics of an aging population, myths and realities of aging. Examination of contemporary issues including elder abuse, elderly caregiver needs, bereavement and loss, and resilience in aging, and career opportunities in gerontology.

203. Personal Health. (*3*).

Discussion and laboratory experiences in individual health problems. Disease and health behaviors with emphasis on preventative health care. Exploration of the American health care system and current health issues of interest. Provides students with tools to make healthy, lifelong behavior changes.

204. Contemporary Issues in Sexual Health. (3).

Introduction to the study of sexuality and sexual health. Contemporary trends and issues in sexual behavior, including theoretical perspectives and research methods in sexuality from the biological basis of sexuality to sexual development through the lifespan. The social context of sexuality, gender roles, intimacy and love, sexually transmitted infections, HIV, contraception, and sexual assault's impact on healthy decision making.

220. Introduction to Health Sciences. (3).

Introduction to fields in the health sciences. Presentation of health sciences as a coherent group of disciplines addressing prevention, clinical, therapeutic, and administrative health care practices, and academic areas of study. Concepts of individual and population health, significant trends in health, service delivery, nature of services provided, career opportunities within selected fields, and relationships among those fields.

300. Health Care in the United States. At least sophomore standing or consent of instructor. (3)s.

Status, institutions, attitudes and behavior related to health care in the United States. Delivery of services; evolution, structure and dynamics of health professions. Personal and institutional aspects of the health care system and their effects on planning, public policy, the sick role, physician-patient relationships, death and dying, the hospital, and health care politics.

301. Introduction to Health Information Systems for Administrators. HCR 300 and CIS 128. (3).

"Hands-on" overview of trends and innovations in information technology, use of information systems in routine health care management processes, and how data is captured throughout the process of providing patient care. Builds on basic microprocessing skills and presents various health care databases, e.g., medical record systems, ADT, laboratory, patient accounting, decision support, clinical, and financial information systems.

302. Biostatistics. Strong preparation in high school or college algebra and eight credits of biology. (4).

Analysis of quantitative data from biological sources, using basic statistical procedures to elucidate biological phenomena. Mathematical derivations and probabilistic theory not stressed; emphasis on the selection and interpretation of statistical tests commonly used by biologists. Prior knowledge of statistics not necessary. Lecture and recitation. *Also listed as BIO 301*.

304. The Ethics of Health Care. *PHL 162 or PHL/NSC 168 or PHL 261. (3)h.*

Ethical and philosophical issues arising in and from the health care system. Problems and conflicts posed by interpersonal, professional and client relationships. Questions dealing with the right to live, the right to die, informed consent, sterilization, abortion, and human experimentation, and the just allocation of limited resources. Does not count as a prerequisite for philosophy courses, nor toward the Philosophy major or minor.

305. Public Policy and Health Care. HCR 300 and a course in political science; or consent of instructor. (3)s.

Health care policies and policy-making processes; trends in

health care policy and their political, economic and social implications. The ideological basis for United States health care reform efforts will also be discussed. *Also listed as POL 305*.

306. Politics of Aging. POL 120. (3).

Examination of political institutions and policy making processes that impact legislation affecting the aged, including legislators, interest groups, political parties, voters. Analysis of entitlement programs for the aged, including federal and state level regulation and implementation of Medicare, Medicaid, social security. Political attitudes of baby boomers and the aged toward the health care system. *Also listed as POL 306*.

314. Death, Dying and Bereavement. SWR 100 or consent of instructor. (3)s.

Death, dying and bereavement in the United States. Analysis of experiences of individuals at different stages of development in the human life cycle; social and cultural variables with American society affecting death-related encounters, attitudes and practices. Assessment of task-based approaches to coping and ritualistic practice. *Also listed as SWR 320.*

315. Introduction to Epidemiology. HCR 300; MTH 090 (110) taken at UM-Flint within the last two years with a grade of C (2.0) or better or placement into MTH 111 on the mathematics department placement test; at least junior standing. (3).

Basic concepts and tools necessary to describe and understand how diseases are distributed in populations. Levels of prevention, risk factors, and study designs emphasized.

319. Public Personnel Administration. At least junior standing. (3)s.

Selection and management of personnel in public organizations; evolution and development of merit systems. Effects of municipal unionization and collective bargaining on personnel relations in the public sector; accountability and productivity of public employees. *Also listed as PUB 319*.

325. Aspects of Women's Health. *A course in anatomy and/or physiology and a course in psychology.* (2).

Physical and mental health issues of women. Anatomic and physiologic changes during development, pregnancy, and menopause. Medical-surgical disorders including infections and cancer. Sexual dysfunction, eating disorders, and the special needs of females in therapy. Women and violence, including sexual assault, abuse, and incest. *Also listed as NUR 351*.

330. Medical Anthropology. *A course in anthropology or HCR* 300. (3)s.

Anthropological perspective on the relationship and interaction of biological, environmental, and socio-cultural factors in health, disease and illness. Man's health behavior in both traditional and contemporary cultures as encountered in health care delivery by medical systems and medical institutions. *Also listed as ANT 330 and INT 330*.

331. Global Health. HCR 300 or consent of instructor. (3).

Issues in public health from a global perspective. Diseases and health conditions common to developing countries and factors which affect them, including epidemiology and social, economic and political considerations. Identification of appropriate interventions for improving health conditions in the developing world. Global burden of disease, current measurement issues of health and disability and the impact of diminishing resources on health and patterns of AIDS and other diseases of pandemic proportion are addressed. Also listed as INT 331.

350. Health and Aging. SOC 100, HCR 202, at least junior standing; or consent of instructor. (3).

Relationships between health and aging. Definition of aging, historical and cross-cultural views of normal aging, profile of the aged, acute and chronic illness and its implications, health care services for the aged, importance of nutrition and exercise.

351. Special Topics in Gerontology. (3).

In-depth exploration of issues of contemporary relevance to gerontology. Topics vary; may include dying and bereavement, promoting healthy aging, ethnogerontology, spirituality and aging, ethical issues and aging, gender issues in later life, chronic illness and aging, issues with Alzheimer's disease.

352. Chronic Illness and Aging. (3).

Overview of chronic diseases common in later years. Complex nature of chronic illness and disability, including social and psychological consequences for individual and family, and need for health and social services. Treatment and management of chronic illness. Emphasis on individuals' and family members' perspectives of chronic illness experience.

353. Ethical issues in Aging. A course in gerontology or consent of instructor. (3).

Ethical and philosophical issues emerging from an aging society, such as provision of care (what king, how much, by whom), issues around mental and physical capacity (dementia, medical treatment decisions), autonomy and competence, just allocation of resources. Critical and systematic analysis from multiple perspectives. Explicit and implicit effects of ageism and their implications.

- [360. Issues in Maternal and Infant Health. HCR 300, at least junior standing; or consent of instructor. (3).]
- [361. Public Mental Health. PSY 100 or SOC 100 or at least junior standing or consent of instructor. (3).]
- **362.** Cultural Competence in Health Care. (3).

The multi-dimensional nature of cultural competence and complexities in providing heath service to culturally diverse populations. Students' self-awareness, knowledge and skills addressed through discussions of reading, videos and practice exercises.

363. Introduction to Health Disparities. HCR 300, SOC 100; or consent of instructor. (3).

Differences in the incidence, prevalence, mortality and burden of diseases and other adverse health conditions that exist among racial and ethnic minority populations in the US. Emphasis on contributing factors including reduced access to health care, inequalities in income and education, cultural and family factors, individual behavior, racial discrimination, and the complex interaction among these factors.

368. Sociology of Health and Illness. SOC 100. (3)s.

Sociological view of health, illness, and the delivery of medical care. Social and social-psychological factors involved in being ill; social relationships and organizations associated with medical treatment; roles of providers and patients; and national health care systems. Also listed as SOC 368.

376. Health Care Administration. HCR 300, at least junior standing; or consent of instructor. (3).

Administration of hospitals and managed care organizations. Extended care facilities and visiting nurse associations. Decision-making, organizational structure, trustee and medical staff relationships, third party payor relationships, and fiscal management of the health care institution.

377. Health Care Human Resources Administration. HCR 300. (3).

Examination of various leadership and human resources theories, principles, concepts, and techniques used by health care managers to maximize effectiveness of employees. Topics include role and functions of human resources management; job design, job analysis, and job evaluation; recruitment and selection; training and development; wage and benefit administration; and labor issues.

378. Organization and Administration of Long-Term Care. HCR 300, 376; or consent of instructor. (3).

Types and functions of long-term care health organizations (e.g., nursing homes, hospitals, visiting nurses, clinics) and related providers. Students participate in a critical analysis of long-term care administration relating to reimbursement, resource use, monitoring, quality mechanisms, and ethical/legal issues.

379. Introduction to Health Education and Health Promotion. At least sophomore standing. (3).

Introduction to the field of health education. Includes the history, mission, and breadth of health education as both an academic discipline and a profession; outlines professional ethical responsibilities; and describes practice settings. Explores concepts of health, wellness, health promotion, and health education. Exposure to a broad range of content specific topics in health education including: maternal and child health, aging, management of chronic disease, end of life, and women's health. Introduction to health education research methods. Also aims to increase student self-awareness of how culture and biases influence their professional practice.

380. Strategies in Health Education. HCR 379 or consent of instructor. (3).

Introduction to basic principles in health education and health promotion, health education theories, needs assessment and data collection strategies. Basic strategies used in the design, implementation, and evaluation of health education and health promotion programs are examined. Experiential learning in focus group, in-depth interviewing and survey development included.

384. Issues in Program Implementation. HCR 300; at least junior standing. HCR 380 strongly recommended. (3).

Various issues which affect implementation of health programs, including resource allocation, educational strategy selection, marketing and public relations, grantsmanship, and political forces which affect change.

385. Health Care Program Evaluation. HCR 300 and at least junior standing. (3).

Developing a frame of reference for research and evaluation of health care programs. Research and evaluation methods, including setting objectives, measurement of attitudes, and presenting evaluation reports.

386. Media and Materials in Health Care Education. At least junior standing. (3).

Guides students toward acceptance of the proper role and place of media in the health education process, and improves the students' skills in the selection, production, use and evaluation of media in health education.

388. Directed Studies. Consent of instructor. (1-3).

Research on a specific problem in health care. *Graded Pass/Fail/Y*.

390. Internship in Health Care. Consent of instructor. (3-6).

Work assignment in a health care agency as an intern who observes and participates in agency activities under the supervision of both agency and school staff. Internship experiences and related readings discussed in seminars. Not required of students having a year of experience in a health agency comparable to that provided by the practicum. Graded Pass/Fail/Y.

392. Health Care Cooperative Experience. *At least junior standing and consent of instructor and co-op coordinator.* (3-6).

Job assignment planned jointly by the student, the supervisor, and the Academic Advising and Career Center at the beginning of the cooperative work experience. Duties involved should relate to the student's academic program and should increase in responsibility and difficulty during the period of the assignment. Preparation of a paper related to the work experience and problems encountered and handled. *Graded Pass/Fail/Y*.

- [394. Special Topics in Health Care. At least junior standing. (3).]
- **403.** Evaluation of Services and Programs. At least junior standing and a course in statistics. (3)s.

Formulation, implementation and evaluation of the programs of public agencies. Role and conduct of research in the program process; techniques of effective evaluation and report presentation. *Also listed as PUB 403*.

407. Race, Health and Illness. HCR 300, SOC 100, at least junior standing; or consent of instructor. (3).

Relations among race, ethnicity and health for African Americans, Asian Americans, Latinos, Native Americans and white Americans. Individual and institutional-level explanations of these patterns of health and illness including biology, culture, racial discrimination and social class.

410. Healthcare Strategic Planning. HCR 300, 376 or consent of instructor. (3).

Theory, skills, and applications of health planning. Health planning in the public sector, and strategic planning in the private sector. Health insurance reform, stakeholder analysis, conditions,

quality management, and survival strategies. Also listed as PUB

418. Budgeting in Public and Nonprofit Organizations. At least junior standing. (3)s.

Budgetary process in the public sector and nonprofit organizations, with emphasis on application to policy problems. Budgeting as a management and policy-making tool. Planning-programming-budgeting system and cost-benefit analysis. *Also listed as PUB 418*.

420. Environmental Health. At least junior standing or consent of instructor. (3).

Systematic approach to the understanding of and control measures for the major environmental health problems of the twenty-first century in industrialized and developing countries. Reviews health issues, explores basic scientific understandings of causes, and examines current and possible future approaches to control.

421. Occupational Health and Safety. (3).

Introduction to the nature of work-related disease and injuries in the United States. Noise, radiation, ergonomic, biological and chemical hazards discussed in terms of recognition, assessment, and control of workplace hazards. Current regulations, standards, personal protective equipment, monitoring equipment, and career opportunities are covered in the course.

423. Bioterrorism/Biosecurity. (3).

This course is designed to assist planners and first responders from a variety of disciplines in understanding the basics of bioterrorism and key elements necessary for the development of community/agency response plans, and the roles public and private entities play in assuring preparedness.

424. Employment, Law, and Public Policy. At least junior standing. (3)s.

Federal and state statutes and Supreme Court decisions relative to employee rights, civil rights and equal employment opportunity, examined from the perspective of employers, employees and public policy. Progressive discipline, wrongful discharge, sexual harassment, discrimination, and EEO compliance for supervisors and managers. Also listed as PUB 424.

427. Personnel Selection and Evaluation. *PSY 100*; *a course in statistics; consent of instructor.* (3)s.

Lecture/seminar. Basic concepts of prediction and evaluation of job performance (with emphasis on reliability and validity), job analysis and criteria development, varieties of selection procedures, including aptitude and achievement measures, personality and motivation measures, interviews and application forms. Effects of government regulation and societal values on selection and evaluation. Also listed as PSY 427 and PUB 427.

- [428. Seminar in Environmental Health. HCR 420 or consent of instructor. (1-3).]
- **477.** Financial Management in Health Care. HCR 300, 376; at least junior standing; or consent of instructor. (3).

Examination of the financial workings of hospitals, including third party payor reimbursement methods and requirements; budgeting, working capital analysis, long-term resources and obligations, and external reporting. *Also listed as PUB 477*.

479. Economics of Health Care. ECN 202; HCR 300; or consent of instructor. (3)s.

Economic analysis of the health care industry and governmental policies in health care. Use of economic tools to determine the probable effects of various proposals on the pattern of health care produced and on the allocation of resources both within the industry and in the economy generally. Also listed as ECN 479 and PUB 479.

487. Legal Issues in Health Care. HCR 300, at least junior standing; or consent of instructor. (3)s.

Legal issues, restraints and problems arising from the organization and delivery of health care services. Liability and malpractice; definitions of death; informed consent; and health care personnel in court. *Also listed as PUB 487*.

Graduate Courses in Health Care

500. Epidemiology. *Graduate standing.* (3).

Basic concepts and tools necessary to describe and understand how diseases are distributed in populations. Levels of prevention, risk factors, and study designs emphasized. Required for all students in the M.S. in Health Education and Health Care Administration option of the MPA program who have not had HCR 315 or an equivalent course.

501. Seminar in Epidemiology. HCR 315 at UM-Flint; Admission to M.S. in Health Education program; or consent of instructor. (1).

Focus on intermediate concepts in epidemiology, including issues of bias, confounding and random error. Critical review of published epidemiologic research studies, building upon basic knowledge mastered in HCR 315.

504. Ethics in Health Care in Physical Therapy. Admission to the doctor in physical therapy program; or consent of instructor. (3).

Ethical and philosophical issues which impact upon physical therapy practice and research. Conflicts and issues arising out of interpersonal, professional and client relationships. *Also listed as PTP 591*.

505. Health Policy. *Graduate standing.* (3).

Comprehensive analysis of the health policy process in the United States with comparisons to foreign health systems. Systematic and critical review of major ideological influences that have shaped health policy. Other issues include policy implementation and management, policy evaluation, and the impact of government health policy on providers, insurers, industry, labor and consumers. *Also listed as PUB 505*.

506. Research Methods. *Graduate standing.* (3).

Research designs and evaluative models used in health and public administration studies. Special emphasis on de-veloping skills in research analysis and problem identification (research question development). Also listed as PUB 506.

507. Ethics Seminar for Physical Therapy. HCR/PHL 304 or consent of instructor; admission to the doctor in physical therapy program. (2).

Seminar focusing on moral issues related to rehabilitation and clinical decision making for physical therapists. *Also listed as PTP* 507.

508. Evaluation of Services and Programs. *Graduate standing, a course in statistics.* (3).

See HCR 403 for description. Not open to students with credit for HCR/PUB 403. Also listed as PUB 508.

509. Healthcare Strategic Planning. *Graduate standing, HCR* 300, 376; or consent of instructor. (3).

See HCR 410 for description. Not open to students with credit for HCR/PUB 410. Also listed as PUB 509.

517. Race, Health and Illness. Graduate standing; HCR 300, SOC 100, or consent of instructor. (3).

See HCR 407 for description. Not open to students with credit for HCR 407.

518. Budgeting in Public and Nonprofit Organizations. *Graduate standing.* (3).

See HCR 418 for description. Not open to students with credit for HCR/PUB 418. Also listed as PUB 518.

524. Employment, Law, and Public Policy. *Graduate standing.* (3).

See HCR 424 for description. Not open to students with credit for HCR/PUB 424. Also listed as PUB 524.

525. Contemporary Issues in Health Care Management.

Admission to MBA or MPA program. (3).

Contemporary health care issues that affect the management and delivery of heath services. Current realities of supply and demand of health care services, assessed relative to demographics, socioeconomic status, and disease frequency; working relationships of health care managers, clinically-based employees and independent physicians. Evaluation of the merger of technology and the health care environment, relative to dynamics of computer technology and complexities of the environment.

527. Personnel Selection and Evaluation. *Graduate standing; PSY 100 and a course in statistics. (3).*

See HCR 427 for description. Not open to students with credit for HCR/PSY/PUB 427. Also listed as PSY 527 and PUB 527.

574. Topics on Disability Studies. *Graduate standing.* (1-3).

Interdisciplinary approach to disability studies, including focus on arts and humanities, natural and social sciences, and professional schools. Topics include history and cultural representation of disability, advocacy, health, rehabilition, built environment, independent living, public policy. Team taught with visiting speakers. Accessible classroom with real-time captioning. Also listed as PUB 574.

577. Financial Management in Health Care. *Graduate standing; HCR 300, 376; or consent of instructor.* (3).

See HCR 477 for description. Not open to students with credit for HCR/PUB 477. Also listed as PUB 577.

579. Economics of Health Care. Graduate standing; ECN 202; HCR 300; or consent of instructor. (3).

See HCR 479 for description. Not open to students with credit for ECN/HCR/PUB 479. Also listed as ECN 579 and PUB 579.

581. Health Education and Community Resources. *Admission to the doctor in physical therapy; or consent of instructor.* (2).

Appropriate health education strategies for families, support groups, and communities. Identification, utilization and evaluation of community and other resources. *Also listed as PTP 592*.

587. Legal Issues in Health Care. Graduate standing; HCR 300, or consent of instructor. (3).

See HCR 487 for description. Not open to students with credit for HCR/PUB 487. Also listed as PUB 587.

588. Independent Study in Health Care. Consent of instructor. Open only to students in Health Care Administration MPA or other graduate level health care programs. (1-3).

Directed reading or research on a topic relevant to health care/health care administration, under instructor's supervision, by special arrangement only. *Graded ABCDE/Y*.

590. Internship. *Graduate standing. Consent of instructor.* (3).

Students intern in agencies under supervision of agency personnel and faculty, meet in seminars to discuss field experience and related readings. *Graded ABCDE/Y*.

593. Practicum in Research Design. *Graduate standing and completion of 18 hours in the MPA program. (3).*

Development of a research design for the Practicum in Applied Research project, working with the instructor and project readers. *Also listed as PUB 593. Graded ABCDE/Y*.

595. Practicum in Applied Research. PUB 539 or 593. (3).

Implementation of the research design developed in HCR 593. Research conducted in close consultation with a faculty advisor and results presented in a substantial paper demonstrating integration of important topics of public administration. *Also listed as PUB 595. Graded ABCDE/Y*.

Medical Technology (MTP)

2102 W. S. White Building (810) 762-3174 FAX (810) 762-3003 http://www.umflint.edu/hsa/medtech

Director: Nancy S. Gouin, M.P.H., MT(ASCP)

The Bachelor of Science in Medical Technology provides an undergraduate education to those preparing to enter the field of clinical laboratory science, also known as medical technology. Medical technologists produce reliable diagnostic data reflective

patient health status. Physicians rely on the clinical laboratory data provided by medical technologists to determine the presence, absence, extent or cause of a disease. Clinical laboratory professionals are essential members of the health care team, uncovering scientific facts leading to the accurate diagnosis and timely treatment of disease. Students of clinical laboratory science develop the analytical and critical thinking skills necessary to function effectively in a clinical laboratory evnironment.

The Bachelor of Science in Medical Technology is designed to provide a broadly based science background including biology, chemistry, and laboratory science course requirements as well as an opportunity to elect courses from humanities and social sciences. The four years of undergraduate study may be followed by a clinical internship year in a hospital or other clinical setting offering an accredited program in Medical Technology/Clinical Laboratory Science. Persons may obtain clinical internships through participation in the Medical Technology Internship Matching Program of Michigan (MTIMPM), a competitive process that matches participants to clinical internship programs. Internship graduates are then eligible to take a nationally recognized certification examination conducted by the Board of Registry of the American Society of Clinical Pathologists (ASCP). Successful completion of the certification exam confers MT(ASCP) certification status and eligibility for numerous types of positions within the field of clinical laboratory science.

Employment opportunities are available in a variety of work settings. Persons are needed to fill the available positions in clinical practice settings of diagnostic laboratories in hospitals, public health agencies and clinics. Career options also exist outside the traditional clinical laboratory. Graduates with backgrounds in clinical laboratory science occupy positions as medical research and development technologists, technical representatives for medical product and medical equipment companies, and other bio-medically related positions in biotechnology companies.

The degree program in Medical Technology is also an excellent foundation for students preparing for graduate studies in a sub-discipline of interest or for pre-professional training in one of the medical sciences (pre-physician assistant, pre-medicine, pre-denistry).

Department Mission and Program Assessment

The Medical Technology program prepares graduates for clinical laboratory careers and science/medically-related positions in business and industry. The program participates in the University-wide effort to assess its academic programs. Information on assessment plans, including goals, methods and outcomes is available at http://assessment.umflint.edu.

Program in Medical Technology

A concentration program in Medical Technology is offered, leading to the Bachelor of Science degree.

Program in Medical Technology

Requirements.

- Completion of the School of Health Professions and Studies general education requirements.
- B. Biology courses. BIO 111 (Organismal Biology), BIO 113 (Principles of Biology), BIO 326 (Cell Biology), BIO 328 (Genetics), BIO 425 (Immunology), BIO 432* (Mammalian Physiology), BIO 435 (Microbiology), BIO 439 (Mycology), BIO 450 (Parasitology).

- C. Chemistry courses. CHM 260, 261, 262, and 263 (Principles of Chemistry); CHM 330, 331 (Organic Chemistry I); CHM 332, 333 (Organic Chemistry II) or 3-6 additional credits in upper level chemistry.
- D. MTP 201, 301, 302 and 2-3 additional credits in clinical laboratory science (MTP) coursework.
- E. Four credits in computer science.
- F. Electives to complete a total of 124 credits.
- G. Medical terminology, statistics and critical thinking courses are recommended.
- H. A cumulative grade point average of at least 2.7.

*Note: Substitution of BIO 327 for BIO 432 qualifies a student to declare a minor in biology as well as a major in medical technology. Other courses relevant to this major include BIO 438 (Medical Microiology), BIO 467 (Molecular Biology), MTP 401 (Clinical Correlation of Lab Data), MTP 394 (Clinical Chemistry) and HCR 300 (Health Care in the US).

Courses in Medical Technology (MTP)

201. Introduction to Clinical Laboratory Science. (1).

Overview of the field of clinical laboratory science and examination of the role of the medical technologist as a member of the health care team. Sessions on current issues and field visits to laboratory settings. *Graded Pass/Fail*.

301. Introduction to Hematology. *BIO 326.* (2).

Basic theories, principles, and techniques of clinical hematology. Lecture and laboratory participation.

302. Introduction to Immunohematology. *BIO 326.* (2).

Basic theories, principles and techniques of blood banking and coagulation. Lecture and laboratory participation.

320. Medical Terminology for Health Professionals. *At least sophomore standing.* (2).

Analysis of medical terms and components as foundation for recognition of medical language encountered in health care settings; includes examination of medical terminology utilized in case studies. *Not open to students with credit for MTP 321.*

321. Introduction to Medical Terminology. *At least sophomore standing.* (1).

Introduction to medical language used in health care settings with focus on terms describing disease states and diagnostic procedures. *Not open to students with credit for MTP 320.*

390. Independent Research. Consent of instructor. (1-4).

Individual work for qualified students under the supervision of the instructor. Problems may involve search of original literature, experimentation, and analysis of results. *Graded ABCDE/Y*.

392. Hemostasis/Coagulation. (1).

Basic principles of hemostatic mechanism; case study approach emphasizing interaction of hemostatic components and hemostatic disease.

394. Clinical Chemistry. CHM 262. (3).

Introduction to analytes, pathophysiology, assay methodologies, and interpretation of clinical chemistry diagnostic data. Case study approach demonstrates correlation of diagnostic data to disease states. *Also listed as CHM 394*.

398. Body Fluids/Urinalysis. Junior standing.. (2).

Introduces basic theories of urinalysis and body fluid examination which are utilized in a clinical laboratory in the performance of diagnostic testing.

401. Clinical Correlation of Laboratory Data. At least junior standing. (2-3).

Lectures on principles of pathophysiology and how abnormalities of disease are revealed through laboratory data. Liberal use of case studies and practical application of laboratory data. Emphasis placed on cost effective use of laboratory testing.

Nursing (NUR)

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Assistant Director for Clinical Affairs-Hurley Medical Center:

Elizabeth Holifield

Assistant Director for Graduate Program: Constance Creech

Administrative Specialist: Marge Hathaway Business Administrator Associate: Denise Shourd Academic Advisors: Maris Gilles, Lynn Kruse Principal Secretary: Carol Hall

Wells, Denise Will, Michelle Yaste.

Associate Professor Janet Barnfather; Assistant Professors Margaret Andrews, Constance Creech, Linda Knecht, Hiba Wehbe-Alamah; Professor II Maureen Tippen; Clinical Assistant Professor Kristi George; Lecturers Bonnie Hudson, Rose Luster-Turner; Adjunct Professor John Thornburg; Lecturers

Andrea Abernathy, Mary Bair, Edith Bardzilowski, Libby Bell, Lynnette Bourne, Michael Brannon, Brenda Buckle, Kathryn Coggins, Susan Colarossi, Sandra Cooper, Laura Dahnke, Deborah Filos, Pat Fitch, Lauren Goldie, Suzanne Guzelaydin, Carol Higgins, Charles Johnston, Christina Kalisz, Suzanne Keep, Lillian Mess, Sandra Miller, Mary Moretto, Margie Murray-Wright, Richard Richardson, Deborah Smith, Sandra Smith, Theresa Stevens, D. Kay Taylor, Diane Towers, Juanita

Opportunities in the field of Nursing are evolving in new, challenging directions as health care settings expand and diversify. A generation ago, nurses were primarily prepared for work in hospitals. Today, a myriad of challenging opportunities are available. Through the study of theory, research and practice the Bachelor of Science in Nursing (BSN) student prepares to

provide health care to people across the lifespan with awareness of the exigencies of gender, culture, and ethnicity. Theoretical and clinical learning experiences prepare the student to provide care for the acutely and chronically ill and also to instruct clients in health promotion, and disease and injury prevention. BSN students also develop administrative skills necessary to manage the health care needs of clients in a variety of settings. For today's professional nurse, a four-year Bachelor of Science degree in Nursing is essential.

The general education component of the Bachelor of Science in Nursing program, which includes arts, sciences and humanities, provides the student with an academic background promoting development of a well-rounded individual. Students are challenged to develop high level analytical and critical thinking skills. Upon completion of nursing program and general education requirements, the University of Michigan-Flint awards the Bachelor of Science in Nursing degree.

Career opportunities for professional nurses are continually expanding and include: hospitals, clinics, physicians' office practices, home health care agencies, schools, parish churches, businesses, the military, pharmaceutical companies, insurance companies, health maintenance organizations, wellness centers, fitness centers, and community and public health agencies. Nurses are finding opportunities in the fields of business, law and many sectors of the government. The Bachelor of Science in Nursing degree is the foundation for graduate study in nursing. The graduate program in Nursing at the University of Michigan-Flint prepares nurses to be Family Nurse Practitioners, Adult/Psychiatric Mental Health Nurse Practitioners, or Adult Nurse Practitioners.

Accreditation

In April, 2006, the Commission on Collegiate Nursing Education (CCNE), the accrediting body of the American Association of Colleges of Nursing, granted ten-year accreditation to both the baccalaureate program in nursing and the Master of Science in Nursing program at the University of Michigan-Flint Department of Nursing. You may contact them at CCNE; One Dupont Circle, NW, Suite 530, Washington, DC 20036-1120; telephone (202) 887-6791; fax (202) 887-8476.

Department Mission and Program Assessment

The Mission of the undergraduate Nursing Program of the University of Michigan-Flint is to create a learning environment that:

- Prepares graduates to design, manage, and provide nursing care in a variety of settings to meet the health needs of a diverse society through theory-based practice.
- Promotes service to the University, profession, and community.
- Supports scholarly endeavors that advance the health of society.

The Department of Nursing participates in the University-wide effort to assess its academic programs. Students are expected to fully engage in this process. Information on assessment plans, including goals, methods and outcomes is available at http://assessment.umflint.edu.

Programs in Nursing

A concentration program is offered leading to the Bachelor of Science in Nursing degree. This program has two tracks. (1) The University of Michigan-Flint/Hurley Medical Center Basic BSN Program is for students who are earning their Bachelor's degree as they prepare for licensure as a Registered Nurse (RN). A prenursing program is available for these students. (2) The RN/BSN Program, or Registered Nurse Program, is for the student who is a graduate of a state-approved nursing program and already holds a license to practice as Registered Nurse in Michigan.

The Department of Nursing also offers a Master of Science in Nursing Program with three tracks: Family Nurse Practitioner, Psychiatric Mental Health Nurse Practitioner, and Adult Nurse Practitioner. RN/MSN admission is available. See the Graduate Study section of this *Catalog* for further information.

The Pre-Nursing Program

This program is for students who plan to enter the Basic BSN program. Students seeking admission to the Pre-Nursing Program must meet University of Michigan-Flint admission requirements. Application may be made at any time after the beginning of the senior year of high school. The Department of Nursing highly recommends high school college preparatory courses in biology, chemistry, English, and mathematics.

Upon admission to the University, Pre-Nursing Program students are enrolled in the College of Arts and Sciences. Students entering the Pre-Nursing Program in the College of Arts and Sciences should be aware that such admission does not insure their acceptance in the Basic BSN Program. Admission to the Basic BSN Program is selective. To learn details of the application and selection processes, prospective applicants are encouraged to attend Department of Nursing Information Meetings. These are held regularly throughout the school year. Contact the department for scheduled times.

Prerequisite Courses for the Basic BSN program.

Four (4) of the below listed prerequisites courses listed below are required **before applying** to the Nursing Program (at least two of the first four courses must be sciences). All are required **before beginning**.

Completion of 4 of the courses listed below, including at least 2 in the sciences, with grades of at least C+ (2.3) is required **before applying** to the Nursing Program. Completion of all courses with grades of at least C+ (2.3) is required **before beginning**.

BIO 135	Microbiology Basics	(4)
BIO 167	Human Anatomy & Physiology I	(4)
BIO 168	Human Anat & Phys II	(4)
CHM 150	General Chem. for Health Sciences	(3)
CHM 151	Gen Chem Lab for Health Sciences	(1)
ENG 111	College Rhetoric	(3)
ENG 112	Critical Writing/Reading	(3)
PSY 237	Developmental Psych	(3)
NUR 110	Introduction to Professional Nursing	(2)

Notes:

- •BIO 167 and BIO 168 must both be taken at the same institution. •SWR 301 may also be accepted in place of PSY 237.
- •Science credits must be no more than seven years old.
- •CHM 150/151 waived if approved by Chemistry Department to enter CHM 252.

In addition, the following courses are a part of the Basic BSN Program Core Nursing Curriculum, but may be taken before entry into the program: CHM 252; NSC 168, 207, 209, 233; NUR 308. A few nursing electives (NUR courses numbered between 350 and 399) may also be taken before beginning the program.

Minimum grades of C+ (2.3) or higher are required for progression in the program. See this *Catalog* for course descriptions and information on nursing elective classes.

Bachelor of Science in Nursing

University of Michigan-Flint/Hurley Medical Center Basic BSN Program

Admission to this program track for the BSN degree is selective. Thirty-two to forty-five students are admitted for each fall and winter semester. Students may apply after completion of the first set of prerequisites. Application deadlines are January 20 and September 1. Late applications may be accepted if space becomes available. Application packets are available from the Office of Admissions, the Academic Advising and Career Center, or the Department of Nursing. If the student is not admitted and wants to be included in the next pool of applicants, the student must resubmit an updated application packet. Only complete packets are considered.

The Pre-Nursing Program courses are prerequisites for the University of Michigan-Flint/Hurley Medical Center Basic BSN Program. The BSN student is withdrawn from the program if prerequisites are not complete. Students must have a minimum cumulative College/University grade point average (GPA) of 2.75 to be considered for admission. Students must earn a grade of C+ (2.3) or higher in all prerequisite courses. A final grade of C+ (2.3) or better is necessary in all required nursing and elective courses (prefix NUR) to progress in the Nursing program. Students are required to participate in periodic program assessment, which enables the Department to test the efficacy of the curriculum.

Students admitted to the University of Michigan-Flint/Hurley Medical Center Basic BSN Program are charged according to a tuition and fee schedule specific to BSN students, and this fee structure is used for all courses taken while in the program. Students need additional funds for uniforms, medical equipment and professional textbooks. During some semesters, students need the use of an automobile to travel to their clinical assignments. A pre-entrance physical examination, immunizations, CPR certification, and health insurance will be required at the student's expense. Students must meet health requirements as mandated by their clinical sites. Students who do not provide verification of health requirements by the announced deadlines will be disenrolled. Readmission for the next semester is dependent on space available.

Requirements.

- A. Completion of all prerequisite courses with grades of C+ (2.3) or better. Grades of C+ (2.3) or better in NSC 207, 209, 233, NSC/PHL 168 and all NUR courses required for progression in the program.
- B. The School of Health Profession and Studies general education requirements as found in the General Education Program section of this *Catalog*.
- C. Completion of the Core Nursing Curriculum with grades of C+ (2.3) or better:

Semester 1: CHM 252 (3); NSC 207* (3); NUR 202 (3), 220 (6).

Semester 2: NSC 209 (3), 233* (3); NUR 250 (7), 308 (3). Semester 3: NUR 255 (2), 310 (3), 320 (5); NSC 168 (3).

Semester 4: NUR 330 (5), 335 (6).

Semester 5: NUR 405 (5), 407 (2), 410 (6).

Semester 6: NUR 430 (5), 435 (5).

*NSC 207 and NSC 233 may not be taken on-line.

- D. Two electives (4 cr. total) from NUR 350-399, 499.
- E. A 3-credit course relating to cultural studies. (Consult with Department of Nursing for a list of approved courses).

The curriculum is designed for full-time students to complete in three years after acceptance into the Basic BSN Program. Graduates of this program are eligible to apply to take the NCLEX-RN examination for licensure as a Registered Nurse.

Interruption of Program

Students who do not successfully complete NUR 220 cannot continue in the Nursing Program. To be considered for readmission, the student must reapply to the nursing program. Students who elect to withdraw from their program may experience a delay before reinstatement, due to enrollment limits. Students who remain enrolled without interruption in their program are given priority in assignment to clinical courses. Any student considering interruption of the program should discuss this with his/her academic advisor in advance.

Readmission to the Program

Students at the University of Michigan-Flint who are not enrolled for either a fall or winter semester must make application for readmission through the Office of Admissions and to the Student Affairs Committee of the Department of Nursing. Decisions on applications for readmission are dependent upon availability of space in clinical nursing courses and the student's previous academic standing. The student may be required to make adjustments according to the curriculum in effect for the semester into which they are readmitted.

Honors Program in Nursing (For Basic BSN Program Students)

The Honors Program in Nursing affords exceptional nursing students opportunities to demonstrate leadership in nursing administration, education and research through guided independent study, experiences, and research above the regular curriculum. Students must be admitted to the University Honors Program before consideration for the Honors Program in Nursing. Further information may be obtained from the section entitled University Honors Program in this Catalog. Honors Program students who wish to earn the Bachelor of Science in Nursing must complete nursing program prerequisites and apply and be accepted to the UM-Flint Nursing Program and the Honors Program in Nursing. These students must maintain University of Michigan-Flint Honors Program standards, complete all University Honors Program requirements for graduation, and all Department of Nursing requirements for the BSN. In addition, students in the Honors Program in Nursing, with the guidance of an Honors Advisor, design an independent program of study to define, explore and test an area of nursing practice, education, and administration through nursing courses open only to honors students. The following are required:

- Membership in the National Student Nurses' Association.
- 2. NUR 494 (3) Independent Research Plan Development.

- 3. NUR 495 (4) Honors Thesis I.
- 4. NUR 496 (4) Honors Thesis II.
- 5. NUR 498 (1) Independent Study Community Service.

Registered Nurses: RN/BSN Program For Students Who Already Have an RN License

Persons interested in applying for admission to the RN/BSN Program should contact the Department of Nursing office to obtain the appropriate forms and information. An application to the University must be completed and returned to the University of Michigan-Flint Admissions Office of Admissions. (This may be done online.) Official copies of transcripts must be sent to the Office of Admissions. The Performance Evaluation and proof of RN license must be sent to the Department of Nursing. All materials should be received no less than one month prior to the term for which the candidate is seeking admission. The University of Michigan-Flint has a revolving admission policy, which allows prospective students to be admitted in fall, winter, spring or summer. RN students completing prerequisites to the RN/BSN Program will be admitted to the School of Health Professions and Studies (SHPS) as a pre-RN/BSN major. Formal admission to the RN/BSN Program is determined by the Department of Nursing upon completion of all prerequisite courses. RNs must have earned at least a 2.75 GPA in the ADN program, have a current RN license, and a satisfactory performance evaluation in order to be admitted to the RN/BSN program. If candidates do not initially meet the grade point average requirements, they will be required to complete 9 credits of coursework at the University of Michigan-Flint with a 3.0 or better GPA before beginning the RN/BSN core curriculum.

Degree requirements must be completed within seven years of admission to the RN/BSN Program. Credit in nursing and in non-nursing courses may be acquired through transfer of credits, credit by examination (CBE), and by course enrollment. Students must earn grades of C+ (2.3) or higher in CHM 252, NSC 207, 209, 233, NSC/PHL 168 and all NUR courses to be eligible for progression from semester to semester. Students must also earn a grade of C+ (2.3) or higher in all prerequisite courses. Students are required to participate in periodic program assessment, which enables the Department to test the efficacy of the curriculum.

Credit by Examination

The earning of credit by examination (CBE) is based on the premise that the knowledge and skills acquired through course completion may be validated in other ways. Passing a standardized examination validates mastery of subject matter of the course. Credit may be earned by successful completion of the examinations for NSC 207, 209, and 233. Each examination may be taken no more than twice. If a student does not pass an exam on the second attempt, enrollment in the course is required. There is a fee for each exam attempt.

Advanced Placement

In an effort to support transition to the Bachelor of Science in Nursing Program, the Department of Nursing will validate 34 credits from your RN program as University of Michigan-Flint institutional credit.

Requirements.

A. Completion of the following prerequisite courses with grades of C+(2.3) or better:

Before Semester 1 NUR courses: ENG 111 (3), 112 (3); BIO 167 (4), 168 (4).

Pre or co-requisite to Semester 1: NUR 202 (3); SWR 270 (3) or NUR 308 (3) or PSY 201 (3) or SOC 210 (3).

Pre or co-requisite to Semester 2: SWR 301 (3) or PSY 237 (3); NSC 168 (3) (preferred) or PHL 162 or HCR 304. Prerequisite to Semester 3: NSC 207 (3), 209 (3), 233 (3) (all available by credit-by-exam).

- B. The School of Health Profession and Studies general education requirements as found in the General Education Program section of this *Catalog*..
- C. Core Nursing Curriculum:

Semester 1: NUR 300 (3).

Semester 2: NUR 255 (2), 310 (3).

Semester 3: NUR 421 (2), 430* (5).

Semester 4: NUR 407 (2), 410* (6).

*NUR 410 and 430 are clinical courses; each requires six hours per week in the clinical setting.

- D. Two electives (4 cr. total) from NUR 350-399; 499.
- E. A 3-credit course relating to cultural studies. (Consult with Department of Nursing for a list of approved courses).

Course Credit Ratios (Basic BSN and RN/BSN)

Lecture and seminar course credit is a 1:1 ratio, which is standard for the University of Michigan-Flint: for each credit earned, one 50-minute hour is allocated. Practicum course credit is a 2:1 ratio, two 60-minute hours of contact per week for each credit earned. Clinical course credit is a 3:1 ratio, three 60-minute contact hours per week for each clinical credit earned. Lab course credit is a 2:1 ratio, two 60-minute contact hours per week for each lab credit earned. Independent study credit is a 3:1 ratio.

Lecture courses: NSC 168, 207, 208, 209, 233, 234; NUR 110, 255, 300, 308, 310, 407, 421.

Seminar/Clinical course: NUR 435.

Lecture/Lab course: NUR 202. Lecture/Clinical courses: NUR 220, 250, 320, 330, 335, 405,

410, 430.

Independent study courses: NUR 399, 499.

Nursing Support Courses (NSC)

168. Introduction to Bioethics. *Open to all University students.* (3).

Introduction to classical ethical theories and their application to contemporary medical issues. Emphasizes acquisition of critical reasoning skills essential to providing ethical solutions to problems healthcare personnel encounter. *Does not count as a prerequisite for any philosophy course, nor toward any philosophy major or minor. Also listed as PHL 168.*

207. Disease Processes and the Human System. *BIO* 167 and 168; prior or concurrent election of CHM 252. (3).

Addresses disease and disease process by reviewing normal function, then moving to the more common variations from normal (disease). Includes the concepts of systems, adaptation, and the health-illness continuum. Offered online in fall. Online sections for RN/BSN students only.

208. Nutrition in Health Care: Diet Therapy. NUR 205. (1).

Nutrition therapy in diseases in hospitalized and nonhospitalized clients. Offered online only. Not open to students having credit for NSC 209.

209. Basic Nutrition for Health Care Practitioners. Open to all University students. (3).

Part I: Basic principles of nutrition science. Macronutrients and micronutrients are defined, including sources, functions, deficiency states, toxicity states, and intake recommendations. Part II: Nutrition therapy in diseases in hospitalized and nonhospitalized clients, emphasizing treatment and prevention. Part III: Nutrition throughout the life cycle. Course provides general information in the science of nutrition and translates that information into healthy food choices in both health and disease. Offered on campus in fall; online in winter and spring.

233. General Principles of Pharmacology. BIO 167 and 168; NSC 207; prior or concurrent election of CHM 252; or RN/BSN. (3).

A one-term course designed to introduce students to the fundamental principles of drug action, and to present the essentials of how major drugs are used therapeutically in various disease states. Identification and assessment of adverse drug responses or drug-drug interactions. Offered on campus in fall; online in winter. The online sections are for RN/BSN students only.

234. Updates in Pharmacology. NUR 203. RN/BSN only. (1).

Designed for RN students. New drug facts including revised nursing considerations and patient/family teaching guidelines, as well as newly researched side effects, adverse reactions, precautions, interactions, contraindications and IV therapy information. Offered online only.

Courses in Nursing (NUR)

110. Introduction to Professional Nursing. Open to all University students. (2).

Successful completion is required prior to admission to the nursing program. Begins the socialization process into the nursing profession and introduces tools to help students become successful in their nursing career. Course content includes: roles of professional nurses, ANA Social Policy Statement, legal aspects of nursing including licensure requirements, Standards of Nurisng Care, Code of Ethics, therapeutic communication, and medical terminology. Introduction to APA Manual for Publication and scientific writing.

202. Health Assessment. Basic BSN Program, Semester 1; RN/BSN Program, prior or concurrent with NUR 300. (3).

Learn interviewing and physical assessment skills, using Gordon's Functional Health Patterns as a framework for assessment of the physiologic, psychologic, sociocultural and spiritual systems of the individual. Utilize and expand current skills as well as gain new skills.

220. Fundamentals of Nursing. Basic BSN program, Semester

Students examine and apply the fundamental nursing concepts,

skills and techniques which form the foundation of nursing practice. Common client problems identified. The application of critical thinking with the nursing process provides a foundation for clinical decision-making. Therapeutic communication and teaching skills are used in class and clinical settings to promote health and well-being of the adult client. Legal and ethical parameters of nursing practice, cultural considerations in client care and the changing health care delivery system are introduced.

250. Medical Surgical Nursing I. Basic BSN program, *Semester 2. (7).*

Begins the study of holistic nursing care of adults experiencing medical-surgical conditions. The major focus of the course is on achieving physicological integrity as influenced by application of basic care and comfort measures, reduction of risk and collaborating with other health care team members. The emphasis of the course work is on critical thinking and decision-making using current nursing knowledge. Students are assisted in using data, information and knowledge to make nursing care choices.

255. Gerontological Nursing. *Basic BSN program, Semester 3;* RN/BSN. (2).

Examines health as it is experienced and managed in later life. Focuses on developing an appreciation for the diversity of experiences of age and health within the population of older adults. The influence of culture and various social factors on perceptions of health and health practices are discussed. Strategies for providing high quality, developmentally appropriate care for older adults are developed. Health promotion, risk reduction, disease prevention and management of chronic conditions are addressed. Legal and ethical issues, health care policy and end-of-life care of the older adult within the context of shrinking health care resources are examined.

300. Transition to Professional Nursing Practice. RN/BSN Program, semester 1. (3).

Introduces the RN to nursing theory, professional issues, and the role of the professional nurse.

308. Research in Nursing. Open to all University students. (3).

An introductory level course to provide students with knowledge and skills to understand and participate in nursing research. There is an emphasis on the components of the research process that is enriched by including an array of nursing studies. Students review and partcipate in critical reading, evaluating, and interpreting research studies. They begin to explore ways to incorporate research-based knowledge into practice by learning about research-utilization and evidence-based practice models.

310. Health Promotion in Families and Groups. Basic BSN program, Semester 3. (3).

Introduces the student to concepts and theories related to family systems and group dynamics. Students' thinking broadens and shifts from the individual as client to the family system and/or group as client. Emphasis is on the relationships between individual, family, group and health; the role and responsibility of the nurse in working with families and groups and interpersonal communication in families and groups.

320. Medical Surgical Nursing II. Basic BSN Program, Semester 3. (5).

Expands the study of holistic nursing care of adults to include complex medical-surgical condiditions. Focuses on life threatening health problems affecting three major systems: cardiovascular, neurological, and respiratory. Emphasis of the course work is on critical thinking and decision-making using current nursing knowledge as applied to acutely ill patients. Students gain confidence in application of nursing knowledge in complex nursing situations.

330. Maternity Nursing. Basic BSN Semester 4. (5).

Knowledge and beginning level skills necessary for nursing care of the childbearing family. Focus on physical, psychological and social needs of women, newborns and families throughout the maternity cycle. Evidence-based practice, cultural competence, and complementary therapies; selected reproductive issues relevant to pre-conception counseling. Clinical education provides learning experiences in a variety of settings.

335. Parent-Child Nursing. Basic BSN Program, Semester 4. (6).

Designed to assist the learner to plan and deliver nursing care to children and families. Health care needs of children of varying ages and in various states of health are examined within a family context. Emphasis on wellness, promotion of growth and development, acute and chronic illness, and the functioning of family as a unit is explored within a variety of health care settings. Application of theory, critical thinking, and applying the nursing process is utilized to plan and deliver nursing care to children and families.

351. Issues in Women's Health. Open to all University students. (2).

Focus on the unique physical and mental health issues of women. Anatomic and physiologic changes during development, pregnancy and menopause. Medical-surgical disorders including infections and cancer. Sexual dysfunction, eating disorders, and the special needs of females in therapy. Women and violence, including sexual assault, abuse and incest. Also listed as HCR 325.

- [352. Health Assessment of the Older Adult. BIO 167, 168; NUR 202; or consent of instructor. (2).]
- [353. Functional Assessment of the Older Adult. Basic BSN Program; RN/BSN Program; or consent of instructor. (2).]
- **354.** Genetics in Nursing Practice. BIO 135, 167, 168; NSC 207. Open to all University students. (3).

Introduces the student to the basic concepts of human genetics. Periconceptual counseling and prenatal diagnosis are discussed. Implications of presymptomatic diagnosis and cancer risk education/counseling are presented. Considerable emphasis is placed on the ethical, legal and social issues involved and the nurse's role.

- [355. Assessment and Management of the Elder Patient with Dementia. Basic BSN Program; RN/BSN Program; or consent of instructor. (2).]
- **356.** End of Life Care. RN/BSN or Basic BSN semester 3 or

later; or consent of instructor. (2).

Issues surrounding end of life care, from a nursing perspective. Topics include decision making; the process of dying; Technology? What does it get us?; durable power of attorney for health care vs. living wills; What is death, anyway?; fears surrounding the dying person; palliative care options; cultural differences related to death and dying.

357. Teaching Strategies. Basic BSN Program; RN/BSN Program; or consent of instructor. (2).

Focus on the teaching-learning process. Preparation for effective teaching, use of teaching as part of the nursing process, exploration of teaching strategies, materials and evaluation. Assignments relate to student's work setting or specific areas of interest.

359. Human Sexuality. *Open to all University students.* (2).

Overview of human sexuality. Concepts and issues related to male and female sexuality within today's society. Students should develop a heightened awareness of the impact of biopsychosocial changes on sexual functioning. Nursing sexual health assessment and plan of care for individual male and female clients conducted as a requirement.

360. Bereavement in Children. NUR 220 or RN/BSN; or consent of instructor. (2).

Service learning providing the opportunity to experience a direct relationship with children ages 6-17 who have experienced loss of a loved one. The student spends approximately 3 days at a residential camp as part of a team focusing on children's grief needs. Emphasis on roles and responsibilities of the professional nurse in the camp setting and grief needs of children at varying developmental stages.

- [361. Health Promotion across the Life Span. Basic BSN Program; RN/BSN Program; or consent of instructor. (2).]
- **365.** Camp Nursing. Basic BSN Program, Semester 3;RN/BSN: Completion of 200-level nursing courses. Consent of Instructor. (2).

Classroom and clinical experience focusing on meeting primary, secondary and tertiary health needs in a camp setting. Roles and responsibilities of a professional nurse in camp settings. Students spend approximately one week at various residential specialty camps. *Graded ABCDE/Y*.

369. Transcultural Care. Open to all University students. (3).

Unique interaction of culture and cultural values with health beliefs and the impact these have on the utilization of the health care system. Leininger's Theory of Culture Care Diversity and Universality and the Sunrise Model are used as a basis for studying the relationship between culture and health. The various approaches necessary to provide culturally congruent care are explored.

371. Spiritual Dimensions of Professional Nursing Practice. Basic BSN Program; RN/BSN Program; or consent of instructor. (2).

Interdependence of body, mind and spirit and the effects this interdependence has on an individual's health outcomes.

Synthesis of nursing concepts and frameworks and other theories relevant to professional nursing practice within the spiritual dimension are explored.

373. Introduction to Computers in Nursing. Open to all *University students.* (2).

Assists novice computer users in developing computer skills useful in the school and practice settings. Includes instruction and hands-on experience for commonly used applications such as Word and Excel and introduces concepts and use of mail-merge, e-mail, literature searching, and the Internet.

374. Exploring Health and Healing. Basic BSN Program; RN/BSN Program; or consent of instructor. (2).

Broadens the student's perspective from that of illness and cure to that of health and healing. Exploration of culturally diverse beliefs and traditions regarding healing, current knowledge of the mind-body-spirit relationship, and complementary modalities for healing.

- [377. Advanced Trauma Nursing. RN/BSN Program. (2).]
- [379. Adolescent Health Nursing. Basic BSN Program, Semester 3 or later; RN/BSN Program. (2).]
- 381. International Nursing. Basic BSN Program, Semester 4 or later; RN/BSN Program. Consent of instructor. (2-4).

Provides the student with the opportunity to experience a direct relationship with health care consumers from various cultural backgrounds. Emphasis on providing direct care to the population and examination of the culture, with a focus on nursing practice based on a systems perspective.

383. Nursing Management of the Critically Ill Adult. Basic BSN Program, Semester 3 or later; RN/BSN Program. (2).

Focuses on the collaborative medical and nursing management of adult clients suffering from conditions commonly treated in critical care units. Covers content areas found on the CCRN certification exam from a holistic nursing perspective. Emphasis on pathophysiology of conditions, diagnostic testing, collaborative medical and nursing management, and communication with the client, family, and health care team. For RNs planning to take the CCRN exam and Basic BSN Program students who desire a more in-depth background in medical surgical nursing.

- [385. Adolescent Pregnancy. Basic BSN Program, Semester 3 or later; RN/BSN Program. (2).]
- **399.** Directed Study. At least sophomore standing in nursing and petition to Student Affairs Committee. (1-4).

With the assistance of a faculty member, student develops behavioral objectives and an action plan appropriate to the topic being studied. May be based on experience or directed reading. May be used when a student has, through prior coursework or experience, met most but not all of the objectives of a course. This identified area of study, when combined with the previous learning experience(s), is considered equivalent to a course in the nursing department. Graded ABCDE/Y.

405. Mental Health Nursing. *Basic BSN Program, Semester 5.*

Introduces students to concepts and theories applicable to clients, groups and families experiencing a mental illness and/or emotional problem on the wellness continuum. The relationship between emotional, social, physical, spiritual health/wellness patterns and clients with a mental/emotional illness is explored. Biological theory, critical thinking and communication theories are emphasized. The opportunity to apply knowledge and skills is provided in a variety of clinical settings. Focus is on critical thinking to implement the nursing process, application of nursing theories and models of practice, appropriate therapeutic nursing interventions and evaluations.

407. Nursing Issues and Trends. Basic BSN Program, Semester 5; RN/BSN Program. (2).

> Selected professional, political, social and ethical issues affecting current and future nursing practice. Strategies for individual and collective participation in decisions that influence professional nursing practice and health-care delivery.

410. Community Health Nursing. Basic BSN Program; Semester 5. (6).

Based upon a synthesis of nursing and public health science, this combined theory and clinical course focuses on maintaining optimal levels of health and wellness among individuals, families, groups, and aggregates in community settings. With an emphasis on disease prevention and health promotion among population groups, students are introduced to epidemiology principles and practices. In clinical experiences in varied community settings, students have the opportunity to apply their synthesized knowledge and practice nursing skills that are essential in caring for a community's health.

421. Synthesis of Knowledge for Professional Nursing Practice. RN/BSN Program. (2)

Provides guided opportunity to synthesize knowledge about nursing care for individuals, families and communities with complex problems. Faculty will assist students in the synthesis of knowledge related to various dimensions of professional nursing with an emphasis on proactive clinical judgment, selfassessment, inquiry and the role and responsibilities of the professional nurse.

430. Leadership and Management in Nursing. Basic BSN Program, Semester 6; RN/BSN. (5).

> Designed to prepare the graduate to assume leadership and collaboration roles in the clinical setting of heatlh care organizations. The theoretical framework for nursing leadership and management within the health care nursing systems is the core of content. A systems approach to administrative concepts related to leadership theory, principles of organizations, and management process provides the theoretical framework for this course. Provides students with clinical experience in the management and leadership aspects of health care systems.

435. Synthesis of Nursing Knowledge and Practice. Basic BSN program, Semester 6. (5).

Provides students with a guided opportunity to synthesize nursing knowledge with practice while providing care for individuals and families. Students provide care for a group of clients under the guidance of a preceptor in a hospital setting with clinical faculty maintaining responsibility for students' learning experiences. Case presentations by student focus on learning experiences tailored to students' needs. Students use nursing and other theories to support their evidence-based nursing practice. Emphasis is placed on critical thinking, proactive clinical judgment, self-assessment, inquiry, and the role and responsibilities of the professional nurse.

494. Independent Research Plan Development. Consent of Department Chair. Open only to Department of Nursing Honors Program students. (3).

An area of nursing to explore in NUR 495 and 496 honors courses is defined and validated through a literature search. A thesis and detailed plan of how that topic will be explored is prepared for review by the Honors Program Council. This plan will include a time schedule, budget, and terminal outcomes. This approved body of work becomes the basis for NUR 495 and 496. *Graded ABCDE/Y*.

495. Honors Thesis I. *Permission of the Honors Council or its designate. Consent of Department Chair. Open only to Department of Nursing Honors Program students.* (4).

An off-campus opportunity to independently carry out approved activities outlined in the NUR 494 plan in one or more areas of nursing research, education and administration. Summer between Junior and Senior Year. Graded ABCDE/Y.

496. Honors Thesis II. Permission of the Honors Council or its designate. Consent of Department Chair. Open only to Department of Nursing Honors Program students. Prior or concurrent election of NUR 495. (4).

After NUR 495, the student returns to campus and evaluates the detailed plan executed in NUR 495, and completes the thesis begun in NUR 494. The completed thesis is presented to a faculty review group consisting of the student's Nursing Honors Advisor, a member of the Honors Council, and a faculty member with expertise in the thesis topic. Members of the review group have equal responsibility for evaluating the thesis and making recommendations. All theses must meet the criteria established by the Honors Program and Honors Program in Nursing. *Senior Year. Graded ABCDE/Y*.

498. Independent Study Community Service. Consent of Department Chair. Open only to Department of Nursing Honors Program students. (1).

One credit of community service per a written plan approved by the Honors Faculty Advisor. May be taken at any time after entering the program. Graded ABCDE/Y.

499. Independent Study in Nursing. *Basic BSN Program; RN/BSN Program, completion of 200-level nursing courses and consent of instructor.* (1-4).

Under the guidance and with the approval of a selected faculty member, student develops behavioral objectives appropriate to the topic being studied and a plan of action to achieve objectives. May be based on experience, directed reading, study or research. May not be used as a substitute for required courses, but may be used to fulfill nursing elective requirements. Graded ABCDE/Y.

Master of Science in Nursing

See the Graduate Study section of this Catalog.

Nursing Development and Research

2180 William S. White Building (810) 762-3420

Director: Margaret Andrews

The office of Nursing Development and Research is organized to meet the needs of nurses for continued learning beyond their basic preparation. The Office works cooperatively with Genesee, Lapeer, and Shiawassee health care institutions/agencies, as well as state-wide professional organizations, to provide conferences and workshops for health care professionals.

Instructors for continuing education programs include state and national leaders, specialists in health care agencies, and University of Michigan-Flint faculty. Participation in continuing education programs is open to health care professionals in hospitals, home health and community health agencies, nursing homes, health care organizations, industry, and schools.

Continuing Education Credit

The Office of Nursing Development and Research is approved as a provider of continuing education in nursing by the Michigan Nurses' Association, which is accredited as an approver of continuing education in nursing by the American Nurses' Credentialing Center Commission on Accreditation. Availability of continuing education credits for other health care professionals is dependent upon the content of the specific program and the requirements of the professional organization/provider.

Radiation Therapy (RTT)

2102 W.S. White Building (810) 237-6502 FAX (810) 762-3003 http://www.umflint.edu/hsa/rtp/

Director: Michele R. Fortner Secretary: Dianne Scrimger

The Bachelor of Science in Radiation Therapy is a four-year, 141-credit, baccalaureate degree program. Upon successful completion of the program requirements, the graduate is eligible to take the Radiation Therapy Certification Examination given by the American Registry of Radiologic Technologists (ARRT).

The profession of Radiation Therapy involves the use of highenergy radiation in the treatment of disease, primarily cancer. Radiation therapy may be used alone or in combination with surgery and chemotherapy. As a team member the radiation therapist administers the radiation to the exact area of the patient's body as prescribed by a physician. In order to effectively treat patients, various types of equipment are utilized, such as highenergy linear accelerators. In addition, radiation therapists monitor the patient's progress while they are receiving radiation therapy, observe for signs of any complications, and determine when treatment should be withheld until a physician is consulted.

The structure of the Radiation Therapy program includes two

years of general education requirements and pre-professional courses. The professional program begins in the Summer of the junior year and continues for 22 consecutive months through April of the senior year. Didactic classes in the junior year are taught on the University of Michigan-Flint campus. The didactic classes taught in the senior year are held at the University of Michigan Hospital in Ann Arbor. The clinical practicum begins September of the junior year. Juniors attend clinic on Tuesdays and Thursdays from 9-3:30. Seniors attend Monday-Friday from 7:00 am to 3:30 pm in the spring and summer and on Mondays, Wednesdays, and Fridays from 7:00 am to 3:30 pm in the fall and winter semesters. The student is required to do one week on the early shift to learn quality assurance procedures in RTT 403, 404, and 405. The student will never exceed forty hours of combined classroom and clinical time per week.

University of Michigan-Flint students applying to the program can obtain an application by contacting the Program Office, 2102 W.S. White Building. The Radiation Therapy Program Director must receive completed applications, including all references by May 1 of the calendar year of the intended summer semester enrollment. Students will be admitted in the summer term only. In order to be admitted to the program all prerequisite courses must be successfully completed. Students applying to the program who are not UM-Flint students at the time of application must also submit a completed UM-Flint application including any transfer transcripts, indicating "Radiation Therapy" as the proposed field of study. Forms to apply for admission to the University are available from the Office of Admissions, from the Program Director, and also online at www.flint.umich.edu.

All qualified applicants will be invited to interview with the Admissions Committee. However, should the number of applications to the program far exceed the number of positions available, the program's Admissions Committee reserves the right to limit the number of interviewed applicants to two times the number of positions available in the class.

The Radiation Therapy Program at UM-Flint is fully accredited by the Joint Review Committee on Education in Radiologic Technology (JRCERT), 20 North Wacker Dr., Suite 900, Chicago, IL 60606-2901; telephone (312) 704-5300.

Program Mission and Program Assessment

The mission of the Radiation Therapy Program is to provide highquality, professional radiation therapy education to undergraduate students by: preparing graduates in radiation therapy to meet the needs of society through theory-based radiation therapy practice; preparing graduates who have the ability to communicate and collaborate effectively with respect for cultural and human diversity; maintaining a radiation therapy curriculum that reflects the interactive aspects of radiation therapy with the psychosocial behavioral, physical, and natural sciences; collaborating with local and regional institutions/organizations to provide access to professional radiation therapy education; promoting service and scholarly endeavors relating to health care needs of the community of Flint and Southeastern Michigan; promoting lifelong learning for graduates in Radiation Therapy. The program participates in the University-wide effort to assess its academic programs. Information on assessment plans, including methods and outcomes available goals, is http://assessment.umflint.edu.

Requirements for admission into the Radiation Therapy Program:

A. Completion of all general education and pre-professional

courses, with no grade lower than a C (2.0), as follows:

- 1. ENG 111, 112, 354.
- CHM 140 or CHM 150.
- MTH 111, 120.
- 4. CIS 128.
- COM 382. 5.
- 6. PSY 100; SOC 100.
- 7. Fine arts course.
- 8. PHL 168.
- 9. MTP 320.
- 10. Once course in values inquiry/humanities.
- 11. HCR 120 or 119, 300, 304, 362.

The courses below must be completed with a minimum grade of B- (2.7):

- 12. BIO 167, 168.
- 13. PHY 143, 145.

These courses may be taken at UM-Flint, or equivalent courses may be transferred from another accredited institution. In some instances, specific courses may be waived in consultation with the Program Director.

- B. Students must complete a minimum of sixteen hours of observation in a Radiation Therapy Department. Students must be at least 18 years old. All clinic observation hours will be arranged through the Program Director.
- C. Acceptance to the University of Michigan-Flint and completion of the supplmental Radiation Therapy program application. Application for general admission may be completed online at www.umflint.edu.
- D. Three references, one from an individual actively involved in the applicant's educational process, i.e., instructor, advisor, mentor; one from the current supervisor at the applicant's place of employment; and one from an individual commenting on the applicant's character. The Radiation Therapy program's supplemental application is available at www. umflint.edu/hsa/rtp
- E. Prior to beginning the clinical component of the program, the student is required to have a complete physical exam. Immunizations must be up-to-date and documented on the phsycial form by a physician. Students must document current CPR certification and maintain CPR certification while in the program. The physical form can be downloaded from the program website www.flint.umich.edu/hsa/rtp.

The student must perform the following:

- 1. Have sufficient strength to assist patients in transferring from a wheelchair or stretcher to the treatment couch. This will involve lifting at times.
- Have sufficient strength, coordination and dexterity to lift and position cerrobend blocks, electron cones and wedges up to 45 pounds to a height of 5'5".
- Have sufficient visual acuity to set machine field size, set monitor units on the machines, align treatment fields in dimly lit room, place blocks, review radiographs, view port films and monitor patients on a close-circuit television during treatment.
- Have sufficient auditory capability to hear warning bells in the treatment rooms and hospital fire alarms, as well as to monitor patients during treatment.
- Be capable of effective and concise verbal communication with patients, their families and other

health care workers.

- Be physically, intellectually and emotionally able to respond to emergency situations, providing first aid, CPR and patient care until a physician or nurse arrives.
- Be capable of handling stressful situations, making informed decisions and giving emotional support to patients and their families.
- 8. Be capable of understanding and applying clinical instructions given from departmental personnel.

Once admitted into the program the student must earn a minimum grade of a B- (2.7) in all RTT courses.

Program in Radiation Therapy

A concentration program in Radiation Therapy is offered, leading to the Bachelor of Science degree.

Pre-Professional Courses and General Requirements

Freshman year

Fall: **BIO 167 (4), ENG 111 (3), MTH 111 (3), PSY 100 (3),

one course in fine arts (3).

Winter: **BIO 168 (4), CIS 128 (3), ENG 112 (3), MTH 120 (4),

one course in values inquiry/humanities (3).

Spring: COM 382 (3). Summer: SOC 100 (3).

**Minimum grade of B- (2.7) required.

Sophomore year

Fall: ENG 354 (3), HCR 300 (3), PHL 168 (3), **PHY 143 (4). Winter: CHM 140 or 150 (3), HCR 304 (3), HCR 362 (3), MTP

320 (2), **PHY 145 (4). Spring: HCR 119 (2) or 120 (4).

Summer: RTT 300 (3).

**Minimum grade of B- (2.7) required.

Professional Program

Junior year

Fall: HCR 301 (3), 315 (3); RTT 301 (3), 311 (3), 351 (3). Winter: HCR 487 (3); RTT 315 (2), 321 (3), 341 (3), 352 (3). Spring/Summer: RTT 403 (10).

Senior year

Fall: RTT 404 (6), 423 (3), 431 (3)

Winter: RTT 405 (6), 410 (2), 432 (3), 433 (2), 444 (3)

Courses in Radiation Therapy

300. Basics of Radiation Therapy. Admission to professional program in radiation therapy. (3).

Basic patient safety, infection control and clinical radiation therapy terms.

301. Introduction to Radiation Therapy. *Admission to professional program in radiation therapy.* (3).

Introduction to activities and responsibilities of the radiation therapist. Orientation to school and hospital policies; career insights; overview of techniques in radiation therapy; essentials of procedures needed in the care of radiation oncology patients; review of medical terminology specific to the field.

311. Patient Care and Management. RTT 300 and admission to professional program in radiation therapy. (3).

Patient care techniques with emphasis on those necessary in the care and examination of oncology patients, especially those receiving radiation therapy. Psychological considerations, management of emergencies, infection control, examination, medical-surgical asepsis and tube management.

315. Seminar in Radiation Oncology. *Admission to professional program in radiation therapy.* (2).

Literature search of topics related to radiation oncology with written analysis and oral presentations of professional journal reviews. Practice in observation of images commonly viewed in the clinic.

321. Technical Radiation Oncology. RTT 301. (3).

Fundamental principles of atomic structure and matter, production and properties of radiation, interactions of photons; particulate radiation and measurement of absorbed dose. Different radiation therapy treatment units; tumor localization utilizing simulators, beam directing devices and other technical considerations. Focus on the radiation therapist's role in the clinic.

341. Oncologic Pathology. BIO 167, 168; Admission to professional program in radiation therapy. (3).

Disease concepts including inflammatory process, neoplasm, types of growth, causative factors, behavior of tumors, and staging procedures.

351. Clinical Practicum I. RTT 300 and admission to professional program in radiation therapy. (3).

Supervised experience in the practice of radiation therapy technology. Observes and partcipates in simulation procedure and delivery of radiation therapy to patients in the *Radiation Oncology Department of the University of Mighican Health System in Ann Arbor and affiliated clinical sites.* Patient care and management addressed.

352. Clinical Practicum II. RTT 351. (3).

Continued supervised experience in the practice of radiation therapy technology. The student therapist will observe and participate in simulation procedure and deliver radiation treatment to patients in the *Radiation Oncology Department of University of Mighican Health System in Ann Arbor and affiliated clinical sites.* Patient care and management addressed.

403. Clinical Practicum III. RTT 352; Admission to professional program in radiation therapy. (10).

Continued supervised experience in simulation procedures and treatment delivery to patients. Offered in the Radiation Oncology Department of University of Michigan Health System in Ann Arbor and affiliated clinical sites.

404. Clinical Practicum IV. RTT 403; Admission to professional program in radiation therapy. (6).

Continued supervised experience in simulation procedures and treatment delivery to patients. *Offered in the Radiation*

Oncology Department of University of Michigan Health System in Ann Arbor and affiliated clinical sites.

405. Clinical Practicum V. RTT 404; Admission to professional program in radiation therapy. (6).

Continued supervised experience in simulation procedures and treatment delivery to patients. Offered in the Radiation Oncology Department of University of Michigan Health System in Ann Arbor and affiliated clinical sites.

410. Mock Registry Reviews. *RTT* 404, Admission to professional program in radiation therapy. (2).

Students take mock registry exams and review material in preparation for the ARRT examination. Offered at the University of Michigan Health System in Ann Arbor.

423. Radiobiology. BIO 167, 168; Admission to professional program in radiation therapy. (3).

Biophysical principles of ionizing radiation and effects on living tissue; emphasis on radiosensitivity and response to radiation; review of cell biology. Hyperthermia as treatment modality, cellular response to heat, methods of heating, interactions of heat and radiation. Offered at the University of Michigan Health System in Ann Arbor.

431. Radiation Physics I. PHY 143, 145; Admission to professional program in radiation therapy. (3).

Fundamental principles of atomic structure and matter, production and properties of radiation, interactions of photons, particulate radiation, measurement of radiation and of absorbed dose. Discussion of different radiation therapy treatment units. Offered at the University of Michigan Health System in Ann Arbor.

432. Radiation Physics II. RTT 431; Admission to professional program in radiation therapy. (3).

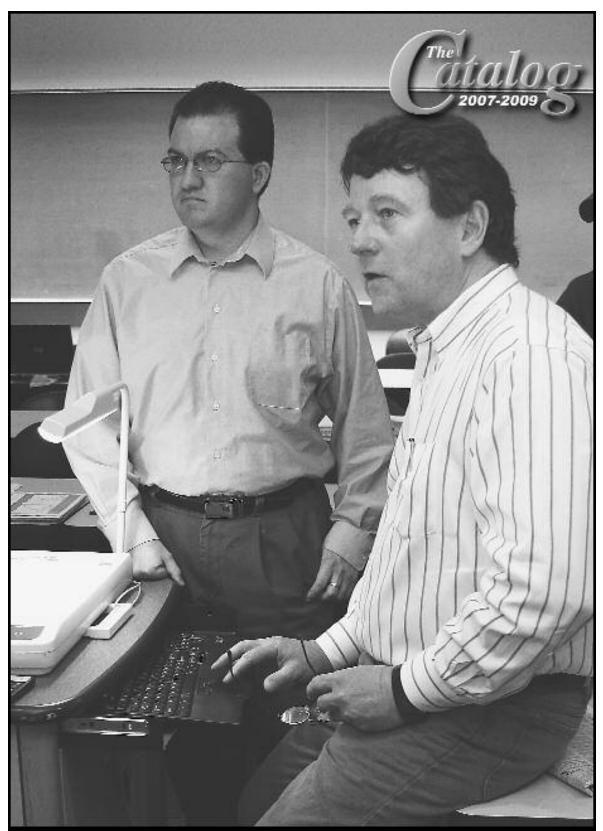
Principles of radiation safety and quality assurance, need for radiation protection, detection and measurement of radiation, regulatory agencies and regulations, personnel monitoring and practical radiation protection. Types and storage of brachytherapy sources, use and care of applicators, leak testing and surveys and accident procedures. Laboratory exercises included. Offered at the University of Michigan Health System in Ann Arbor.

433. Clinical Dosimetry. RTT 431; Admission to professional program in radiation therapy. (2).

Basic concepts of clinical dosimetry including use of isodose charts, treatment planning, field defining apparatus and wedges; different methods of dosimetric calculations. Emphasis on conformal therapy, MLC dosimetry, three-dimensional treatment planning. *Offered* at the University of Michigan Health System in Ann Arbor.

444. Clinical Radiation Oncology. RTT 341, Admission to professional program in radiation therapy. (3).

Overview of radiation oncology and its role in medicine as compared with surgery and chemotherapy. Discussion of tumors including locations etiology, detection, staging, grading and treatment; oncologic emergencies. Offered at the University of Michigan Health System in Ann Arbor.



School of Management

SCHOOL OF MANAGEMENT

3139 William S. White Building

(810) 762-3160 Fax: (810) 762-3282

Website: http://www.flint.umich.edu/departments/som

Dean: I. Douglas Moon

Special Assistant to the Dean for Academic Programs: Yener

Area Coordinators: C. Peethambaran Kartha, Operations Management, Quantitative Studies, Marketing, International Business, Organizational Behavior/Human Resource Management and Strategy; Mark Perry, Accounting, Finance, Business Economics, Management Information Systems, **Business & Society**

Director of Global Alliances and Executive Education:

Madhukar Angur

Business Administrator: Dennis Fattaleh Major Gifts Officer: Nicole Borcherding

Coordinator of Educational Development and Student Services:

Doritta McDaniel

Executive Secretary to the Dean: Katie Tesmer MBA Program Director: D. Nicol Taylor-Vargo

MBA Program Administrative Coordinator: Jean Corey

BBA Program Manager: Lisa Myers

BBA Program Student Counselor: Brenda Harrison

Support Staff: Kendra Atwell, Marcia Campbell, Dominic Fusero, Sharon Seames

Professors: Madhukar Angur, C. Peethambaran Kartha, Vahid Lotfi, Seyed Mehdian, I. Douglas Moon, Keith Moreland, Fred E. Williams; Associate Professors: Clement Chen, Yener Kandogan, Denise Luethge, Mark Perry, Fataneh Taghaboni-Dutta, Betty A. Velthouse; Assistant Professors: Avinash Arya, Brian Blume, Thomas Hemphill, Weiqi Li, Feisal Murshed, Jacob Peng, Michael Stouder; Adjunct Faculty: Peter Bush, Srinivas Chakravathy, Francine Cullari, Robert Heckman, Norman Irish, Pamela Kalmar, Theresa Kraft, Daniel Lake, Chris Lezovich, Rodney McGraw, James Murdock, Morys Perry, Douglas Philpott, Pam Royston, Dale Tuttle, Jeffrey Williams

Professors Emeritus: Dennis F. Ellis, Walker E. Fesmire, Richard W. Fortner

Mission of the School

As part of the internationally recognized University of Michigan system, our mission is to provide high-quality management education to prepare students for intellectual growth, productive careers and professional development. We deliver programs to diverse groups of graduate and undergraduate students primarily in Michigan and the surrounding region using a variety of learning/teaching approaches that focus on skills, abilities, technology and knowledge vital to organizations. We will also expand these programs to reach out to the national and international colmunity in order to link our students and faculty to the global marketplace. We are committed to excellence in teaching, learning, intellectual contributions and creative endeavors. We use our professional skills to provide service to the university, professional organizations, alumni, and the community as we engage them to enrich our intellectual pursuits and instructional activities.

The School of Management is an AACSB-accredited, professional school offering programs leading to the Bachelor of Business Administration (BBA) degree and the Master of Business Administration (MBA) degree. (The address of this accrediting body is: AACSB INTERNATIONAL, The Association to Advance Collegiate Schools of Business, 777 Harbour Island Blvd., Suite 750, Tampa, Florida, 33602-5730, http://www.AACSB.edu.) Established as a separate school in 1975, the School of Management has faculty members with extensive experience in working with business and government and in teaching management programs.

Preparation for management careers requires a broadlybased, balanced liberal education. University of Michigan-Flint programs emphasize an understanding of economic, social, political and cultural environments, coupled with the acquisition of requisite problem solving, decision making, and leadership Management curricula strive for balance among knowledge, skills, and abilities applicable in the short term and those required for long-term personal and professional growth.

Our Bachelor of Business Administration (BBA) program prepares students for careers in management, accounting, finance, marketing, human resource management, operations management and public administration, and for graduate studies in management, accounting, finance, marketing, law, or related fields. The Master of Business Administration (MBA) program is designed for individuals who show high promise as managers. Structured to offer valuable support for its students' next ten years in management, the MBA program provides a solid background for higher levels of responsibility. For further information on the MBA program, see the *Graduate Study* section of this *Catalog*.

Requirements for Admission

Students may declare a business major and be admitted to the School of Management upon admission to the University. Requirements to complete the BBA program are those in effect at the time of admission to the School of Management.

Admission to the MBA Program

Admission to the MBA program is based on a review of the applicant's job experience, as indicated by a resume; a bachelor's degree from an accredited college or university as indicated by transcripts; scores on the Graduate Management Admission Test (GMAT); personal statement; and letters of recommendation. A complete description of the MBA program, including admissions requirements, is presented under the Master of Business Administration Program in this Catalog. Contact the MBA Office for additional information.

Academic Advisement

The advising system is based on the premise that students are responsible for maintaining and recording their own progress. However, working closely with our advising staff keeps students on track with regard to prerequisites for later classes, the proper sequence in which to take classes, and which elective courses are most advantageous for your career goals.

The School of Management BBA Office generally is open from 8:00 a.m. to 5:00 p.m. Monday through Friday. Students are encouraged to contact the office for information or appointments.

Part-Time Study

The School of Management provides flexible class scheduling. It is possible to complete the BBA degree requirements on either a full- or part-time basis, with classes scheduled during day and evening hours and through on-line access. Although the sample BBA programs presented in a subsequent section are designed for full-time students, roughly half of all BBA students are part-time participants in the program.

School of Management courses also serve students with no imminent degree objective. Most non-candidate-for-degree (NCFD), also referred to as Life-Long Learning, students hold baccalaureate degrees and pursue management courses to enhance professional skills or prepare for graduate studies.

Academic Regulations

All regulations of the University of Michigan-Flint apply to School of Management students. Students should note these regulations printed in earlier sections of this *Catalog*. Specific rules and regulations adopted by the faculty of the School of Management are presented in the following sections.

Grades and Scholastic Requirements

Grades are assigned by letters, some with + and - suffixes. In computing grade point averages, the following scale of grade equivalents is used by the School of Management undergraduate program:

Letter Grade	Honor Points
A+	4.0
A	4.0
A-	3.7
B+	3.3
В	3.0
B-	2.7
C+	2.3
C	2.0
C-	1.7
D+	1.3
D	1.0
D-	0.7
Е	0.0

Grades of P (pass), and F (fail) do not affect any grade point average. Of these, only the grade of P earns credit toward graduation.

The grade Y indicates "Work in Progress" and is therefore used only for courses designated to extend beyond a single semester. After completion of the work, the Y grade will be removed and replaced by an appropriate grade, or it may also be replaced by an (I) Incomplete.

Cumulative grade point averages are computed by dividing the total number of honor points earned by the total number of credit hours attempted. Three cumulative grade point averages are important to business students. The *first* average includes all courses taken at the University of Michigan-Flint. The *second* average includes all courses offered by the School of Management (those courses listed with a BUS prefix). The *third* average applies to all University of Michigan-Flint courses included in a student's concentration area.

Each of these averages must be maintained at 2.0 or higher for the student to be in good academic standing or to receive a degree.

Any student whose grade point average in any of the three areas falls below 2.0 is referred to the Academic Review Committee of the School of Management. The student is given a warning (placed on academic probation) for the next major semester. If the student's deficient GPA should reach 2.0 or better at the end of this probationary term, the student is removed from

warning status. However, if the deficient GPA should be the same or lower at the end of the probationary term, the student would normally not be allowed to register for the next major semester. (The exception to this rule is if the student's grade point deficiency can be explained by extraordinary circumstances, in which case s/he may petition the Academic Review Committee to be allowed to continue.) If the student's deficient GPA should improve significantly without reaching the minimum 2.0, the student may be placed on warning continued for one additional semester.

A student placed on *warning* or *warning continued* may register for a maximum of nine credit hours for a major semester, and a maximum of six credit hours in spring/summer terms. Students whose deficient GPAs do not improve will be asked to withdraw from the University for at least one major semester. Students who are withdrawn for a major semester must petition the School of Management to be readmitted. If the Committee grants the petition, they are readmitted on *warning* status.

Incomplete Work

A student whose work is incomplete in a minor way at the end of a term, or who is unavoidably absent from the final examination for a reason considered excusable by the instructor, may receive an I (incomplete). Work must be completed and submitted, or the final examination taken, within the six-week period which begins on the last day of examinations for the term in which the incomplete is given.

If a student fails to complete the required work, or if the instructor does not grant the privilege, then the final grade is an E, unless the quantity and quality of all work completed merits a passing grade, as determined by the instructor.

In extenuating circumstances, the Academic Review Committee may grant an extension of time. A student's petition must be endorsed by the instructor and received by the Committee before the expiration of the specified six-week period.

Pass/Fail Option (Credit without Grade)

This provision is used by the School of Management only for BUS 394, Business Internship Experience, and the MBA selected reading courses, MGT 502, 503 and 504. Students may elect a limited number of pass/fail courses as non-business electives without concern for the effect on the cumulative grade point average.

Credit by Examination

The School of Management acknowledges proficiencies obtained outside its regular courses by permitting students to obtain credit by examination for a maximum of three upper-division (300- and 400-level) courses (nine credits). Students who wish to establish such credit should make arrangements through the Associate Dean. If the request is approved, students must register for courses through the Office of the Registrar and pay the regular fees. The examination is given at a time and place agreed upon between students and the Associate Dean. Results are reported within ten working days after the examination.

A grade of C (2.0) or better must be obtained on this examination in order for credit to be earned. The letter grade earned (A, B, C or E) is recorded on the transcript.

Only courses offered by the School of Management in at least one term of the current academic year may be chosen for credit by examination. Credit in management cooperative program courses, and others as decided by the faculty, cannot be earned by examination.

Appeals on Academic Matters

Students who believe they have been unfairly affected by a policy or practice of the School of Management may request review of the matter in question.

Many problems can be resolved by consultation with members of the faculty. This must be the initial step in all problems involving a faculty member. Any problem which is not resolved in this way may be appealed in writing to the Office of the Dean. Student appeals are reviewed by the appropriate area or department Coordinator. If, after review, the issue remains unresolved, it may be appealed to the Dean and the Executive Committee. At this stage of the appeal, two students from the School of Management may be present in the discussion and resolution of the grievance, one designated by the appealing student and one designated by the Executive Committee. The students present do not vote. The decision of the Executive Committee shall be final.

In problem situations involving discrimination or sexual harassment charges, the student should consult with the Affirmative Action Coordinator or the Dean. Formal complaints must be filed with the Affirmative Action Coordinator. In those cases where discrimination or sexual harassment is alleged, findings of the Affirmative Action Coordinator are reported to the Dean and included as evidence to the Executive Committee in its review and rendering of a decision.

The initial step for an undergraduate student who seeks a review of a policy or practice not directly involving a faculty member is to ask (petition) for such a review by the Academic Review Committee; a graduate student should request a review by the Graduate Program Committee. If the issue is not satisfactorily resolved by the appropriate Committee, the student may submit the issue to the Executive Committee by filing a written petition. Appeal to this Committee is the final step in the appeal process for a student who requests a waiver of any School rule or policy.

The student's petition should clearly indicate the request or grievance and provide supporting evidence relevant to the case; a prompt hearing and timely decision will follow. Details and petition forms are available from the BBA Program Office or the MBA Program office.

Recognition of Superior Scholarship

On the basis of the last 58 credits completed, students with grade point averages of 3.6 or higher are recommended for the degree *with high distinction*, and students with grade point averages of 3.2 or higher are recommended for the degree *with distinction*. In computing averages, only courses taken at the University of Michigan-Flint are included, and only completed terms are counted.

Each year the faculty chooses outstanding students for special awards and academic honors provided by several professional organizations, corporate, and individual sponsors.

The School supports two honorary societies, Beta Alpha Psi, and Beta Gamma Sigma. Beta Alpha Psi is a national scholastic and professional fraternity for Financial Information students and professionals. The primary objective of the fraternity is to encourage and give recognition to scholastic and professional excellence in the business information field. This includes promoting the study and practice of accounting, finance and information systems; providing opportunities for self-development, service and association among members and practicing professionals, and encouraging a sense of ethical, social, and public responsibility.

Beta Gamma Sigma is the honor society serving business programs accredited by AACSB International - The Association to Advance Collegiate Schools of Business. Membership in Beta Gamma Sigma is the highest recognition a business student anywhere in the world can receive in a business program accredited by AACSB International.

Cooperative Education Program

Cooperative education is designed to integrate classroom instruction, career goals, and off-campus work experience. Students are employed on either a part-time or full-time basis in a supervised work situation in business, industry, or social and governmental agencies.

The School of Management offers several courses which provide academic credit for successful completion of appropriate work experience, and which include evaluation by the employer and the Cooperative Education and Career Center staff, participation in scheduled seminars and meetings with the staff and faculty members, and accomplishment of learning objectives.

Students who have participated in cooperative education experiences find them to be rewarding in terms of experience and skills gained. Students are exposed to the realities of the workplace, complete job assignments, and learn to manage time and work demands for both classroom studies and employment. Cooperative education fulfills one of the key attributes employers seek in students - career related experience prior to graduation. Students may begin to explore co-op opportunities as early as the sophomore year. It is extremely important to start the application process prior to acquiring 55 credits hours. In order to enroll in the program, students must consult with the program staff and meet the following requirements:

- A. Completion of 55 credits prior to job placement.
- B. A minimum 2.50 grade point average.

Filing of an application is a commitment to enroll in specified courses for academic credit upon job placement. For further information, see *Cooperative Education Program* in the *Experiential Education* section of this *Catalog*.

Business Internship Program

The Business Internship Program (BIP) provides essential cooperative linkages between the business and education communities. Established as a pilot program in winter 2003, the BIP largely parallels the Cooperative Education Program with two added enhancements: (1) Placements are primarily arranged in direct consultations between School of Management faculty and staff and the employing organization, and (2) BIP internship activities are directly supervised by SOM faculty and staff in order to earn appropriate academic credit. The Business Internship Program offers participants many advantages, including:

- Professional business experience before graduation
- College credit based on academically-relevant work experience
- Opportunity to test out a career choice
- Professional supervised work experience
- Job training in a business setting
- · Professional contacts in the field of business

In order to enroll in the program, students must consult with the School of Management Internship Staff and meet the following criteria:

- A. Admission into the Bachelor of Business Administration Program.
- B. Good academic standing (not on academic probation).

- C. Minimum 2.50 grade point average.
- Filing of an application and enrollment in BUS 394, Business Internship Experience, upon job placement.

Student Organizations

Students in the School of Management are represented by student-run organizations which serve the specialized needs of persons interested in business and management: the Business Club, the Beta Alpha Psi, the Society of Human Resources Management, and the National Association of Black Accountants. Further information is available from officers of the clubs or from the BBA Program Office.

Student Representation on School of Management Committees

Juniors and seniors currently registered for at least nine credits of course work and in good academic standing in the School of Management are eligible for service as student members on the Academic Review, Undergraduate Program, and Spring and Summer Interim committees. Further information is available from the BBA Program Office.

Undergraduate Programs in Business

3180 William S. White Building

(810) 762-3307

Website: http://www.umflint.edu/departments/som/

Dean: I. Douglas Moon

Special Assistant to the Dean for Academic Programs: Yener

Kandogan

BBA Program Manager: Lisa Myers

BBA Academic Counselor: Brenda Harrison

The School of Management offers six concentration areas and an Honors Program, all leading to the Bachelor of Business Administration degree: General Business, Accounting, Finance, Marketing, Operations Management, and Organizational Behavior & Human Resources Management. The School also offers three minors: General Business, Marketing, and Organizational Behavior & Human Resources Management.

Program Assessment

The School participates in the University-wide effort to assess its academic programs. Information on assessment plans, including goals, methods and outcomes is available at http://assessment.umflint.edu.

General Program in Business (Bachelor of Business Administration)

Requirements. At least 120 credits, as follows:

- A. Minimum grade point averages of 2.0 in the concentration area, 2.0 in all courses taken in the School of Management, and 2.0 in college work overall.
- B. BUS 110, 181, 201, 202, 211, 250, 313, 330, 341, 361, 371, 381, 385, 489.

- C. Additional requirements for a concentration in general business, accounting, finance, marketing, operations management, organizational behavior and human resources management, or the School of Management honors program, as detailed below.
- D. At least 48 credits in business administration, including at least 36 credits in upper-division courses and at least 30 credits completed at the University of Michigan-Flint.
- E. A two-course, non-business focus elective from any one of the following topic areas: economics, communications, computer science, education, ethics, foreign language, history, international studies, or sociology/anthropology. Lists of approved courses can be obtained from the BBA Program Office.
- F. Completion of at least 60 credits in courses other than business, including the general education requirements and specific course requirements in English, mathematics and economics (COM/ENG 338; MTH 118; ECN 201, 202).
- G. Completion of at least 45 credits while enrolled at the University of Michigan-Flint (in residence), including the last 30 credits (senior year enrollment).

Concentration in General Business

Objectives. The General Business concentration provides students with a broad business background and great flexibility to choose their course of study.

All faculty members of the School of Management are available to consult with students wishing to pursue professional careers in business.

Requirements. In addition to the requirements for the BBA degree specified above, the concentration in general business requires 18 additional credits in business, including at least 15 in courses numbered 300 or higher.

Concentration in Accounting

Objectives. The Accounting Concentration prepares students for professional careers in public, managerial, and governmental accounting, such as managerial, cost, tax or government accountant, internal or independent auditor. Graduates of the program are also prepared for advanced study in accounting, management, law, or related fields.

The curriculum emphasizes developing an understanding of the social, ethical, economic, legal, and regulatory environments that affect accounting. Development of problem solving, decision making, communication and leadership skills, in addition to business and accounting knowledge, are emphasized.

Accounting faculty members are available to consult with students wishing to pursue careers in any of the above-mentioned areas.

Requirements. In addition to the requirements for the BBA degree specified above, 15-16 additional credits as follows:

- A. BUS 320, 321, 322, 421.
- B. BUS 324, 325; or one from: BUS 323, 394*, 422, 424, 425, 467. Additional elections are encouraged. *Internship should be in the area of accounting.

To become a Certified Public Accountant (CPA) in the State

of Michigan and most other US states, students are required to have completed 150 hours of college credit. Students planning to become CPAs in Michigan should consider one of the following paths:

- Completion of 150 credit hours at the undergraduate level. Coursework must include BUS 320, 321, 322, 323, 324, 421, 424 and two from BUS 422, 425, 467. BUS 425 is also strongly recommended.
- Completion of the School of Management's Master of Business Administration (MBA) with an accounting concentration. This program is particularly appropriate for students wishing to become a CPA in a state that requires 150 hours of university education to take the CPA exam, including Michigan. For students who successfully complete the BBA program and receive a grades of B (3.0) or better in undergraduate courses BUS 201, 202, 211, 313, 341, and ECN 201, 202, MBA foundation course requirements are waived and the MBA with an accounting concentration requires only 33 additional credits for completion. For further information, see the Graduate Study/School of Management section of this *Catalog*.

The student who wishes to pursue a CPA license in Michigan under option A or B above should see an accounting faculty member by early in the junior year to see which path best fits needs. In some cases, students with a BBA degree with an accounting concentration may be able to take the CPA exam before the completion of all required courses, but counsel from an accounting faculty member, or State Board of Accountancy, should be sought before doing so. The student who wishes to take the CPA exam, and become a CPA in another state must comply with the requirements for education and CPA certification in that state.

Many professional certifications are available in accounting and, more generally, in financial services. Examples include, Certified Managerial Accountant (CMA), Certified Internal Auditor (CIA), Certified Fraud Examiner (CFE), Certified Information Systems Auditor (CISA), Certified Financial Planner (CFP), Certified Government Financial Manager (CGFM), and Certified Bank Auditor (CBA). Criteria for these certifications are readily available on the internet, and most of them require fewer accounting credits than the CPA license. However, the CPA license is still seen by many as the top accounting designation attainable. Students are encouraged to consult with accounting faculty members regarding certification opportunities.

Concentration in Finance

Objectives. The Finance concentration prepares students for professional careers in the fields of corporate finance, banking and financial institutions, and investment.

The curriculum emphasizes developing an understanding of these three areas of finance through courses on forecasting, portfolio theory and security analysis, options and futures markets, accounting, money and banking, management of working capital, and management of financial institutions.

Finance faculty members are available to consult with students wishing to pursue careers in any of the above-mentioned areas.

Requirements. In addition to the requirements for the BBA degree specified above, 18 additional credits as follows:

- A. BUS 363, 461, 466.
- B. Three from: BUS 316, 321, 322, 365, 369, 394*, 462, 463, 467, 468; ECN 314: MTH 378. *Internship should be in the area of finance.

Concentration in Marketing

Objectives. The Marketing Concentration prepares students for professional careers in marketing such as advertising, sales, consumer research, and new product development in commercial and other organizations.

The curriculum emphasizes the study of those aspects of the firm that are involved with the attributes of the product, its price, the place it will be distributed, and how it will be promoted, known as the "Four P's".

Marketing faculty members are available to consult with students wishing to pursue careers in any of the above-mentioned areas.

Requirements. In addition to the requirements for the BBA degree specified above, 18 additional credits as follows:

- A. BUS 332, 338, 438.
- B. Three from: BUS 316, 336, 394*, 413, 430, 432, 435, 443. *Internship should be in the area of marketing.

Concentration in Operations Management

Objectives. The Operations Management Concentration prepares students for professional careers in operations such as production manager, management analyst and purchasing manager in manufacturing and service organizations. The study of operations management focuses on management of systems and processes that create goods and/or provide services.

The curriculum emphasizes the study of management of the direct resources required to produce the goods and services provided by an organization, including people, plants, parts, processes, planning and control systems.

Operations management faculty members are available to consult with students wishing to pursue careers in any of the above-mentioned areas.

Requirements. In addition to the requirements for the BBA degree specified above, 15 additional credits as follows:

- A. BUS 316 or 413 or 473; BUS 373 or 472.
- B. Three additional from: BUS 316, 347, 359, 373, 394*, 413, 432, 435, 443, 461, 467, 472, 473.
 - *Internship should be in the area of operations management.

Concentration in Organizational Behavior and Human **Resources Management**

Objectives. The Organizational Behavior & Human Resources Management concentration prepares students for professional careers in the administration and management of workforces in all types of organizations.

The curriculum emphasizes leadership, communication, interpersonal and team-building skills and the study of organization dynamics and labor relations.

Organizational behavior & human resources management faculty members are available to consult with students wishing to pursue careers in any of the above-mentioned areas.

Requirements. In addition to the requirements for the BBA degree specified above, 15 additional credits as follows:

A. BUS 344, 443, 445, 449.

B. One from: BUS 346, 347, 359, 394*.

*Internship should be in the area of organizational behavior & human resources management.

Sample Calendars

Students should carefully plan their programs of study to meet the general education requirements and prerequisites for advanced courses. Students are strongly encouraged to see BBA Program academic counselors as early as possible for a curriculum plan designed with career goals in mind. Sample calendars meeting the pre-business and the general business, accounting, finance, marketing, operations management, and organizational behavior & human resources management requirements follow.

Freshman/Sophomore Years

In the freshman/sophomore curriculum, courses that fulfill general education requirements such as principles of psychology, sociology, American government, public speaking, and logic are recommended. A good preparation in mathematics and word processing, spreadsheet and presentation computer software is needed for many business courses.

Freshman Year

Fall Semester

English composition; mathematics (MTH 111); psychology or sociology (psychology required for marketing concentration); BUS 110; CSC 121.

Winter Semester

English composition; mathematics (MTH 118); BUS 181; humanities; fine arts.

Sophomore Year

Fall Semester

BUS 201, 250; ECN 201; humanities; natural science.

Winter Semester

BUS 202, 211; ECN 202; humanities; natural science.

Junior/Senior Years

The junior/senior curriculum provides two years of professional education in the chosen concentration.

General Business Curriculum

Junior Year

Fall Semester

BUS 313, 330, 341, 381.

Winter Semester

BUS 361, 371, 385; ENG 338.

Senior Vear

Fall Semester

BUS 489; non-business focus elective; two business electives.

Winter Semester

Three business electives; non-business focus elective.

Accounting Curriculum

Junior Year

Fall Semester

BUS 313, 320, 321, 341.

Winter Semester

BUS 322, 361, 371, 381.

Senior Year

Fall Semester

BUS 330, 385, 421, non-business focus elective.

Winter Semester

BUS 489, accounting elective; ENG 338; one non-business focus elective course.

*Students planning to take the CPA examination are advised to take additional accounting coures, including BUS 425.

Finance Curriculum

Junior Year

Fall Semester

BUS 313, 341, 361; ENG 338.

Winter Semester

BUS 330, 363, 371; non-business focus elective.

Senior Year

Fall Semester

BUS 381, 385, 461; finance elective.

Winter Semester

BUS 466, 489; two finance elective; non-business focus elective.

Marketing Curriculum

Junior Year

Fall Semester

BUS 313, 330, 341; ENG 338.

Winter Semester

BUS 332, 361, 371; non-business focus elective.

Senior Year

Fall Semester

BUS 338 (has psychology prerequisite), 381, 385; marketing elective

Winter Semester

BUS 438, 489; non-business focus elective; two marketing electives.

Operations Management Curriculum

Junior Year

Fall Semester

BUS 313, 330, 341; ENG 338.

Winter Semester

BUS 316, 361; non-business focus elective; operations management elective.

Senior Year

Fall Semester

BUS 371, 381, 385; operations management elective.

Winter Semester

BUS 373, 489; operations management elective; non-business focus elective.

Organizational Behavior and Human Resources Management Curriculum

Junior Year

Fall Semester BUS 313, 330, 341; ENG 338. Winter Semester BUS 361, 371, 381; non-business focus elective.

Senior Year

Fall Semester BUS 344, 385, 443; non-business focus elective. Winter Semester BUS 445, 449, 489; OB/HRM elective.

Honors Program in Business (Bachelor of Business Administration)

The Honors Program of the School of Management offers students of superior ability and demonstrated achievement an opportunity to broaden and enrich their management education. Supplementing and paralleling the regular curriculum, it encourages greater depth and breadth in regular courses and offers independent study and research.

Admission

Admission to the Honors Program is by invitation only. A student may be invited to enter the program if any of the following applies:

- A. The student has participated in the Freshman/Sophomore Honors Program.
- B. The student has participated in an Honors Program at another university.
- C. The student is eligible to join the Junior/Senior Honors Program which parallels the second half of the Honors Scholar Program. For further information, see the Honors Advisor in the School of Management.

Selection

Admission is selective. Selection is made on the basis of performance in the Freshman/Sophomore Honors Program. A student may also be admitted after establishing a record of superior performance in the regular program.

Advising

An honors advisor and an advisor from the BBA program assist the student in planning a challenging and coherent academic program. This program is tailored to the needs and interests of the student.

Curriculum

The School of Management Honors Program builds upon the Freshman/Sophomore University Honors Program but offers greater flexibility and more emphasis on independent study. It includes an opportunity for off-campus study and an honors thesis. Students who complete the program are named Honors Program Scholars, and this is recorded on their transcripts and diplomas.

The honors curriculum consists of all regularly required courses in the chosen concentration and the following:

Junior Year

- A. Junior Honors Seminar (3 credits). In-depth study of philosophical, ethical and/or research issues in business and management. Students may meet this requirement by successfully completing any junior year course or through independent study. An honors course requires regular registration. In addition to meeting the specified course requirements, the honors student plans with the instructor and carries out a study project involving extra work during the semester. Suggested courses include BUS 316 and 359.
- B. An independent research course. Enrollment for three credits in BUS 391 or BUS 494 under the Senior Research Thesis advisor, to allow the student to plan research for the Senior Research Thesis. During the semester, the student conducts an in-depth literature search and prepares a detailed research plan. A thesis proposal and a budget of expenses to be incurred are prepared for review by the Honors Program Council of the University of Michigan-Flint. If approved, it becomes the plan of action for the Senior Research Thesis.

Senior Year

- A. Off-Campus Research Project. During the summer between the junior and senior years or during the academic year the student has an opportunity for off-campus research. The Senior Research Thesis serves as the focus during the offcampus study period. This period may include study at another institution here or abroad, employment in the intended profession, or independent study. The student ordinarily enrolls for four credits in BUS 495 but may earn additional credits through transfer or independent study.
- Senior Research Thesis. On return to the University of Michigan-Flint, the student completes the writing of the thesis under BUS 496. The criterion for the thesis is that it be of publishable quality. The Honors Scholar presents the completed thesis to a faculty review group, which includes the advisor, a member of the Honors Council, and a member of the School of Management faculty, or where appropriate, an outside department. Each member of the review group has equal responsibility for the evaluation.
- C. Senior Honors Seminar. HON 498 (3 credits) provides students with the opportunity to relate their area of study to other disciplines. The seminar involves reading, discussion, presentations by faculty and students, and oral and written reports.

Honors Electives

The Honors Scholar normally completes 15 credits of honors electives during the four years of college study. At least nine credits must be taken in the freshman and sophomore years. Remaining honors electives are taken during the junior and senior years.

Any course can be an honors elective. The student arranges with the course instructor to provide additional assignments that broaden and deepen the student's knowledge of the subject area. It is expected that such additional work will go well beyond normal course requirements, typically requiring 15 hours of outside work.

Eight credits of honors electives must be outside the student's field of concentration but not necessarily outside the School of Management. Students should consider courses in the social sciences, mathematics, and computer science areas which underlie the management sciences.

Honors Scholars must demonstrate, by examination, a reading proficiency in a foreign language.

Honors Program Scholarships

All students in good standing in the program receive financial aid.

Minors for Management Students

Students in the School of Management may elect any minor outside the concentration area offered by any academic unit of the University of Michigan-Flint.

SOM Minors for CAS Students

With the permission of the major department, any student enrolled in a College of Arts and Sciences program may complete one of the following minors.

Minor in General Business

Prerequisites. ECN 201, 202; a course in statistics (e.g., BUS 211).

Requirements. Twenty-four credits as follows:

A. BUS 201, 202, 250, 313, 330, 341, 361, 371.

B. Grade point average of 2.0 or higher in the minor.

Minor in Marketing

Prerequisite. ECN 201.

Requirements. Twenty-one credits as follows:

- A. BUS 201, 330, 341; a course in statistics (e.g., BUS 211).
- B. Three from: BUS 332, 336, 338, 430, 432, 435.
- C. Grade point average of 2.0 or higher in the minor.

Minor in Organizational Behavior and Human Resources Management

Prerequisite. A course in statistics (e.g., BUS 211).

Requirements. Eighteen credits for students outside SOM, 15 credits for SOM students as follows:

- A. BUS 201, 341, 344, 445, 449.
- B. One from: BUS 346, 347, 443.
- C. Grade point average of 2.0 or higher in the minor.

If the minor in OB/HRM is combined with a BBA concentration, only BUS 341 may be credited toward both the concentration and the minor.

Courses in Business (BUS)

110. (105). Business Concepts and Careers. (3).

Comprehensive overview of basic business concepts and business protocol. Foundations of general business managements, human resources management, operations management, marketing, accounting, finance and their interdependent nature. Job search techniques, writing resumes, job interviewing, establishing interpersonal relationships. Introduction to UM-F services including the library, Academic Advising and Career Center, computer labs and services, Recreation Center and Student Services.

181. Fundamentals of Information Systems. CSC 121. (3).

Introduction to basic IS concepts; focus on use, design and management of information technology to support effective decision making. Topics include basic hardware and software concepts, telecommunications, business process, IS development, application tools, use of the Internet, and programming, and social issues around the use of IT. Hands-on approach; assignments drawn from applications in business contexts.

201. Principles of Financial Accounting. MTH 111; at least sophomore standing. (3).

Introduction to the utilization of an accounting system to generate financial statements. Emphasis on interpreting and using the information reported in the financial statements to understand and evaluate the financial results and position of an entity. Foundation course for students planning to do further work in accounting; survey course for others.

202. Principles of Managerial Accounting. BUS 201; at least sophomore standing. (3).

Analysis of accounting information used internally by nonprofit as well as profit oriented management to aid in planning, controlling, and decision making.

211. Business Statistics. CSC 121; MTH 118 or 121. (3).

Elementary principles and techniques for analyzing numerical data. Central tendency, dispersion, correlation, inference from random samples, and graphical presentations. Laboratory problems based on business and economic data. Students in this course may not also receive credit for a course in general statistics.

250. Contemporary Legal Issues for Business. (3).

Legal environment of business and principles of law involved in contracts and agency.

307. History of Business in America. *At least junior standing.* (3).

Origins and growth of business in the United States. Business activities before the Civil War. Consolidation and the antitrust movement. The depression of 1929, the New Deal, World War II, and the Cold War. *Also listed as HIS 307*.

313. Introduction to Management Science. *BUS 181, 211 and their prerequisites.* (3).

Quantitative approaches to management decision making. Decision theory, inventory and production models, linear programming, dual problem, sensitivity analysis, game theory, queuing, simulation, dynamic programming, Markov processes, PERT/CPM. Use of computer packages.

316. Business Conditions Analysis. *BUS* 181, 201, 202, 211 and their prerequisites; *ECN* 201, 202. (3).

Causal factors at work in the cyclical process; time series and index numbers. National and regional data sources.

Techniques of forecasting; applications to business conditions, prices and sales.

320. Cost Accounting. BUS 181, 201, 202 and their prerequisites; at least junior standing. (3).

Collecting, analyzing and controlling cost of manufacturing a product or rendering a service. Particular emphasis on cost accounting systems, allocations, and providing different costs for different purposes in helping shape business strategy.

321. Intermediate Accounting I. BUS 181, 201, 202 and their prerequisites; at least junior standing. (3).

Introduction of accounting theory and focus on problems associated with acquisition, maintenance, depreciation and replacement of assets. Also includes income statement, balance sheet, current assets, investments, plant assets, and natural resources.

322. Intermediate Accounting II. *BUS 321 and its prerequisites.* (3).

Continues with accounting theory and practice. Intangible assets, long-term investments, long-term debt, stockholders' equity, pension plans, leases, income taxes, changes in financial position, analysis of statements, and current accounting issues are covered.

323. Federal Income Taxation. *BUS 181*, 201, 202, 211 and their prerequisites; at least junior standing. (3).

Basic concepts (applicable to all taxpayers) of tax management, exempt incomes, deductions, cost recovery, tax accounting methods, credits, property transactions, tax research and planning. Introduction to income taxation of corporations.

324. Fundamentals of Governmental and Not-for-Profit Accounting. BUS 181, 201, 202 and their prerequisites; at least junior standing. (2).

Accounting cycle; governmental accounting; budget process; principles of fund accounting; accounting for educational institutions, health care and welfare organizations; use of accounting data.

325. Income Tax Preparation. *BUS 201, 202.* (2).

Preparation to participate in the volunteer income tax assistance (VITA) program. Training in tax return preparation, and interpersonal and computer skills. Preparation of income tax returns.

330. Marketing Management. ECN 201; at least junior standing. (3).

Introduction to marketing from managerial viewpoint. Markets; consumer behavior; product policies; pricing strategy; wholesaling, retailing, and channels of distribution; promotional strategies, personal selling, sales management, advertising, and sales promotion; related topics.

332. Marketing Research. *BUS 181, 211, 330 and their prerequisites. (3).*

Methods of determining organizational requirements for information, and for reducing available data to develop needed additional information. Use of computer to perform hands-on data analysis required.

336. Advertising Management. BUS 338 and its prerequisites. (3).

Management of advertising, media, preparation of advertisements, use of research, campaigns, budgets, advertising agencies.

338. Consumer Behavior. BUS 181, 211; prior or concurrent election of BUS 330; a course in psychology. (3).

Study of macro and micro consumer behavior. Emphasis on basic determinants of how and why consumers purchase needed products and services. Analysis of current consumer movement and of consumer buying problems.

341. Human Behavior in Organizations. A course in sociology or psychology; at least junior standing. (3).

Application of basic behavioral science concepts and research to management of organizations. Emphasis on determinants and consequences of individual behavior, interpersonal communications, group and intergroup behavior, as they influence effectiveness of management.

344. Human Resource Management. BUS 181, 211 and their prerequisites; prior or concurrent election of BUS 341; ECN 201, 202. (3).

Organization, training, motivation, and direction of employees. Designed to be helpful to any student who may be called upon to supervise work of others.

346. Contemporary Labor-Management Issues. BUS 181, 211 and their prerequisites; prior or concurrent election of BUS 341; ECN 201, 202. (3).

Economic, social and legal problems in negotiating the collective bargaining agreement. Detailed consideration of issues of collective bargaining and administration of the contract through grievance procedures and arbitration. Basic exploration of compensation planning and administration.

347. Managing Projects and Teams. BUS 181, 341 and their prerequisites; at least junior standing. (3)

Examination of the creation, management, and impact of teams in the contemporary work world. Different types of teams are discussed with an emphasis on problem-solving teams (e.g., process improvement teams, re-engineering teams, special project teams). Addresses issues of selection, role assignment, team facilitation, group dynamics, conflict and empowerment. Project management issues such as planning and controlling large-scale projects are also addressed.

358. Business and Government. ECN 201, 202; at least junior standing. (3).

Relationships between business and government. Maintaining competition by antitrust laws, policies toward labor and agriculture, public regulation, public ownership, protecting consumers and investors, conservation, and moderating competition.

359. Business and Society. BUS 250; ECN 201, 202. (3).

Business-related problems in such areas as ethics, social responsibilities, pollution, crime, urban crisis, discrimination, education and politics.

361. Financial Management. BUS 181, 201, 202, 211 and their prerequisites; ECN 201, 202; MTH 118 or 121. (3).

Basic presentation of instruments of managerial finance, legal nature of the corporation, technical features of stocks and bonds, and principles of capitalization. Analysis of policy problems involved in financing business corporations, management of working capital, surplus and dividend determination, business combinations, and business reorganizations. International aspects.

363. Investments. BUS 361 and its prerequisites. (3).

Types and distinguishing features of securities available to today's investor. Overview of the institutional framework which affects security trading. Concepts of efficient and inefficient market theories. Computer application of valuation and rates of return.

365. Portfolio Theory and Security Analysis. *BUS 313, 363 and their prerequisites.* (3).

Emphasis on linear programming as a tool for constructing optimal portfolios and the Capital Asset Pricing Model for analyzing price changes of securities. Review of empirical literature and applications; examination of computer applications.

369. Personal Finance. *BUS* 181, 201, 202, 211 and their prerequisites; *ECN* 201, 202. (3).

Major financial decisions faced by individuals. Housing and home financing, insurance, retirement, and death planning. Introduction to various personal computer software packages.

371. Operations Management. *BUS 313 and its prerequisites.* (3).

Management of operations, including design of product or service; process selection; facility location and layout; job design and work measurement; learning models; forecasting, scheduling, inventory and quality control; project management; operating information systems. Case studies.

373. Operations Management for Service. *BUS 313 and its prerequisites. (3).*

Management of service operations; forecasting, routing, service facility design and layout; service quality; queuing theory; capacity planning; data envelopment analysis; yield management. Case studies used to enhance the real world application of the methodologies discussed.

381. Management Information Systems. BUS 181, or CIS 151, 152; and its prerequisites; at least junior standing. (3).

Introduction to use of computers and computer-based information systems in operation, management, and decision making functions. Management information systems, model-based decision support systems, fundamentals of computer equipment and software, data structure and data bases, systems analysis and design, data communication systems. Extensive use of cases.

385. International Business. *BUS 181*, 201, 202, 250 and their prerequisites; *ECN 201*, 202; *MTH 118*. (3).

Exploration of the opportunities, difficulties, and risks inherent in

conducting international business, which differs from domestic business due to cultural differences, political conflicts with foreign governments, foreign governmental restrictions on trade and investment, foreign economic and market conditions, foreign exchange, marketing issues, and strategic considerations. Trade and foreign investment patterns around the world; regional and cooperative agreements among countries that may affect a firm's ability to conduct business in particular regions of the world.

391. Directed Research in Business. At least junior standing; consent of instructor. (1-3).

Independent study elected in management science, accounting, marketing, organizational behavior or industrial relations, business environment, finance, operations management, international business, or general business administration. Research project, jointly designed by the student and an appropriate instructor and submitted in writing; approval required before registration. Supervised by the instructor until completion. Only larger projects are approved for two or three hours of credit. A maximum of three hours of directed research in business can be used to meet graduation requirements. Graded ABCDE/Y.

392. Management Cooperative Experience. At least junior standing. (3).

Job assignment, planned by student, supervisor, and Coordinator of Cooperative Programs. Duties involved should relate to student's academic program and should increase in responsibility and difficulty during period of the assignment.

393. Advanced Management Cooperative Experience. *At least junior standing.* (3).

Continuation of work experience, with evaluation of assignment planned and completed as for BUS 392.

394. Business Internship Experience. At least junior standing; consent of instructor. (3).

Business Internship Program job assignment, planned by student, supervisor, and Coordinator, Business Internship Program. Duties will relate to student's academic program. May be repeated once for credit. A maximum of six semester hours of BUS 392, 393, and 394 may be applied toward BBA degree requirements. Graded Pass/Fail/Y.

413. Statistical Methods and Business Applications. *BUS 313 and its prerequisites; ECN 201, 202. (3).*

General multivariate techniques such as multiple regression, multivariate analysis of variance, factor analysis, discriminant analysis, principal components; business research methods such as sample survey, questionnaire construction and analysis. May include time series forecasting and/or statistical quality control.

421. Accounting Information Systems. BUS 201, 202, 381 and their prerequisites. (3).

Technology and methods underlying financial record keeping systems; flow charting of financial and cost data movements; attention to accounting applications of computing systems and computer-assisted decision models. Designing and implementing databases for financial and managerial decision-making purposes. This course includes extensive use of cases.

422. Federal Income Taxation-Advanced Topics. *BUS 323 and its prerequisites.* (3).

Advanced federal income tax concepts, related to corporations, shareholders, "S" corporations, partnerships, trusts and estates.

424. Auditing. BUS 211, 320, and their prerequisites; prior or concurrent election of BUS 322, 421; senior standing. (3).

Financial and operational auditing theory, objectives, and procedures required for careers in public, managerial, and governmental accounting. Auditing procedures and standards, internal control, statistical sampling, audit of electronic data processing systems, audit reports, professional ethics, and auditor's legal and societal environment.

425. Advanced Accounting. BUS 322 and its prerequisites. (3).

Accounting for business combinations and consolidated statements, partnerships, installment sales, segment and interim reporting, and other topics.

430. Services Marketing. *BUS* 181, 211, 330 and their prerequisites; *ECN* 201, 202. (3).

Strategies involved in marketing of services. External environmental and internal control factors as applied to professional, financial, educational, entertainment, health care, governmental, religious, non-profit, and other organizations, institutions and agencies.

432. International Marketing. *BUS 181*, 201, 202, 211, 330 and their prerequisites; *ECN 201*, 202. (3).

International marketing and its role in multinational firms. Appraising international marketing opportunity; product, price, promotion and distribution policies; analysis of the foreign marketing environment.

435. Product Management. *BUS 332 and its prerequisites; ECN 201, 202. (3).*

Nature of new product innovations and their importance to the firm. Development processes with organizational methods for achieving new product success.

438. Marketing Applications. *BUS 332, 338 and their prerequisites; a marketing elective; ECN 202. (3).*

Application of marketing theory to contemporary marketing problems. Project approach utilized to develop student's ability to integrate all major areas of marketing. Students assigned to groups that work with local organizations with specific marketing concerns.

443. Developing Communication Skills. *COM/ENG 338; senior standing.* (3).

Experiential focus on developing skills necessary for effective management. Self-presentation, interpersonal influence, counseling, feedback and performance appraisal, process observation, bargaining and negotiating.

445. Human Resource Development. *BUS 341, 344 and their prerequisites; senior standing. (3).*

Approaches and practices to select, train and compensate employees to ensure organizational effectiveness and employee satisfaction. Topics include recruitment methods and tools including measurement of validity and reliability, staffing tools such as the employment interview and training systems (e.g., needs analysis, development, and evaluation) as well as compensation systems that attract, retain, and motivate good employees. Lecture, discussion and project management format.

449. Issues in Leadership and Change Management. *BUS 344*, *443 and their prerequisites; senior standing.* (3).

Examination of contemporary developments and trends (hot topics) that affect organizational behavior and human resource management and the exploration of how to effect organization-wide change. Projects include in-depth interview with practicing human resource manager, in-basket exercise, challenge team building. Capstone course for the OB/HRM concentration.

461. Financial Management Application and Strategy. *BUS 361 and its prerequisites.* (3).

Linking facts, theory, and systematic implementation through study of actual decision situations, financial problems, and business scenarios. Stress on working capital planning and management, capital structure analysis and planning, capital budgeting, and episodic financial decision; computer solutions.

462. Management of Working Capital. *BUS 361 and its prerequisites.* (3).

Basic processes, principles, tools and concepts of working capital management. Cash management, inventory management, financial forecasting, financial ratios in predicting bankruptcy, interest rate risk, and foreign exchange risk; accounting for each topic and applications of quantitative techniques.

463. Financial Engineering and Risk Management. *BUS 363 and its prerequisites.* (3).

History, theory, institutional structure, and contribution to the economy of options and futures markets. Roles of arbitrage, hedging and speculation as tools in routine operations of domestic and multinational corporations.

466. International Finance. BUS 361 and its prerequisites. (3).

Balance of payments, history of international monetary system, exchange rate determination, foreign exchange exposure, hedging strategies and international capital markets. Cost of capital, capital budgeting, capitalization policies, and techniques for dealing with exchange rate exposure and working capital issues.

467. Financial Statement Analysis. BUS 361 and its prerequisites. (3).

For accounting and finance students. Uses and interpretation of public accounting statements and economic data from the markets. Use of quantitative methods to analyze, forecast, and examine market reactions to data. Emphasis on real world cases and communication of results through brief written reports and presentations.

468. Management of Financial Institutions. *BUS 361 and its prerequisites.* (3).

Analysis of managerial strategies prudent for banks, credit unions, life and property and casualty insurance companies, investment and finance companies, and pension funds. Liquidity policies and asset-liability management techniques. **472.** Advanced Operations Management. BUS 371 and its prerequisites. (3).

Distribution models, scheduling, inventory control, facility planning, production systems analysis (using computer simulation), flexible manufacturing. Discussion of real-world cases; use of computer software to solve more challenging problems; multiple criteria decision making.

473. Topics in Quality Management. BUS 181, 211 and their prerequisites. (3).

Introduction to various tools and techniques of modern quality management, with emphasis on applications. Management issues, including total quality management, Deming's fourteen points for management effectiveness, international standards, and related issues. Statistical tools such as statistical process control, problem solving strategies for quality improvement, experimental design, and Taguchi methods.

489. Business and Corporate Strategy. *BUS 330, 341, 361, 371, 381, 385 and their prerequisites.* (3).

Integration of an organization's functional areas from the viewpoint of the chief executive officer. Processes of managing and exercising judgment in evaluation and execution of action plans.

495. Honors Thesis I. BUS 181, 201, 202, 211 and their prerequisites; ECN 201, 202. Open only to School of Management Honors Program students. (4).

Credit and grade for BUS 495 is not given until successful completion of BUS 496. Graded ABCDE/Y.

- **496. Honors Thesis II.** *BUS 495 and its prerequisites. Open only to School of Management Honors Program students. (4). Graded ABCDE/Y.*
- **499.** Senior Seminar. BUS 181, 201, 202, 211 and their prerequisites; ECN 201, 202; senior standing; consent of instructor. (3).

Specific topic announced in advance of registration. *Offered at irregular intervals*.

585. Management Theory and Practice. Open only to students in the Physical Therapy program. (2)g.

Introduction to noted theorists in management. Focus on the organization rather than individual patients and families. Individual, small group, and macro issues of organizational life; organizational functions of marketing, budgeting, recruitment, and human resource managing. Contemporary issues facing the health care industry. Course readings from broad management literature; discussions focus and apply theories to the field of physical therapy.

Graduate Program in Business

See the Graduate Studies section of this *Catalog* for information on the Master of Business Administration.



Graduate Programs and Courses

GRADUATE STUDY

The Office of Graduate Programs 251 Frances Willson Thompson Library Phone: (810) 762-3171

Fax: (810) 766-6789 Email: gp@umflint.edu

Web site: graduateprograms.umflint.edu

Associate Provost & Dean: Dr. Vahid Lotfi Administrative Specialist: Mary Deibis Graduate Admissions Director: Brad Maki

Marketing Communications Specialist: Jon Davidson

Student Administration Assistant Intermediate: Erin Carrasco

Secretary Intermediate: Kathy Bloink Coordinator of K-12 Projects: Robert Hahn

The Office of Graduate Programs coordinates graduate programs offered by the University of Michigan-Flint. It is the admissions office for Flint graduate programs and provides the contact between the University of Michigan-Flint and the Horace H. Rackham School of Graduate Studies of the University of Michigan.

The University of Michigan-Flint offers eleven graduate degree programs: the Master of Arts in Social Sciences (MA), the Master of Science in Biology (MS), and the Master of Science in Computer and Information Systems (MS) through the College of Arts and Sciences; the Master of Liberal Studies in American Culture (MLS) and the Master of Public Administration (MPA) through the Horace H. Rackham School of Graduate Studies; the Master of Arts in Education (MA) through the School of Education and Human Services; the Master of Science in Anesthesia (MS), the Master of Science in Health Education (MS), the Doctor of Physical Therapy (DPT), and the Master of Science in Nursing (MSN) through the School of Health Professions and Studies; and the Master of Business Administration (MBA) through the School of Management.

Students who have been admitted into other Rackham programs and are in good standing may register for graduate courses at the University of Michigan-Flint, but are advised to seek assistance as to procedures from their respective campuses.

Information on graduate degree programs offered by the University of Michigan-Flint is available in the Office of Graduate Programs.

Admission

Students who have earned the bachelor's degree at an accredited college or university in the United States, or its equivalent in another country, are considered for admission without regard to sex, color, religion, national origin or ancestry, age, marital status, handicap, or Vietnam-era veteran status. See the appropriate section below for admission requirements specific to the various degree programs.

An applicant who holds a degree from outside the United States that is not the equivalent of a U.S. bachelor's degree may be granted conditional admission to a degree program upon the recommendation of the director of the graduate program and the concurring opinion of the Dean of Graduate Programs. Such an admission decision will be based on a careful evaluation of the applicant's qualifications, acceptable evidence of the institution's competence in the student's principal areas of preparation, and other relevant factors. If

granted conditional admission, the student may be required to complete a number of hours of graduate or upper-level undergraduate qualifying course work.

Application Deadlines

Most graduate programs have specific deadlines for the submission of application materials. Please refer to graduateprograms.umflint.edu for application deadlines. International applicants should apply no later than six months prior the term of intended enrollment.

Application Forms

Application forms are available from the Office of Graduate Programs and are available on line graduateprograms.umflint.edu. Inquiries should be addressed

Office of Graduate Programs University of Michigan-Flint 251 Thompson Library Flint, MI 48502-1950

or prospective students may telephone (810) 762-3171 or email gp@umflint.edu.

Application Fees

The application fee for all graduate programs is \$55. The application fee is non-refundable and does not apply to any other University fee. The fee may be paid by check, money order or credit card. (Payment by credit card is required if submitting an online application.) Applications received without fees will not be evaluated. All fees are subject to change without prior notice.

Graduate Lifelong Learning and Guest Admission

Individuals holding a bachelor's or master's degree from an accredited institution who want to elect graduate courses, those seeking admission to a graduate program but not yet admitted, or graduate students at other colleges and universities who wish to elect a graduate course at UM-Flint are considered graduate Lifelong Learning students.

Applicants must provide proof of bachelor's or master's degree and complete an Application for Graduate Lifelong Learning or Guest Admission to the Office of Graduate Programs each term in which they seek to enroll as graduate Lifelong Learning students. Students must obtain instructor and/or program director approval for each course he/she wishes to elect. Guest students must also submit approval (via a memo) from their advisor in the program in which they are currently enrolled or admitted.

Prerequisites, grading standards, class assignments, and attendance requirements of a course apply to all students in that course, including graduate Lifelong Learning and guest students. Colleges, departments, schools, and programs determine rules of access to their courses and may limit enrollment of graduate Lifelong Learning and guest students in certain courses.

Graduate Lifelong Learning and guest students are not eligible for most sources of financial aid.

Graduate Lifelong Learning and guest students who wish to be admitted to a UM-Flint graduate degree program in the future

must apply for that program using the Graduate Application for Admission in accordance with established application deadlines. Courses taken as a graduate Lifelong Learning student do not guarantee admission to a program.

In general, up to six (6) graduate credit hours elected as a graduate Lifelong Learning student may apply toward a UM-Flint graduate degree. In certain circumstances, some programs may accept up to nine (9) credits. The student must receive admission to a degree program, and the program director must determine that the courses are acceptable.

Graduate Lifelong Learning and guest admission is for one term only. Students who wish to enroll in a future term as a graduate Lifelong Learning or guest student must submit another Application for Graduate Lifelong Learning or Guest Admission.

Graduate Lifelong Learning or guest admission is not applicable for students on an F-1 visa. Current regulations require full-time enrollment in a degree program, which is also non-applicable in this status. Holders of other types of visas may apply using this status.

International Applicants

Individuals from other countries may apply for admission to the University of Michigan-Flint. Applicants are advised to submit a completed application no later than six months prior to the term of intended enrollment. In addition to the application materials required of all applicants, the following documentation must be received before a decision on admission can be made:

- A. Demonstration of English proficiency for applicants whose native lanauge is not English (this includes U.S. citizens and permanent residents whose native language is not English). Official score reports from either the Test of English as a Foreign Language (TOEFL) or the Michigan English Language Assessment Battery (MELAB), the International English Language Testing System (IELTS), or the Examination for the Certificate of Proficiency in English (ECPE) must be submitted to the Office of Graduate Programs. The scores submitted must be official and taken within the last two years.
- B. Official transcripts from post-secondary school(s) (college/university). The Office of Graduate Programs may request that all transcripts (official records) for education completed outside the United States be evaluated by a nationally recognized credential service. Reports must include course-by-course evaluations that provide U.S. educational equivalents and U.S. credit and grade equivalents for each subject studied.
- C. All students seeking an F-1 Visa must submit a certification of financial resources adequate to provide for all expenses while attending the University of Michigan-Flint. An Affidavit of Support must be completed, and returned with all supporting documents.
- D. Copy of current visa. International applicants currently in the U.S. on a visa must submit a copy of their visa. This requirement does not apply to applicants seeking an F-1 visa.

Thesis

Students enrolled in a graduate program for which a thesis is a degree requirement will be charged a \$25.00 thesis fee the

semester the thesis/practicum is elected. Students should contact their academic program for specific thesis guidelines.

Financial Aid

Graduate scholarship/fellowship/grant information may be viewed online at: graduateprograms.umflint.edu. Information is also available under "Financial Aid" in the "General Information" section of this *Catalog*.

Tuition and Fees

Please refer to the following Web site for tuition and fee rates: http://vca.umflint.edu/fs/tuition.htm. Information is also available under "Admissions" in the "General Information" section of this *Catalog*.

Residency Classification

Please refer to the "Information on Residency Classification for Admission and Tuition Purposes" in the "General Information" section of this *Catalog*.

College of Arts and Sciences

The College of Arts and Sciences offers graduate programs in Biology, Computer and Information Systems, English Language and Literature, and Social Sciences. These programs lead to a Master of Science in Biology, a Master of Science in Computer and Information Systems, a Master of Arts in English Language and Literature, and a Master of Arts in Social Sciences.

Academic Rules and Regulations

See the College of Arts and Sciences section of the Catalog for academic rules and regulations pertaining to graduate programs offered by the College.

Master of Science in Biology

Director: Joseph F. Sucic

Program Faculty: Professors Steven F. Myers, David L. Wigston; Associate Professors Gary L. Pace, Bruce D. Parfitt, Jerry D. Sanders, Joseph F. Sucic; Assistant Professors Ann Sturtevant, Stephen Trumble; Lecturers Mary Ann Cardani, Nanette Kelly, Elizabeth A. Malinowski, Ernest J. Szuch, Dennis P. Viele, Jr., Tracy L. Wacker, Margaret Ware.

Program Mission and Assessment

The mission of the Master of Science Program is to update as well as increase breadth and depth of training in students who have completed undergraduate degrees in biology or related life science. The Program emphasizes varied methods and techniques that have proven useful in both teaching and research settings. Program core requirements survey cellular/molecular, organismal and ecology/evolutionary biology, and levels of biological organization; other coursework expands breadth and depth of student understanding of living systems. The Program participates in the University-wide effort to assess its academic programs. Information on assessment plans, including goals, methods and outcomes is available at http://assessment.umflint.edu.

Admission to the Program

To begin in Spring or Summer term, students must apply for Regular Admissions no later than March 15. To begin in Fall or Winter term, applications must be received no later than July 15 or November 15, respectively. Conditional Admission may be granted if all prerequisites are not completed. Applications for this program may be obtained from the Office of Graduate Programs.

Admission Criteria

- A. Bachelor of Science degree in Biology or a related life science (e.g., zoology, botany) from an accredited institution.
- B. Two or more letters of recommendation.
- C. Minimum overall GPA of 3.0 and a minimum GPA of 3.0 in required prerequisite undergraduate courses or their equivalents.
- D. Submission of a written statement delineating personal goals for graduate study.
- A personal interview may be conducted by the graduate admissions committee of the Biology faculty of the UM-Flint.
- F. General and advanced GRE Scores.
- G. Application Fee.

Prerequisites. Students must complete the following courses or their equivalents prior to Regular Admission to the program:

- A. Cell Biology, Ecology, Genetics.
- B. Organic Chemistry.
- C. Pre-Calculus Mathematics.
- D. General Physics.
- E. Statistics (preferably, Biostatistics) recommended.

Transfer or NCFD Course Credit

All students, with approval of the graduate committee, may transfer in or take as an NCFD up to two graduate level courses (8 maximum credits) in biological sciences. No more than two courses (8 maximum credits) of cognate, transfer, or NCFD credits may be applied toward completion of this degree.

Program Requirements

- A. Graduate Core Curriculum (12 credits).
 BIO 501, Current Topics in Cellular and Molecular Biology
 BIO 502, Current Topics in Organismal Biology
 BIO 503, Current Topics in Ecology and Evolutionary
 Biology
- B. Completion of Plan A or B below.

Plan A, Thesis Option

 An original research project report (thesis) designed and completed in cooperation with the student's advisor, including an oral defense of the thesis (6 credits). Thesis design must be approved by the student's individual thesis committee. Additional graduate-level courses in biology to complete a minimum total of 30 credit hours. Course elections must be approved by the Biology Graduate Committee. With permission of that committee, any core curriculum course may be reelected once for credit, and up to two courses (8 credits maximum) of graduate level courses in non-biological science may be applied toward the degree.

Plan B, Non-Thesis Option

- 1. Non-thesis research (2 credits).
- 2. Additional graduate-level courses in biology to complete a minimum total of 32 credit hours. Course elections must be approved by the Biology Graduate Committee. With permission of that committee, any core curriculum course may be reelected once for credit, and up to two courses (8 credits maximum) of graduate level courses in non-biological science may be applied toward the degree.

Grading System

The following grading system is used by the MS in Biology program. Courses in which grades of D or E are earned cannot be used in fulfillment of degree requirements.

Letter Grade	Honor Points
A+	9
A	8
A-	7
B+	6
В	5
B-	4
C+	3
C	2
C-	1
D	0
E	0

Cumulative grade point averages are computed by dividing the total number of honor points earned by the total number of credit hours attempted. A final grade point average of at least 5.0 is required for successful completion of the MS in Biology program.

Graduate Courses in Biology (BIO)

501. Current Topics in Cellular and Molecular Biology. Admission to the graduate program in biology. (4).

Survey, review and presentation of recently developed information, concepts, techniques and methods in cellular and molecular biology. Lecture and laboratory.

502. Current Topics in Organismal Biology. Admission to the graduate program in biology. (4).

Survey, review, presentation and discussion of recently developed information, concepts, techniques and methods in the biology of whole organisms. May involve detailed study of a limited taxonomic group of organisms. Lecture and laboratory.

503. Current Topics in Ecology and Evolutionary Biology. Admission to the graduate program in biology. (4).

Survey, review and presentation of recently developed information, concepts, techniques and methods in ecology and evolutionary biology. Lecture and laboratory.

504. Biostatistics. Strong preparation in high school or college algebra, eight credits of biology, and graduate standing. (4).

Analysis of quantitative data from biological sources, using basic statistical procedures to elucidate biological phenomena. Mathematical derivations and probabilistic theory not stressed; emphasis on the selection and interpretation of statistical tests commonly used by biologists. Prior knowledge of statistics not necessary. Lecture and discussion. Not open to students with credit for BIO 301 (404) or HCR 302 (402) or its equivalent.

507. Human Macroscopic Anatomy. *Graduate standing; BIO* 111, 113, 326; or consent of instructor. (4).

Detailed study of the macroscopic structure of the human body, following a systems approach to the study of human anatomy. Laboratory involves the study of anatomical models and cadaver specimens. Lecture and laboratory. *Not open to students with credit for BIO 407 (302)*.

508. Comparative Anatomy. Graduate standing; BIO 111, 113, 327; or consent of instructor. (4).

Evolutionary and developmental aspects of the gross structure of representative chordate animals. Lecture and laboratory. *Not open to students with credit for BIO 408 (308)*.

518. Lectures in Histology and Organology. Admission into the professional program in physical therapy; graduate standing; or consent of instructor. (3).

Microscopic structure and function of mammalian cells, tissues, and organs. Lecture . Not open to students with credit for BIO 418

519. Histology and Organology Laboratory. Graduate standing, BIO 111, 113, 326, and concurrent enrollment in BIO 518; or consent of instructor. (2).

Identification of mammalian cells, tissues, and organs. Laboratory. *Not open to students with credit for BIO 419.*

520. Invertebrate Biology. *Graduate standing; BIO 111, 113, 327; or consent of instructor.* (4).

Functional morphology and biology of the major groups of invertebrate animals. Lecture and laboratory. *Not open to students with credit for BIO 420 (321)*.

521. Mammalogy. Graduate standing; BIO 111, 113, 327; or consent of instructor. (4).

Study of the major groups of mammals; natural history, physiology, anatomy, and systematics of all living orders; North American mammals classified to family. Students are responsible for species identification from field and skull characters of most Michigan mammals. Labs in the field encompassing techniques commonly used in mammalogy; required trip to Detroit Zoo. *Not open to students with credit for BIO 421*.

523. Wildlife Ecology and Management. Graduate standing; BIO 111, 113, 327. (4).

Application of basic ecological knowledge to populations of animals and their plant and animal associates. Topics include dynamics of animal and plant populations and communities; management of animal populations (including introduced, game, non-game and endangered species) and ecosystems that support these populations; the need to balance the welfare of the managed populations with the needs of people. Lecture and discussion. *Not open to students with credit for BIO 423*.

524. Wetlands Management. Graduate standing; BIO 327. (5)n.

Applied course in biology covering applications of concepts, methods and techniques relating to wetlands. Relationships among soils, topography, vegetation and land use; environmental analysis and design of wetland mitigation sites. Lecture, lab, field trips. *Not open to students with credit for BIO 424*.

526. Wildlife Policy and Law. *Graduate Standing; BIO 111, 113, 327. RPL 312, GEO 372 recommended. (3).*

Policy sciences approach to wildlife issues, such as ecology, "native" and introduced species, *ex situ* and *in situ* conservation, wildlife and ethnoscience, wildlife use and trade. Local policies; roles of parks, zoos, gardens and arboreta; state, federal and international laws and conventions. Lecture. *Not open to students with credit for BIO 426.*

531. Comparative Animal Physiology. Graduate standing; BIO 111, 113, 326; or consent of instructor. (3).

Detailed comparative study of invertebrate and vertebrate physiology with special emphasis on environmental and energy interrelationships. Lecture. *Not open to students with credit for BIO 431 (331)*.

532. Mammalian Physiology. *Graduate standing; BIO 111, 113, 326; or consent of instructor.* (4).

Detailed study of organ and organ-system function in mammals; emphasis on human function. Lecture and laboratory. *Not open to students with credit for BIO 432 (332).*

533. Evolution and Adaptation. *Graduate standing; BIO 111, 113, 326, 327, 328. (3).*

Fundamentals of plan and animal evolution. Genetics of populations, selection models, geographic variation, adaptation, population structure, mating systems, species concepts, and molecular evolution. Emphasis on evolutionary mechanisms in populations. Lecutre. *Not open to students with credit for BIO* 453 (353).

534. Human Anatomy. *Admission to the doctoral program in physical therapy, or graduate standing and consent of instructor.* (6).

Detailed study of the gross structure of the human body. Laboratory involves cadaver dissection. Lecture and laboratory. *Not open to students with credit for BIO 434. Also listed as PTP 510.*

539. (**537**). **Mycology Lecture.** *Graduate standing; BIO 111, 113, 326; concurrent election of BIO 540. BIO 435 recommended.* (3).

Fungal physiology, growth, classification, and genetics. Role of fungi in the environment and their importance to man in causing some problems and solving others. Lecture. *Not open to students with credit for BIO 439 (437).*

540. Mycology Laboratory. *Graduate standing; BIO 111, 113, 326; concurrent election of BIO 539. BIO 435 recommended.* (1).

Identification of fungi; experiments in physiology, nutrition, symbioses. Laboratory. *Not open to students with credit for BIO 440.*

541. Renal Physiology. Admission to the graduate program in anesthesia or consent of instructor. (1).

Detailed study of renal physiology as a foundation course for nurse anesthesia students. Lecture. *Also listed as ANE 541*.

542. Endocrine Physiology. Admission to the graduate program in anesthesia. (1).

Detailed study of the anatomy, physiology and major diseases of the endocrine system of the human. Assessment of function, description of major clinical manifestations and effects of the anesthetic process on the endocrine hypothalamus, pituitary, thyroid, parathyroid, adrenal and pancreas. Lecture. *Also listed* as ANE 542.

543. Limnology. Graduate standing; BIO 111, 327, and consent of instructor. (5).

Interactions of biotic communities with their physical and chemical environments examined in both natural and polluted lakes and streams. Lecture, lab, and field trips. *Not open to students with credit for BIO 443 (343)*.

544. Neuroanatomy and Physiology. Admission to the graduate program in anesthesia. (3).

Principles of neuroanatomy and neurophysiology as a foundation course for nurse anesthesia students. Lecture and laboratory. *Also listed as ANE 544*.

550. Parasitology. Graduate standing; BIO 111, 113; or consent of instructor. (4).

Study of the major groups of parasitic protists and animals, with particular emphasis on those infecting man and the higher vertebrates. Lecture and laboratory. *Not open to students with credit for BIO 450 (350)*.

560. Conservation Biology. *Graduate standing; BIO 111, 113, 327. (4).*

Examination of the principles underlying attempts to conserve biodiversity. Conservation values and ethics, global biodiversity, species conservation, community level conservation, and management and design of reserves. Lecture. Not open to students with credit for BIO 460 (360).

562. Molecular Biology of Plants. *Graduate standing; BIO 111, 113, 326, 328; concurrent election of BIO 563; or consent of instructor. BIO 464 recommended. (3).*

Survey of the molecular biology of plants. Gene regulation in response to environmental conditions, coordinated regulation of nuclear and plasmid genes, transposons, control of plant development. Applications to agriculture and biotechnology, including the production and use of genetically modified crops. Lecture. *Not open to students with credit for BIO 462 (466)*.

563. Molecular Biology of Plants Laboratory. Graduate standing; BIO 111, 113, 326, 328; concurrent election of BIO 562; or consent of instructor. BIO 464 recommended. (1).

Cell and molecular biological techniques used to study gene expression in plants. May include isolation of chloroplasts, SDS-PAGE, PCR and various plant tissue culture techniques. Laboratory. *Not open to students with credit for BIO 463*.

567. Molecular Biology of Procaryotes. *Graduate standing; BIO 111, 113, 326, 328; prior or concurrent enrollment in BIO 435; CHM 220 or 330; consent of instructor.* (4).

Survey of the molecular biology of procaryotic organisms. DNA replication, DNA repair and recombination, and mechanisms regulating gene expression at the transcriptional and post-transcriptional levels; the interaction of these processes in complex phenomena such as ribosome biosynthesis, cell division, and sporulation. Lecture and laboratory; laboratory focus on recombinant DNA methodologies. *Not open to students with credit for BIO 467*.

568. Molecular Biology of Eucaryotes. Graduate standing; BIO 111, 113, 326, 328, 435; CHM 220 or 330; consent of instructor. (4).

Survey of the molecular biology of eucaryotic organisms. DNA replication, DNA repair and recombination, DNA rearrangements, and mechanisms regulating gene expression; the interaction of these processes in complex phenomena such as single transduction, cell cycle control, cell differentiation, and cancer. Lecture and laboratory; laboratory includes mammalian cell culture and expression of cloned genes in mammalian cells. *Not open to students with credit for BIO* 468

580. Field Biology. *Graduate standing; BIO 111, 113, 327; consent of instructor.* (5).

Studies of individuals, populations and communities of the Great Lakes area with emphasis on field identification of vascular plants, amphibians, reptiles and birds. Organismal adaptations, habitat preferences, behavior, life history and biotic interactions; introduction to the biology/ecology of amphibians and reptiles. Classes consist of day-long field trips, one evening field experience and a term-ending week-long field excursion to Michigan's upper peninsula. *Not open to students with credit for BIO 480 (380)*.

581. Field Studies in Biology. *Graduate standing; BIO 111, 327; consent of instructor.* (4).

Lectures on, and individual study of, the flora, fauna, and geology of a selected area of the country, culminating in a field trip to that region. Each student is given a special problem to investigate. Lecture and laboratory. *Not open to students with credit for BIO 481 (381)*.

582. Neuroscience. Admission to the professional program in physical therapy; or graduate standing and consent of instructor. (4).

Principles of neuroanatomy and neurophysiology as a

foundation course for physical therapy students. Also suitable for other students wishing a solid framework for understanding the structure and function of the nervous system. Lecture and laboratory. Not open to students with credit for BIO 482 (382). Also listed as PTP 512.

583. Special Topics. *Graduate standing; consent of instructor.* (1-4).

In-depth examination of selected topics of special interest to biologists. Course content, format and prerequisites vary with the topic presented. Additional work required.

584. Biology of Birds. *Graduate standing; consent of instructor.* (5).

Introduction to ornithology with emphasis on field identifaction of the birds of southern Michigan. Field trips to a variety of habitats in the region. Laboaratory study of morphology; additional identification using 35 mm slides and recorded bird songs. Lectures and readings on aspects of the anatomy, physiology, evolution, ecology and behavior of birds. *Not open to students with credit for BIO 484 (384).*

585. Pathology. *Graduate standing; BIO 111, 113, 326, 432. (3).*

Human structural and functional disorders, mechanisms by which they arise, and systemic effects. *Not open to students with credit for BIO 485*.

588. Systematic Botany. Graduate standing; BIO 111, 113, 327, or consent of instructor. (4).

Identification, classification and phylogeny of vascular plants. Nomenclature, principles of systemics, contemporary methods, sources of systematic evidence, collection techniques, and historical review of plant classification systems. Field trips. Lecture and laboratory. *Not open to students with credit for BIO 488 (388).*

596. Seminar. Admission to the graduate program in biology. (1).

Presentations by UM-Flint or visiting faculty and by graduate students on proposed, ongoing, or completed research. Presentations may be focused on a limited area of biological science. Lecture and discussion.

- 597. Non-Thesis Research. Admission to the graduate program in biology; consent of instructor. (1-2). Independent study for graduate students in Plan B option (2 credits required). Graded ABCDE/Y.
- **598. Graduate Thesis.** *Admission to the graduate program in biology; consent of instructor.* (1).

Independent study for graduate students in Plan A option (6 credits required). *Graded ABCDE/Y*.

599. Thesis Research. Admission to the graduate program in biology, consent of instructor. (1-5).

Independent study for graduate students in Plan A option (5 credits required). *Graded ABCDE/Y*.

Master of Science in Computer and Information Systems

Director: Dr. Michael E. Farmer
Program Faculty: Associate Professors R. Shantaram, Stephen W.
Turner, and Mudasser Wyne

Program Mission and Assessment

The mission of the program is to provide a solid understanding of the principles of computers and computing, not only in the context of problem solving, but also in technical support, education and training, and software/hardware management. Given a real world problem, the student should be able to understand the problem, analyze it, design a solution, and implement it on a computer with the tools available. The program has two distinct tracks; (i) Computer Science and (ii) Information Systems. The goal of the Computer Science track is to provide students with a thorough understanding of the theory and applications of traditional computer science. The goal of the Information Systems track is to provide students with a blend of computer science theory and business theory and applications. The program participates in the Universitywide effort to assess its academic programs. Information on Assessment plans, including goals, methods and outcomes is available at http://assessment.umflint.edu.

Admission to the Program

The program has a rolling admissions policy where you can apply at any time and be notified of admission within 2-4 weeks. The application deadline is August 15 for the following Fall term and December 1 for the following Winter term. Conditional admission may be granted if not all the prerequisites are completed, so students with bachelors degrees in non-computer science disciplines are encouraged to apply as well. Application forms may be obtained from the Office of Graduate Programs.

Admission Criteria

- A. Bachelor of Science in Computer Science, Computer Information Systems or Computer Engineering from an accredited institution. Candidates with other undergraduate degrees will be considered if the program prerequisites are completed.
- B. Three letters of recommendation.
- C. Minimum undergraduate GPA of 3.0 on a 4-point scale.
- Written statement indicating personal goals for graduate study.

Prerequisites. Completion of the following courses or their equivalents:

- A. CSC 335, Computer Networks I, or CIS 335, Telecommunication and Computer Networks.
- B. CSC 365, Computer Architecture, or CIS 365, Information Technology Hardware and Software.
- C. CSC 375, Data Structures and Algorithm Analysis, or CIS 375, File, Data, and Object Structures.
- D. CSC 382, Software Engineering I, or both CIS 410, System Design and Analysis, and CIS 420, System Design and Implementation.

E. CSC/CIS 384, Database Design.

Program Requirements

Computer Science Track.

- A. Core courses. CSC 535, 565, 575, 582 (12 credits).
- B. CSC 544, 546, 549, 577 (12 credits).
- C. Completion of one of the following options (6 credits).

Thesis Option. Six additional credits in thesis research, consisting of a research project with a final thesis paper and an oral defense.

Non-Thesis Option. Six additional credits in elective graduate-level course in Computer Science or Information Systems, and satisfactory performance on a Master's level exit examination.

Information Systems Track.

- A. Core courses. Two from: CIS 535, 565, 575, 582 (6 credits).
- B. Computer science/information systems/management courses (18 credits).
 - 1. CIS 510/MGT 581 (3 cr.).
 - 2. Three from: CIS 520, 530, 550, CSC 549 (9 cr.).
 - 3. Two from: MGT 512, 521, 551, 571 (6 cr.).
- C. Completion of one of the following options (6 credits).

Thesis Option. Six additional credits in thesis research, consisting of a research project with a final thesis paper and an oral defense.

Non-Thesis Option. Six additional credits from the courses listed above, and satisfactory performance on a Master's level exit examination.

Graduate Courses in Computer Science (CSC)

535. Advanced Computer Networking. Admission to the MS in CAIS program. (3).

Advanced topics in computer networking. May include layered network architecture, transmission techniques on wired and wireless mediums, transmission impairments, bandwidth limitations, signaling techniques, error correction and detection, transmission protocols, contention-based medium access protocols, queuing theory, routing algorithms, internetworking, connection management, performance issues, application-level protocol standards, communication of multimedia over computer networks. *Graded ABCDENIY*.

544. Computer Simulation and Modeling. Admission to the M.S. in CAIS program. (3).

Techniques for modeling of real-world objects with computers; design and analysis of models. Simulation techniques such as event-driven, time-driven, and object-oriented simulation.

Queuing systems, petri nets, discrete simulation, random number generation. Model validation. Applications of simulation; use of simulation tools. *Graded ABCDEN/Y*.

546. Advanced Artificial Intelligence. Admission to the M.S. in CAIS program. (3).

Problem solving techniques including searching and game playing. Knowledge and reasoning; knowledge bases; first-order logic. Planning; uncertainty and probabilistic reasoning. Learning techniques including observations, neural networks, and reinforcement learning. Communication. *Graded ABCDEN/Y*.

549. Computer Ethics and Security. Admission to the M.S. in CAIS program. (3).

Ethical discussions, basis for ethics, computer crime, reliability and error. Encryption techniques including conventional encryption algorithms, classical and modern techniques. Public-key cryptography; number theory; hashing and message authentication. Digital signatures and authentication protocols; authentication applications. Electronic mail security; security over computer networks and the world-wide web. System security; intruders, viruses, and worms; firewalls. *Graded ABCDENIY*.

565. Computer System Architecture. Admission to the M.S. in CAIS program. (3).

Techniques for high performance and cost measurement. Memory system design including cache and virtual memory. Pipelining. Characteristics of numerical applications and their effects on computer architecture. Vector computers. Multiprocessors and multiprocessor algorithms. *Graded ABCDEN/Y*.

575. Algorithm and Complexity Analysis. Admission to the M.S. in CAIS program. (3).

Algorithm efficiency, asymptotic notation, solutions to recurrence relations. Greedy algorithms for graphs, scheduling problems, and greedy heuristic methods. Divide and conquer algorithms for sorting and numeric computation. Dynamic programming. Graph algorithms including DFS and BFS. Probabilistic algorithms. Introduction to complexity theory. *Graded ABCDENYY*.

577. Advanced Distributed Systems. Admission to the M.S. in CAIS program. (3).

History of operating system development. Issues in communication. Processes and naming; synchronization and consensus; consistency and replication; fault tolerance. File systems, security, middleware. Process and thread management. Examples of distributed operating system techniques. *Graded ABCDEN/Y*.

578. Study of Parallel Computation. *Admission to the MS in CAIS program.* (3).

Motivation for and applications of parallel processing. Parallel processing architectures, including physical organization and comparisons thereof. Design and implementation of parallel algorithms. Performance analysis of parallel algorithms. Programming using the message-passing and shared-memory paradigms. *ABCDENYY*.

580. Advanced Software Engineering. Admission to the M.S. in CAIS program. (3).

Advanced topics in software engineering; advanced design methods including formal methods, component-based design, design with patterns and frameworks, and architectural-based designs. Modern software processes such as Extreme Programming and Cleanroom software development. Issues and problems associated with large-scale software project failures and techniques for preventing them. *Graded ABCDEN/Y*.

581. Theory of Computation. Admission to the M.S. in CAIS program, CSC 575; or consent of instructor. (3).

Finite automata theory, including determinism vs. nondeterminism, regular expressions, nonregular languages, and algorithms for finite automata. Context free languages including grammars, parsing, and properties. Turing machines and their functions. Undecidability. Computational complexity, including the classes P and NP. *Graded ABCDENIY*.

582. Advanced Database Concepts and Emerging Applications. Admission to the M.S. in CAIS program. (3).

Active database concepts, triggers, design and implementation issues; temporal database time representation and dimension; multimedia databases; deductive databases' interpretation of rules and use of relational operations; distributed databases' parallel and distributed technology; data management techniques; XML and Internet databases; object oriented databases. *Graded ABCDENIY*.

592. Special Topics in Computer Science. Admission to the M.S. in CAIS program. (3).

Topics of interest in computer science that are not offered on a regular basis, announced in the course schedule. Various offerings may treat different topics. Course may be reelected: each election must emphasize a different topic. Graded ABCDEN/Y.

595. Master's Thesis I. Admission to the M.S. in CAIS program; election of the thesis track. (3).

Advanced topics of particular interest to the student chosen in cooperation with the thesis advisor. Directed research under supervision of advisor, thesis document preparation, preparation for oral defense. *Graded ABCDE/Y*.

596. Master's Thesis II. *CSC* 595; election of the thesis track. (3).

Continuation of thesis research. *Graded ABCDE/Y*.

Graduate Courses in Computer Information Systems (CIS)

510. Information Systems. *Admission to the M.S. in CAIS program.* (3).

Information systems role in transforming organizations and industries. The firm in its environment; the systems approach. Strategic planning and issues; information resource management. Case studies; AIS and MIS. *Graded ABCDEN/Y*.

520. Advanced Information Systems. CIS 510; admission to the M.S. in CAIS program. (3).

Development of an integrated technical architecture; hardware, software, network and data. Technologies for intra- and interorganizational systems. Packaged solutions for integrating systems. Industry technology directions. *Graded ABCDEN/Y*.

530. Information Storage and Retrieval. *Admission to the M.S. in CAIS program. (3).*

Concepts, principles, issues and techniques for managing data resources. Query structure and matching process. Retrieval effectiveness. Document access and output presentation. *Graded ABCDEN/Y*.

550. Decision Support Systems. CIS 510; admission to the M.S. in CAIS program. (3).

Decision making and available support. Evolution of computerized decision aids. Decision making models and systems; decision support systems. *Graded ABCDEN/Y*.

592. Special Topics in Information Systems. Admission to the M.S. in CAIS program. (3).

Topics of interest in computer information systems not offered on a regular basis, announced in the course schedule. Various offerings may treat different topics. Course may be reelected; each election must emphasize a different topic. Graded ABCDEN/Y.

595. Master's Thesis I. Admission to the M.S. in CAIS program; election of the thesis track. (3).

Advanced topics of particular interest to the student chosen in cooperation with the thesis advisor. Directed research under supervision of advisor, thesis document preparation, preparation for oral defense. *Graded ABCDE/Y*.

596. Master's Thesis II. CIS 595; election of the thesis track. (3).

Continuation of thesis research. Graded ABCDE/Y.

Master of Arts in English Language and Literature

Program Director: Dr. Thomas Foster

Program Faculty: Professors Robert Barnett, Stephen Bernstein,
 Thomas Foster, Jan Furman, Frederic Svoboda, D.J. Trela,
 Jacqueline Zeff; Associate Professors Jan Bernsten, Kazuko
 Hiramatsu, Alicia Kent, Mary Jo Kietzman; Assistant
 Professors Anjili Babbar, Jacob Blumner, Suzanne Knight,
 Stephanie Roach, Annemarie Toebosch; Lecturers Maureen
 Thum, Jan Worth-Nelson

Program Mission and Assessment

The MA in English Language and Literature encourages a broad study of historical, theoretical, and methodological research and texts in the areas of literature, writing, composition studies, linguistics, literacy and English pedagogy. The program reflects the English Department's uniquely interdisciplinary nature and its

commitment to nurturing, in a seminar-based approach, independent researchers, teachers, and lifelong learners. The Program participates in the University-wide effort to assess its academic programs. Information on assessment plans, including goals, methods and outcomes is available at http://assessment.umflint.edu.

Program Requirements

- A. English Studies (3 credits). ENG 500.
- B. Theory (3 credits). A course in literary, rhetorical or pedagogical theory (selected from ENG 567, 568, 570, 571, or a theory course approved by the program director).
- C. One course from each of the following areas (9 credits).
 - 1. Literature. ENG 522, 525, 526, 527, 532, 533, 534, 537, 538, 539, 555.
 - 2. Linguistics and Language Studies. ENG 509, 520, 521,
 - 3. Writing. ENG 560, 561, 562, 566, 567*, 568* *May not also be counted toward theory requirement.
- D. One or two individual scholarship experiences (6-12 credits), optional. Students may develop an individually-defined program of study, in consultation with the English Department. Programs may include, but are not limited to, the following (6 credits each):
 - Individually-defined reading and examination.
 Primary research project.

 - 3. Thesis.
 - 4. Study program at a foreign university or accredited U.S. graduate program.
 - 5. Archival research project.
 - 6. Creative writing project.
 - 7. Professional internship.
- E. Electives in English to bring total credit hours to 30.

Optional Area of Emphasis

To achieve an Area of Emphasis recognition on the transcript, the student must complete either three (3) courses or two (2) courses plus an Individual Scholarship Experience project in one of the following areas:

- **British Literature**
- American Literature
- Composition/Rhetoric
- Linguistics and language
- Pedagogy in English

Cognate Areas

Where appropriate, and after consultation with an advisor, students may fulfill program requirements with courses from cognate graduate areas such as Education, Social Sciences, Liberal Studies.

Graduate Courses in English

500. English Studies: Issues and Methods. Graduate standing. (3).

Intensive study of the professional practice of research and scholarly inquiry in literary studies, linguistics, and composition and rhetoric. Required of all candidates for the Master of Arts in English degree. Graded ABCDE/Y.

509. American English. Graduate standing. (3).

See ENG 409 for description. Not open to students with credit for ENG/LIN 409.

510. Improvement of Reading in the Middle and Secondary **School.** *Graduate standing.* (3).

See ENG 410 for description. Not open to students with credit for EDR 445 (EDU 410) or ENG 410. Also listed as EDR 545.

512. Writing for Middle and Secondary School Teachers. *Graduate standing.* (3).

See ENG 412 for description. Not open to students with credit for EDR 446 (EDU 412) or ENG 412. Also listed as EDR 546.

513. Topics in English Education. Graduate standing. (3).

Selected issues in pedagogy for the experienced English teacher. Topics vary; may address questions of literacy, composition, or language study. May be repeated to a total of six credits when subject matter varies. Graded ABCDE/Y.

515. Literary Pedagogy. *Graduate standing.* (3).

Studies in the theory and practice of teaching literature at the secondary and postsecondary levels, with emphasis in selected areas such as teaching Shakespeare, theory and pedagogy of multicultural literatures, American literature in the classroom. May be repeated to a total of six credits when subject matter varies. Graded ABCDE/Y.

522. Topics in British Literature to 1800. *Graduate standing.*

Writing of Britain from the medieval period through the eighteenth century. Subject of study may vary by historical period, theme, genre and critical approach (e.g., early modern women writers, Elizabethan drama). May be repeated to a total of six credits when subject matter varies. Graded ABCDE/Y.

525. Topics in British Literature since 1800. Graduate standing. (3).

Writing of Britain from Romanticism through postmodernism. Subject of study may vary by historical period, theme, genre and critical approach (e.g., Victorian women writers, modernist novel). May be repeated to a total of six credits when subject matter varies. Graded ABCDE/Y.

526. Topics in British Postcolonial Literature. Graduate standing. (3).

Literature of former British colonies in Africa, India, Asia, the Middle East, the Caribbean, Australia and Canada. Subject of study may vary by historical period, theme, genre and critical approach. May be repeated to a total of six credits when subject matter varies. Graded ABCDE/Y.

527. Topics in Irish and Scottish Literature. Graduate standing. (3).

Writing of Ireland and Scotland from antiquity to the

contemporary era. Subject of study may vary by country, period, genre, and theme (e.g., Scottish novel, contemporary Irish poetry, writing and rebellion). May be repeated to a total of six credits when subject matter varies. Graded ABCDE/Y.

532. The American Novel. *Graduate standing.* (3).

See ENG 432 for description. Not open to students with credit for ENG 432.

533. American Poetry. Graduate standing. (3).

See ENG 433 for description. Not open to students with credit for ENG 433.

534. American Drama. Graduate standing. (3).

See ENG 434 for description. Not open to students with credit for ENG/THE 434. Also listed as THE 534

535. American Film I. Graduate standing. (3).

See ENG 435 for description. Not open to students with credit for ENG 435.

536. American Film II. Graduate standing. (3).

See ENG 436 for description. Not open to students with credit for ENG 436.

537. Topics in American Literature to 1900. Graduate standing. (3).

American literature from the colonial encounter through the nineteenth century. Subject of study may vary by historical period (e.g., Concord and American Romanticism), theme (e.g., writing of westward expansion), genre and/or critical approach. May be repeated to a total of six credits when subject matter varies. Graded ABCDE/Y.

538. Topics in American Literature since 1900. Graduate standing. (3).

American literature in the twentieth and twenty-first centuries. Subject of study may vary by historical period, theme, genre and/or critical approach (e.g., modernist novel, contemporary poetry). May be repeated to a total of six credits when subject matter varies. Graded ABCDE/Y.

539. Themes in Multicultural American Literatures. *Graduate standing.* (3).

Issues and themes of literature from various immigrant and ethnic communities in the Americas. Course readings may include African American, Native American, Jewish, Asian American, Hispanic, and Caribbean writing. May be repeated to a total of six credits when subject matter varies. Graded ABCDE/Y.

548. Children's Literature. *Graduate standing.* (3).

See ENG 448 for description. Not open to students with credit for EDR 430 (EDU 448) or ENG 448. Also listed as EDR 530.

549. History of the English Language. *Graduate standing; LIN* 200. (3).

Survey of the bases of the language and how it developed: Old English, Middle English, Early Modern and Modern English. *Not open to students with credit for ENG/LIN 447. Graded ABCDE/Y*.

555. Studies in Genre. *Graduate standing.* (3).

Examination of issues and major figures in selected genre (e.g., poetry, fiction, drama, essay), with intensive study of genre theory and practice. *May be repeated to a total of nine credits when subject matter varies. Graded ABCDE/Y.*

560. Topics in Writing and Rhetoric. *Graduate standing.* (3).

Issues and themes in contemporary writing and rhetoric. Subject of study may vary by theory, genre, and/or practice. May be repeated to a total of nine credits when subject matter varies. Graded ABCDE/Y.

561. Writing and Publishing. Graduate standing. (3).

Investigation of careers in writing, editing and publishing, with intensive writing in a workshop format. Subject of study may vary (e.g., freelance magazine and book writing, publishing procedures, and editing). May be repeated to a total of six credits when subject matter varies. Graded ABCDE/Y.

562. Creative Writing Workshop. *Graduate standing.* (3).

Intensive practice in poetry, fiction, or literary nonfiction, featuring a workshop approach to discussion of student writing. May be repeated to a total of nine credits when subject matter varies. Graded ABCDE/Y.

566. Teaching College Composition. Graduate standing, ENG 340; or consent of instructor. (3).

Examination of current theories and practices of teaching writing in college. Focus on understanding theory and how to apply it to a college classroom setting. *Graded ABCDE/Y*.

567. Topics in Composition and Rhetorical Theory. *Graduate standing.* (3).

Modern, postmodern and contemporary composition and rhetorical theories, and their impact on writing and writing instruction. May be repeated to a total of six credits when topic varies. Graded ABCDE/Y.

570. Modern Literary Theory. *Graduate standing.* (3).

Study of major theories of literary criticism since the 1950s, including formalism, psychoanalytic and archetypal approaches, New Historicism, feminist and Marxist theories, cultural studies, and poststructuralist theory. Application of major theoretical approaches to selected works. *Graded ABCDEIY*.

571. History of Literary Criticism. *Graduate standing.* (3).

Study of major developments in Western literary criticism and theory, from Plato and Aristotle through the New Criticism of the 1950s. Application of major theoretical approaches to selected works. *Graded ABCDE/Y*.

574. Adolescent Literature. *Graduate standing.* (3).

Survey of the content and literary merit of books read by middle

and high school students. Consideration of criteria for the selection of reading material; emphasis on approaches for teaching with such materials in a variety of school contexts. Not open to students with credit for EDR 437 (EDU 474) or ENG 474. Also listed as EDR 537.

591. Individual Study Experience. *Graduate standing.* (3-6).

Individually-defined study developed in consultation with the English Department. May include area reading and examination, primary research project, thesis, study program at a foreign or accredited U.S. graduate program, archival research project, creative writing project or professional internship. May be repeated to a total of 12 credits. Graded ABCDE/Y.

Master of Arts in Social Sciences

Program Director: Dr. Roy Hanashiro Administrative Specialist: Crystal M. Pepperdine, MPA Program Faculty: Jami Anderson (PHL/WGS), John Ellis (HIS), Ernest Emenyonu (AFA), Adam Lutzker (ECN), Derwin Munroe (POL), Judy Rosenthal (ANT/SOC)

The MA in Social Sciences supports the missions of the University of Michigan-Flint and the College of Arts and Sciences by offering education to students within the service area, particularly those with complex lives. The program provides post-baccalaureate education in a field of study especially important for in-service teachers and administrators. The program also provides opportunity to students wishing to pursue a Ph.D. program in the social sciences after completion of the Master's degree.

Program Mission and Assessment

The Mission of the Master of Arts in Social Sciences is to prepare students who have an enhanced understanding of the social sciences, within and beyond the traditional scope of the United States and Europe. Graduates of the program should be able to: critically analyze primary and secondary texts; construct thesis and arguments in the social sciences; conduct social science research; use appropriate documentation style; and write critically and analytically. The Program participates in the University-wide effort to assess its academic programs. Information on assessment plans, including goals, methods and outcomes is available at http://assessment.umflint.edu.

Requirements. Completion of a minimum of 30 credit hours, distributed as follows, with an overall cumulative grade point average of 5.0 (B) or better. The program must be completed within six consecutive years.

A. Graduate Core Curriculum (12 credits).

SSC 501 Social Theory SSC 502 Political Economy SSC 503 Gender, Race, and Inequality SSC 504 World Historiography

- B. Track options (12 credits). Four courses from one of the following tracks*, with no more than three in a single area:
 - 1. Global Studies Track.

Historical/Cultural Area ANT/INT 515

Seminar on Contemporary Global Issues

ANT 556	World Religions
HIS/INT 546	Twentieth Century World
HIS 574	History of British Empire Since
	1790
HIS 579	Pacific World in Transition
	since 19th Century
HIS 587	Islam and Political Change
SOC/ANT/INT 575	Social and Cultural Change
	_
Political/Economic Area	
13700 550	

ANT 552

Culture and Economy in Cross-

Cultural Perspective

ANT/INT/SOC/WGS 576 Sex, Work, and International

Capital

The Global Economy ECN 566 ECN 567 World Economic History POL 533 International Law and

Organization

POL/PUB 541 Welfare State in Comparative

Perspective

POL 544 Latin America Politics POL 545 European Politics POL/INT 559 Comparative Revolution

2. U.S. History and Politics Track.

Historical/Cultural Area	
ANT 511	Historical Archaeology
HIS 510	The Birth of the American
	Republic
HIS 511	The Age of Jefferson and
	Jackson
HIS 521	History of the United States
	Constitution, 1789 to Present
HIS 528	Emergence of the United States
	as a World Power since 1914
HIS/AFA 534	History of Ethnic and Racial
	Minorities in the United States
POL/ANT 551	Political and Legal
	Anthropology
SOC/WGS 554	Sociology of the Family
SOC 571	Social Movements in America
SOC 585	Sociology of Law

Political/Economic Area ECN 521 American Economic History POL 523 The U.S. Congress POL 526 The U.S. Supreme Court POL 527 The American Presidency POL 529 Civil Liberties and the Constitution POL 537 Problems in American Foreign Policy SOC 566/PUB 572 Work, Occupations and

Professions

3. Gender Studies Track.

WGS 540/EDE 533

Historical/Cultural Area	
ANT/SOC/WGS 525	Culture and Personality
ANT/WGS 578	Sex and Gender in Cross-
	Cultural Perspective
HIS/WGS 569	History of American Women
PHL/WGS 567	Race and Gender
SOC/WGS 554	Sociology of the Family
SOC/WGS 574	Gender and Society

Girls, Culture and Education

Political/Economic Area

ANT/INT/SOC/WGS 576 Sex, Work and International

Capital

POL/WGS 531 Women and Work POL/WGS 585 Women and the Law PHL 586/WGS 580 Gender Theory

*Three credits of SSC 599, Special Topics, may be applied toward a track with approval of advisor.

C. SSC 591, Capstone Seminar (3 credits). Investigation of issues in social sciences in a particular area of student interest under the direction of a MA in Social Sciences faculty member.

D. Cognate (3 credits).

Any graduate level course, including IGS study abroad courses, outside the track of concentration and with the approval of advisor.

Graduate Courses in Social Sciences (SSC)

501. Social Theory. *Graduate standing.* (3).

Study and comparison of theorists of significant influence on the social sciences and public intellectual discourse in the past half century. Survey of key writers on modernity, political economy, inequalities, post-modernity, post-colonial, feminist and queer theory. Deeper examination of several theoretical orientations articulated by major writers from different periods. Discussion of positivist and functionalist theories, critiques of idealism and materialism, essentialism and identity politics, structuralism and post-structuralism, deconstruction.

502. Political Economy. Graduate standing. (3).

Analysis of global capitalism in historical perspective. Exploration of major theories and debates, critical analysis of competing vocabularies, focus on interactions between political and economic systems.

503. Gender, Race and Inequalities. Graduate standing. (3).

Analysis of systems of inequality in local, national, and global contexts. Focus on class, race/ethnicity, gender, and their intersections through time and across societies. Exploration of dynamics of social reproduction and change.

504. World Historiography. *Graduate standing.* (3).

Major themes and writings of world and comparative history. Examination of the history of human interaction on a multilateral or global basis. World historiography, global historical narratives, systems of global interaction and exchange, global development of technology and science, the environmental context of world history, imperialism and global power, recent debates regarding globalization.

591. Capstone Seminar. Graduate standing. (3).

Investigation of issues in social sciences in a particular area of student interest under the direction of a Master of Social Sciences faculty member. **599.** Special Topics. *Graduate standing.* (1-3).

Different topics each semester, to be announced in advance of registration.

Rackham School of Graduate Studies Programs

The University of Michigan-Flint offers two graduate degree programs through the Horace H. Rackham School of Graduate Studies: the Master of Liberal Studies in American Culture (MLS) and the Master of Public Administration (MPA) with concentrations in Criminal Justice Administration, Educational Administration, Health Care Administration, and Administration of Nonprofit Agencies.

Admission to Rackham School Programs

Admission applications are available from the Office of Graduate Programs, 251 Thompson Library, or at the Website: graduateprograms.umflint.edu. The procedure for applying for admission includes filing a completed application, one official transcript from each college and university attended, three letters of recommendation, a statement of purpose, and an application fee. Applicants to the Educational Administration concentration of the MPA program must also submit a copy of their teaching certificate. A cumulative undergraduate 3.0 grade point average is expected of each applicant, although this should not prevent a highly motivated applicant with a somewhat lower average from applying. Each program has additional requirements, which are described under the program listing. Please refer to graduateprograms.umflint.edu for application deadlines. International applicants should apply no later than six months prior to the term of intended enrollment.

There are three types of admission:

Regular: Applicants who satisfy all admission requirements of the Horace H. Rackham School of Graduate Studies and of the program may be given regular admission.

Conditional: Applicants who have yet to satisfy one or more of the requirements may be given conditional admission.

Probationary: In some circumstances, applicants who do not meet the required minimum grade point average for the number of credits specified may, with the approval of program faculty, be granted probationary admission.

Readmission

Students who have not been enrolled in Graduate School for more than one year (12 months) must apply for readmission. Readmission is dependent upon program approval. Before readmission can be finalized for international students, proof of adequate funding is required in order to obtain the appropriate visa documents. Readmission applications are available from the Office of Graduate Programs, 251 Thompson Library.

Grading System

The following grading system is used by the MLS and MPA programs. The letter grade system is used for all courses except for PUB 590: Internship in which a graduate student may receive a "P" or "F" grade. Courses in which grades of D or E are earned

cannot be used in fulfillment of degree requirements.

Letter Grade	Honor Points
A+	9
A	8
A-	7
B+	6
В	5
B-	4
C+	3
C	2
C-	1
D	0
Е	0

Cumulative grade point averages are computed by dividing the total number of honor points earned by the total number of credit hours attempted. No honor points are generated by the earning of either a "P" or a "F" grade, and such grades are not calculated in a graduate student's grade point average. A cumulative graduate grade point average of "B" (5.00) is required for all graduate courses taken for credit and applied toward the master's degree. A minimum cumulative final graduate grade point average of at least B (5.0) is required for successful completion of the MLS and MPA programs.

Academic Standing and Academic Discipline

To maintain satisfactory academic standing, a student must have a minimum cumulative graduate grade point average of "B" (5.00) for all graduate courses taken for credit and applied toward the degree program in which the student is enrolled.

A student whose cumulative graduate grade point average falls below a "B" (5.00) in a given term or half term will be placed on probation for the following term or half term, or may be denied permission to register. A student whose cumulative graduate grade point average falls below a "B" average for two successive terms or half terms may, upon the recommendation of his or her graduate program director and with the consent of the Associate Provost, be granted a final opportunity to correct the scholastic and/or academic deficiency.

Transfer of Credit

Up to six (6) hours of graduate credit completed in residence at another accredited institution or in an approved graduate extension program(s) may be accepted for transfer into the MLS and MPA programs. Transfers are made in accordance with the policies of the Horace H. Rackham School of Graduate Studies. Please contact the Administrative Specialist for more information concerning transfer of credit.

Time Limit to Complete Degree

A student must complete all work toward the master's degree within five consecutive years from the date of first enrollment in the graduate program. Students may, however, request or petition for an extension of this time limit. Requests are made by completing a Petition for Modification of Waiver of Regulation form. Students submit completed forms with required signatures to the Administrative Specialist.

Degree/Diploma Application

To be considered for a master's degree, MLS and MPA students must complete the formal Degree/Diploma Application.

Completed applications should be submitted to the Office of Graduate Programs, 251 Thompson Library, early in the semester in which all degree requirements will be fulfilled.

Academic Policies and Procedures

All Flint Rackham students are held accountable for all policies and procedures of the Rackham School of Graduate Studies. Contact the Program Coordinator for further information concerning academic policies and procedures.

Master of Liberal Studies in American Culture

Program Director: Robert Houbeck, MA
 Administrative Specialist: Crystal M. Pepperdine
 Program Faculty: Mr. Charles Bailey (Social Work), Dr. Lauren
 Friesen (Theatre), Dr. Jan Furman (English), Dr. Larry Koch
 (Sociology), Dr. Bruce Rubenstein (History), Dr. Frederic J.
 Svoboda (English), Dr. Jacqueline Zeff (English).

The Master of Liberal Studies (MLS) in American Culture invites students to examine their lived experience through an intellectual lens that highlights the key ideas, institutions, behaviors, and preoccupations that have helped to shape the American character. David A. Hollinger and Charles Capper observe in their preface to The American Intellectual Tradition: "If a tradition is a family of disagreements, the American intellectual tradition is a very extended family." The MLS Program provides students with a sustained opportunity to understand and contribute to that "family" of disagreements—and agreements—we call American culture by drawing on concepts from the humanities, the social sciences, and the arts.

The Program is distinguished by several special, if not unique, features. Students are drawn from a wide diversity of academic backgrounds and even wider array of professional and personal aspirations. Many of our students already hold the professional positions they seek and are looking to strengthen their expertise as teachers, policy makers, or artists. Others, near or anticipating retirement, are drawn to the MLS Program because it offers an opportunity for personal enrichment and lifelong learning, a second chance at liberal education. To accommodate the working professional, all MLS core seminars and many elective courses are offered in the evening, and a systematic planning schedule is designed for the part-time student. Finally, a recurring emphasis on interdisciplinary research distinguishes its academic core and final product, the thesis.

Limited financial aid and scholarship support is available for students in the MLS program. Contact the Office of Graduate Programs for information at (810) 762-3171.

Program Mission and Assessment

The Mission of the Master of Liberal Studies Program is to engage students in a critical, multidisciplinary examination of contemporary American culture; to encourage students to explore and critique issues important to American thought and culture, such as race, gender, equality, politics, religion, popular culture; to help students learn research methods and techniques and apply them to critically examine issues beyond the scope of individual courses; and to set students' experiences in a meaningful context. The Program participates in the University-wide effort to assess its academic programs. Information on assessment plans, including goals, methods and outcomes is available at http://assessment.umflint.edu.

Admission Requirements

- A. See "Admission to Rackham School Programs" for general admission requirements.
- B. Twenty-four credits in the humanities and the social sciences as an undergraduate.

Program Requirements. Thirty credits, distributed as follows:

A.	Core courses (9 <i>credits</i>): Three from:
	AMC 501	The Mind of America
	AMC 502	American Institutions
	AMC 503	The American Character
	AMC 504	The United States in Comparative
		Perspective

B. Research and Thesis (6 credits).

Thesis Writing and Research AMC 500

Thesis AMC 591

THE 505

C. Approved Electives (15 credits). Select courses from at least

Approved Electiv	ves (15 credits). Select courses from at le
two departments:	
AMC 501	The Mind of America
AMC 502	American Institutions
AMC 503	The American Character
AMC 504	The United States in Comparative
	Perspective
AMC 590	Directed Research
AMC 598	Selected Topics
AMC 599	Cross-Cultural Research
ANT 555	Anthropological Interpretation of
	American Socio-Cultural Systems
ANT 570	American Ethnic and Cultural Diversity
ART 509	History of American Art, 1875-1920
ECN 521	American Economic History
ECN 524	Labor Economics
EDU/THE 549	Folklore and Storytelling
ENG 509	American English
ENG 532	The American Novel
ENG 533	American Poetry
ENG/THE 534	American Dramatic
ENG 535	American Film I
ENG 536	American Film II
HIS 510	The Birth of the American Republic
HIS 511	Age of Jefferson and Jackson
HIS 519	History of Sport in the United States
HIS 530	American Indian History
HIS 531	American Urban History
HIS 535	Black America Since the Civil War
HIS 536	Exploring Community History
HIS 538	Jazz, Rock & Cinema: A Social History
	of the 20th Century United States
MUS 522	Jazz in American Culture
MUS 555	American Music
PHL 543	American Philosophy
POL 501	American Political Thought
POL 537	Problems in American Foreign Policy
POL 541	Comparative Social Policy
SOC 545	Ethnicity in American Society
SOC 558	Religion in American Society
SOC 562	Work in American Society
SOC/EDU 569	Sociology of Education
SOC 570	Social Stratification
SOC 571	Social Movements in America
SOC/WGS 574	Gender and Society
MTTT #0.5	

America's Contribution to Theatre

Courses in American Culture (AMC)

499. Selected Topics. Upper division undergraduate standing, consent of instructor. (1-3).

Different topics each semester, to be announced in advance of registration. May be taken more than once, but not so as to repeat a topic.

500. Thesis Writing and Research. Graduate standing. (3).

Formal instruction on how to create a master's thesis. Research methodology, literature searches and surveys, research questions and problem statements. Guest speakers from various disciplines share research expertise.

501. The Mind of America. Graduate standing. (3).

Examination through literature, philosophy, and the arts, of several topics which, taken together, provide an overview of America's intellectual life as a response to, and comprehension of, the American experience.

502. American Institutions. *Graduate standing.* (3).

Examination of the major social institutions in American society, their development, change, and future.

503. The American Character. *Graduate standing.* (3).

Examination of the question, "Is there an American character?" Analyzes the changing definitions of the American character in the context of the major structural principles around which American society is organized.

504. The United States in Comparative Perspective. Graduate standing. (3).

Encompasses two general approaches: comparison with other societies to achieve an understanding of American culture and the examination of the image of America in the eyes of the world.

590. Directed Research. Graduate standing and consent of instructor. (1-3).

Up to three hours total credit. Graded ABCDE/Y.

591. Thesis. *Graduate standing and consent of instructor.* (3).

Research, to be done under the supervision of a member of the program faculty. The research prospectus and the final paper must be submitted to both the supervisor and at least one other faculty member for approval. Graded ABCDE/Y.

598. Selected Topics. Graduate standing and consent of instructor. (1-3). See AMC 499 for description.

599. Cross-Cultural Research. Graduate standing and consent of instructor. (1-3).

May be taken in conjunction with a university study abroad program, with approved faculty supervision.

Master of Public Administration

Program Director: Albert C. Price

Administrative Specialist: Crystal M. Pepperdine

Program Faculty: Susanne Chandler (SEHS), William Laverty (Political Science), Kristine Mulhorn (Health Care), Tevfik Nas (Economics), Patrick O'Donnell (MPA), Mark Perry (SOM), Albert Price (Political Science), Kathryn Schellenberg (Sociology), Suzanne Selig (Health Care), Charles Vergon (MPA)

The Master of Public Administration Program (MPA) is designed to provide advanced education in administration for persons employed in the public or nonprofit sectors, as well as for those seeking entry to careers in administration. This interdisciplinary program addresses the educational needs of those with specialized, technical, or liberal arts degrees, and of those seeking to expand or update their administrative education. The program draws upon faculty and courses in economics, education, health care, political science, psychology and sociology.

The curriculum is designed around a basic core of courses in administration, which should be taken early in the student's program. The core is supplemented by clusters of more specialized courses in administrative functions and processes and analytical methods. An applied research project and, for those with less than two years administrative experience, an internship, are also part of the curriculum.

The program is designed for the part-time student, with courses offered primarily after 5:30 p.m., Monday - Thursday.

The Master of Public Administration (MPA) degree is available as a general program or with specific concentrations in Administration of Nonprofit Agencies, Criminal Justice Administration, Educational Administration, or Health Care Administration.

Program Mission and Assessment

The mission Master of Public Administration Program is to provide students with conceptual knowledge, analytical skills and practical experience relevant for administrative positions in public and nonprofit organizations. Focused on problem-solving and with central attention to the implementation of policies, the curriculum is intended to focus students' attention on administrative processes, conditions, and rules and their implications for the implementation of policy and the provision of services. The Program participates in the University-wide effort to assess its academic programs. Information on assessment plans, including goals, methods and outcomes is available at http://assessment.umflint.edu.

Requirements for Admission

See "Admission to Rackham School Programs" above for general admission requirements. Those seeking admission to the MPA program are expected to have a knowledge base involving understanding of the operation of public institutions, microeconomic principles, and basic analytical tools. Students are encouraged to fulfill the economic principles requirement through ECN/PUB 571, and the analytical requirement through ECN/PUB 580, but undergraduate courses in microeconomic principles and statistics are acceptable.

MPA General Program

Knowledge Base.

- A. A course in government or public sector administration or relevant experience.
- B. PUB/ECN 571 or a course in microeconomic principles taken within the last five years.
- C. PUB/ECN 580 or a course in statistics taken within the last five years.

Requirements. Thirty-nine credits (forty-two credits for students requiring an internship), as follows:

- A. Core Courses (15 credits). PUB 500, 501; PUB/HCR 506; two from: PUB 502, PUB/ECN 571, PUB/POL 510.
- B. Administrative Functions and Processes (12 credits). From PUB 503, 504, 521; PUB/HCR 518, 524; PUB 519/POL 520, PUB/POL 522, 541; PUB 572; SOC 566.
- C. Analytical Methods (6 credits). From PUB 523; PUB/ECN 575, 580; PUB/HCR 508, PUB/HCR/PSY 527.
- D. Applied Research (6 credits). PUB/HCR 593; one from PUB/HCR 595; PUB 502*; PUB/POL 510*; PUB/ECN 571*, 575*.
- E. Internship (0-3 credits).PUB 590. The internship is not required of those students who are practicing administrators or who have had two years or more experience in an administrative capacity.

*Each of these courses requires a substantial research project similar in scope to PUB 595 and cannot be double counted to meet requirements in any other section of the MPA program.

MPA Concentration in Administration of Nonprofit Agencies

The concentration in Administration of Nonprofit Agencies is designed to serve principally those who seek advancement in careers in the not-for-profit sector. The concentration also will serve, and is appropriate for, those with bachelor's degrees but no current or previous relevant employment. The Nonprofit Administration option might be of particular interest to those with undergraduate degrees in social work, sociology, economics, health care, political science, business, psychology, or communications.

Knowledge Base. Same as for the General Program.

Requirements. Thirty-nine credits (forty-two credits for students requiring an internship), as follows:

- A. Core courses (15 credits). PUB 500, 501, 502; PUB/HCR 506; one from: PUB/ECN 571, PUB/POL 510.
- B. Administrative Functions and Processes (12 credits). From PUB 520, 525, 540; one from PUB 503, 504; PUB/HCR 518.
- C. Analytical Methods (6 credits). From PUB 523; PUB/ECN 575, 580; PUB/HCR 508; PUB/HCR/PSY 527.
- D. Applied Research (6 credits). PUB/HCR 593; one from

PUB/HCR 595; PUB 502*; PUB/POL 510*; PUB/ECN 571*, 575*.

E. Internship (0-3 credits). PUB 590. The internship is not required of those students who are practicing administrators or who have had two or more years of experience in an administrative capacity.

*Each of these courses requires a substantial research project similar in scope to PUB 595 and cannot be double counted to meet requirements in any other section of the MPA program.

MPA Concentration in Criminal Justice Administration

The primary objective of the concentration in Criminal Justice Administration is to provide advanced education in administration and policy analysis to persons already employed in agencies in the criminal justice system. The educational needs of those with specialized, technical, or liberal arts degrees, and others with limited or outdated training in administration are addressed. Designed to serve those seeking to update knowledge to deal with the more complex and numerous tasks facing professionals in the criminal justice system, the concentration includes study of contemporary developments in criminal justice administration, most notably the interdependence between preprosecutorial and post-prosecutorial agencies and functions and the close relationship between administration and policy.

Knowledge Base. Same as for the General Program.

Requirements. Thirty-nine credits (forty-two credits for students requiring an internship), as follows:

- A. Core Courses (15 credits). PUB 500, 501; PUB/HCR 506; two from: PUB 502, 503, PUB/ECN 571, PUB/POL 510.
- B. Administrative Functions and Processes (12 credits). PUB 504; PUB/POL 530; two from: PUB 532, 533, 534; PUB/HCR 518, PUB 519/POL 520, PUB/POL 528, SOC
- C. Analytical Methods (6 credits). From PUB 523; PUB/ECN 575, 580; PUB/HCR 508; PUB/HCR/PSY 527.
- D. Applied Research (6 credits). PUB 593; one from PUB/HCR 595; PUB 502*; PUB/POL 510*; PUB/ECN 571*, 575*.
- E. Internship (0-3 credits). PUB 590. The internship is not required of those students who hold full-time employment in agencies in the criminal justice system.

*Each of these courses requires a substantial research project similar in scope to PUB 595 and cannot be double counted to meet requirements in any other section of the MPA program.

MPA Concentration in Educational Administration

The program concentration in Educational Administration equips the educational administrator with concepts and tools, and provides an informed perspective on the range of problems and responsibilities confronting education today. The Michigan Board of Education has reinstated licensure for school administrators. The standards are published on the website of the State of Michigan Department of Education. The MPA curriculum is aligned with the State Board of Education standards, along with those of the Educational Leadership Constituent Council.

Requirements. Thirty-nine credits as follows:

- A. Core Courses (12 credits). PUB 500, 501; PUB/EDU 567,
- B. Administrative Functions and Processes (15 credits). PUB/EDU 550, 563, 564, 566, 594.
- C. Analytical Methods (6 credits). PUB 508; PUB/EDU 568.
- D. Applied Research (6 credits). PUB/EDU 592; PUB 593.

MPA Concentration in Health Care Administration

The program concentration in Health Care Administration offered in collaboration with the Department of Health Sciences and Administration provides advanced education in administration and policy analysis primarily to persons employed within the health care field. It addresses the educational needs of those with specialized, technical, or liberal arts degrees, as well as others with limited or outdated education or training in administration. Focusing on contemporary developments in health care administration, the program concentration prepares students to deal with the complex tasks and challenges of today's health care system.

Knowledge Base. Same as for the General Program.

Requirements. Thirty-nine credits (forty-two credits for students requiring an internship), as follows:

- A. Core courses (15 credits). PUB 500, 501; PUB/HCR 506; two from: PUB 502, PUB/ECN 571, PUB/POL 510.
- B. Administrative Functions and Processes (12 credits).
 - 1. HCR 500 (required if the student has not taken HCR 315 or equivalent); HCR/PUB 505.
 - 2. Additional credits from PUB 503, 504; PUB/HCR 509, 518, 524, 577, 587, PUB 519/POL 520, PUB/POL 522.
- C. Analytical Methods (6 credits). From ECN/HCR 579; PUB 523; PUB/ECN 575, 580; PUB/HCR 508; PUB/HCR/PSY
- D. Applied Research (6 credits). HCR/PUB 593; one from PUB 595; PUB 502*; PUB/POL 510*; PUB/ECN 571*, 575*.
- E. Internship (0-3 credits). PUB 590. The internship is not required of students who hold full-time employment in agencies of the health care system.

*Each of these courses requires a substantial research project similar in scope to PUB 595 and cannot be double counted to meet requirements in any other section of the MPA program.

Graduate Courses in Public Administration (PUB)

500. Politics, Policy, and Public Administration. Graduate standing. (3).

Examination and critique of concepts of American public administration, and of political, economic, legal and institutional contexts in which policy decisions are made and implemented.

501. Administrative Organization and Behavior. *Graduate standing.* (3).

Organizational structure and its impact on behavior in an administrative environment; role of individuals in organizations; individual goals and organizational goals; selected facets of organizational life, including decision making, leadership, innovation and motivation.

502. Management in Public and Nonprofit Organizations. *Graduate standing.* (3).

Theories of organization and behavioral science concepts and their application to the organization and management of serviceproviding agencies in the public sector; applications of systems analyses and other approaches to the design and delivery of services.

503. Personnel Issues in Public Service. *Graduate standing.* (3).

Personnel administration in governmental and quasi-public organizations, including affirmative action, accountability, professionalization, residency requirements, productivity, and unionization and collective bargaining.

504. Ethical Issues in Public Administration. Graduate standing; a course in public administration; or consent of instructor. (3).

Examination of ethical issues in administrative decision making and administrative actions, with emphasis on administrative processes in a democratic political system.

505. Health Policy. Graduate standing. (3).

Comprehensive analysis of the health policy in the United States, with comparisons to foreign health systems. Systematic and critical review of major ideological influences that have shaped health policy. Policy implementation and management, policy evaluation, and the impact of government health policy on providers, insurers, industry, labor and consumers. *Also listed as HCR 505*.

506. Research Methods. Graduate standing. (3).

Research designs and evaluative models used in health and public administration studies. Special emphasis on developing skills in research analysis and problem identification (research question development). *Also listed as HCR 506*.

508. Evaluation of Services and Programs. *Graduate standing, a course in statistics.* (3).

Formulation, implementation and evaluation of the programs of public agencies. Role and conduct of research in the program process; techniques of effective evaluation and report presentation. *Not open to students with credit for HCR/PUB 403. Also listed as HCR 508.*

509. Healthcare Strategic Planning. *Graduate standing, HCR* 300, 376; or consent of instructor. (3).

Theory, skills and applications of health planning. Health planning in the public sector and strategic planning in the private

sector. Health insurance reform, stakeholder analysis, conditions, quality management, and survival strategies. *Not open to students with credit for HCR/PUB 410. Also listed as HCR 509.*

510. Intergovernmental Relations. *Graduate standing.* (3).

Current developments and trends in intergovernmental relations. Legal and political opportunities and constraints affecting administration in state and local governments. Impact of intergovernmental relations on public policy and delivery of services. *Also listed as POL 510*.

518. Budgeting in Public and Nonprofit Organizations. *Graduate standing.* (3).

Budgetary process in the public sector and nonprofit organizations, with emphasis on application to policy problems. Budgeting as a management and policy-making tool. Planning-programming-budgeting system and cost-benefit analysis. *Not open to students with credit for HCR/PUB 418. Also listed as HCR 518.*

519. Law and Administrative Processes. Graduate standing. (3).

Legal foundations of public administration. Development of regulatory agencies, right to a hearing, delegation of power, judicial review, rulemaking and adjudication, efforts to reform administrative regulation, zoning, and land use planning. *Also listed as POL 520.*

520. Resource Development and Administration. *Graduate standing.* (3).

Principles and practices in fundraising and development; proposal writing and presentation; long-range development planning; membership recruitment and retention; fees and pricing of services; special event fundraising; operation of profitmaking ventures by nonprofit organizations. *Also listed as SWR* 520

[521. Entitlement Program Law and Policy. Graduate standing. (3). Not open to students with credit for PUB 421. Also listed as SWR 521.]

522. Environmental Law and Public Policy. *Graduate standing; POL 120 or consent of instructor.* (3).

Political and administrative aspects of environmental regulation, including major legislation, administrative regulations, and litigation involving environmental issues. Actions of the Environmental Protection Agency (EPA) and the Occupational Safety and Health Administration (OSHA) involving the internal environment of the workplace. *Not open to students with credit for POLIPUB 422. Also listed as POL 522.*

523. Accounting in Government and Non-Profit Organizations. Graduate standing; BUS 201 or consent of instructor. (3).

Accounting practices of government and not-for-profit entities. Accounting cycle; government accounting; budget process; principles of fund accounting; accounting for educational institutions, health care and welfare organizations; use of accounting data. *Not open to students with credit for PUB 423*.

524. Employment, Law, and Public Policy. *Graduate standing.* (3).

Federal and state statutes and Supreme Court decisions relative to employee rights, civil rights and equal employment opportunity examined from the perspective of employers, employees and public policy. Progressive discipline, wrongful discharge, sexual harassment, discrimination, and EEO compliance for supervisors and managers. Not open to students with credit for HCR/PUB 424. Also listed as HCR 524.

525. Legal and Regulatory Issues in Nonprofit Administration. *Graduate standing.* (3).

Analysis of principal legal issues affecting nonprofit organizations, including liability, contracts, personnel procedures, labor-management relations, incorporation and bylaws, tax exemption and reporting requirements, and political advocacy. Examination of legal issues in relations with federal, state and local government and in negotiation of government contracts. *Not open to students with credit for PUB 425. Also listed as SWR 523.*

526. Staffing Public Sector Organizations. Graduate standing. (3).

Staffing as a process and function with a prominent role in a public sector organization's Human Resource Management (HRM) system. Description and prescription of various staffing activities such as job analysis, recruitment, interviewing, assessment centers, planning, selection, performance appraisal, discipline conducted in regulated atmosphere. *Not open to students with credit for PUB 426.*

527. Personnel Selection and Evaluation. Graduate standing; PSY 100 and a course in statistics. (3).

Lecture/seminar. Basic concepts of prediction and evaluation of job performance (with emphasis on reliability and validity), job analysis and criteria development, varieties of selection procedures, including aptitude and achievement measures, personality and motivation measures, interviews and application forms. Government regulation and societal values on selection and evaluation. Not open to students with credit for HCR/PSY/PUB 427. Also listed as HCR 527 and PSY 527.

528. Criminal Justice and the Constitution. Graduate standing; POL 120 or consent of instructor. (3).

Constitutional questions involving the process of law and the procedural rights of the accused. Court decisions related to searches and seizures, wire-tapping and electronic eavesdropping, the law of arrest, police interrogations and confessions, right to counsel, double jeopardy. Students deliver oral arguments and prepare briefs of pending and simulated court cases. Not open to students with credit for POL/PUB 428. Also listed as POL 528.

530. The Administration of Justice. Graduate standing, a course in American government. (3).

Criminal justice as public administration. Policy outputs of the major actors of criminal justice including police, prosecutors, judges, defense attorneys, parole boards, and the legislature. Organization theory, bureaucratic decision-making, political environment, and budgetary constraints. *Not open to students with credit for POLIPUB 430. Also listed as POL 530.*

532. Policing Contemporary Society. Graduate standing; CRJ 185. (3).

Administrative and operational aspects of modern policing such as organization and development of police, recruitment practices, socialization processes, and community relations (including community policing). Political and economic nature of policing as the foundation for critical review of policy and societal issues related to policing. *Not open to students with credit for CRJ/PUB 432*.

533. Incarceration, Community Corrections, and Public Policy. *Graduate standing.* (3).

Review of law, policy, administrative practices, value assumptions and expectations regarding corrections; examination or prison and jail policies and their impact; examination and assessment of alternatives to incarceration. Not open to students with credit for PUB 433.

534. Administration of Trial Courts. *Graduate standing.* (3)s.

Concepts and issues in administration of trial courts. Examination of performance standards, judicial independence, court financing, court reform, access to justice and other issues. *Not open to students with credit for PUB 434*.

538. Multicultural Education: Concepts and Strategies. *Graduate standing.* (3).

Designed to prepare certified and pre-certified teachers in multicultural education. Emphasis on design, development, and practical implementation of teaching strategies, theoretical constructs, and curriculum. *Not open to students with credit for EDE 432 (EDU 438) or PUB 438. Also listed as EDE 532. Graded ABCD>N.*

539. Problems in Criminal Justice Administration. *Graduate standing.* (3).

Detailed investigation of specific areas of interest to criminal justice practitioners, from the perspective of policy analysis and public administration. Topics may include court management, prison reform, juvenile justice, or the federal system of criminal justice. *Graded ABCDE/Y*.

540. Volunteerism and the Independent Sector. *Graduate standing.* (3).

Origins of nonprofit organizations; their social, political, economic, cultural and ideological roles in American society. Major types of nonprofit organizations and their characteristics; current trends in the independent sector. *Not open to students with credit for PUB 440. Also listed as SWR 527.*

541. The Welfare State in Comparative Perspective. Graduate standing; POL 190 and one HIS, POL or SOC course numbered 200 or higher; or consent of instructor. (3).

Historical and contemporary social policy in the United States and Europe. The historical emergence of welfare states, different types of welfare regimes across countries, the relationship between gender and social provision, race and ethnicity and social policy, and possible futures for social provision. *Not open to students with credit for POL/PUB 342. Also listed as POL 541.*

542. Social Welfare Policies and Services. Graduate standing.

History of social reform in the United States. Analysis of values underpinning the focus and intent of services. Emphasis on income maintenance, mental health, child welfare, and criminal justice policy. Also listed as SWR 500.

543. Substance Abuse Policies and Services. Graduate standing.

Analysis of policies concerning substance abuse in the United States. Examination of politics and economics of drug and alcohol industries. Control legislation, funding priorities and remediation models. Also listed as SWR 525.

544. Contemporary Issues in Mental Health. Graduate standing. (3).

Examination of mental health policies and services and their historical context, with particular attention to the mentally ill and developmentally disabled populations and communitybased treatment. Also listed as SWR 510.

549. Community Development. *Graduate standing.* (3).

Examination of the role and structure of local community development efforts. Community Based Development Organizations (CBDO) examined with special emphasis on housing. Administration of Community Development Block Grants; intergovernmental aspects of community development including Federal/State/County linkages. Not open to students with credit for PUB 449.

550. Leadership Theory and Practice. *Graduate standing.* (3).

The role of the administrative leader in public organization. Administrative leadership responsibilities and constraints; strategies for achieving group consensus and for making and implementing decisions about policy and process. Not open to students with credit for EDE 440 (EDU 400) or EDL 410 (EDU 450) or PUB 450. Also listed as EDL 510.

562. Management of Educational Systems. *Graduate standing. (3)*.

Systems approach to the examination of educational administrative leadership tasks, personnel management, and organizational structures which determine interaction within the school organization and between the school and the community. Emphasis on strategies for organizational change in decision making, program design, two-way communication, performance evaluation, staff motivation and morale issues. Particular attention to the area of community relations and involvement of parents, community groups and civic organizations in planning and assessment of school objectives. Also listed as EDL 503.

563. Introduction to School Law. *Graduate standing.* (3).

Administrative, judicial and statutory factors related to educational institutions. Legal aspects of evaluating staff personnel and students; court decisions regarding teacher academic freedom and student rights; legal issues of race, religion, liability, tort and contracts. Also listed as EDL 520.

564. School Finance and Business Administration. Graduate standing. (3).

Principles and issues of public school finance: theory, revenues, expenditures, federal and local finance issues. Overview of principles and practices governing management of business affairs in educational institutions, including accounting, auditing, reporting, and applications of electronic data processing as a management tool. Also listed as EDL 525.

565. Supervision. *Graduate standing.* (3).

Critical analysis of the purpose and functions of organizational supervision. Principles, practices and strategies in the supervision of personnel. Supervisory terms, tasks and perspectives, particularly in school district organizations. Also listed as EDL 527.

566. Curriculum Development. Graduate standing. (3).

Assessment and understanding of the principles involved in curriculum development and design; practices and skills necessary in the organization and implementation of scope and sequence curriculum planning. Internal and external influences impacting curriculum development. Also listed as EDL 529.

567. The Principalship. *Graduate standing.* (3).

Administrative leadership responsibilities and functions of the school building principal. Knowledge and skills for program administration; personnel selection, supervision and evaluation; curriculum planning; joint decision-making; consensus problem-solving; community relations; human relations; staff/student motivation. Emphasis on application of skills and behaviors through simulated problem-solving techniques such as in-basket and case study exercises. Also listed as EDL 531.

568. Instructional Practice and Evaluation. *Graduate standing.*

Contemporary theories of instruction and evaluation with their application to classroom practice. Emphasis on the building and central office administrator as an instructional leader. Also listed as EDL 540.

571. Public Economics. *Graduate standing.* (3).

Application of economic tools to public decisionmaking; emphasis on welfare economics and microeconomic foundation of public expenditure analysis; issues and problems in project evaluation and application of cost-benefit techniques. Also listed as ECN 571.

572. Work, Occupations and Professions. Graduate standing or consent of instructor. (3).

Examination of sociological dimensions of the division of labor; particular emphasis on professional/managerial occupations. Topics may include: occupational recruitment and socialization, occupational and labor market structures, organizational context of work, employment relationship, job satisfaction, labormanagement relations, implications of technological change and globalization, effects of gender, age and race/ethnicity on the work experience. Also listed as SOC 566.

574. Topics on Disability Studies. *Graduate standing.* (1-3).

Interdisciplinary approach to disability studies, including focus on arts and humanities, natural and social sciences, and professional schools. Topics include history and cultural representation of disability, advocacy, health, rehabilition, built environment, independent living, public policy. Team taught with vistiting speakers. Accessible classroom with real-time captioning. Also listed as HCR 574.

575. Cost-Benefit Analysis. Graduate standing; ECN 202 or consent of instructor. (3).

Comprehensive, theoretical overview of cost-benefit analysis. Emphasis on theoretical framework for identification and assessment of costs and benefits from society's perspective. Welfare economics and microeconomic foundation of cost benefit analysis; analytical tools and concepts to identify, measure, and compare all possible allocational outcomes in project evaluation; analysis of distributional effects; project evaluation under risk and uncertainty. Not open to students with credit for ECN/PUB 475. Also listed as ECN 575.

577. Financial Management in Health Care. Graduate standing; HCR 376 or consent of instructor. (3).

Financial workings of hospitals, including third party payor reimbursement methods and requirements; budgeting; working capital analysis; analysis of financial positions; capital requirements and budgeting; external reporting requirements. Not open to students with credit for PUB/HCR 476. Also listed as HCR 577.

579. Economics of Health Care. Graduate standing; ECN 202; HCR 300; or consent of instructor. (3).

Economic analysis of the health care industry and governmental policies in health care. Use of economic tools to determine the probable effects of various proposals on the pattern of health care produced and on the allocation of resources both within the industry and in the economy generally. Not open to students with credit for PUB/ECN/HCR 479. Also listed as ECN 579 and HCR 579.

580. Quantitative Methods for Public Administration. *Graduate standing.* (3).

Application of statistical techniques to problem-solving. Forecasting and timeseries; regression; correlation; variance; cost-benefit analysis. Computer methods used in solving problems of public policy and of health care administration. *Not open to students with credit for PUB/ECN 480. Also listed as ECN 580.*

582. Schools and Communities. Graduate standing. (3).

The role of schools in building community. Emphasis on interplay between schools and community agencies in provision of educational and social services to youth, parents and community members. Concrete programs and policies for connecting schools and communities. *Not open to students with credit for EDE/SWR 402 (EDU/SWK 482) or PUB 482. Also listed as EDE 502 and SWR 502.*

Applied Research Methods for Administrators. Graduate standing. (3).

Introduction to the principles and practices of applied research for administrators. Topical coverage of both qualitative and quantitative data and analytic methods. *Also listed as EDL 670*.

587. Legal Issues In Health Care. Graduate standing, HCR 300 or consent of instructor. (3).

Legal issues, restraints, and problems arising from the organization and delivery of health care services. Liability and malpractice; definitions of death; informed consent; and health care personnel in court. *Not open to students with credit for PUB/HCR 487. Also listed as HCR 587.*

589. Independent Study in Public Administration. *Consent of instructor.* (1-3).

Directed reading or research in a topic relevant to public administration.

590. Internship. *Graduate standing and consent of instructor.* (3).

Students intern in agencies under supervision of agency personnel and faculty, and meet in seminars to discuss field experience and related readings. *Not required of students with two or more years experience in administration. Graded ABCDE/Y*.

591. Special Topics in Educational Administration. *Graduate standing.* (1-3).

Exploration of varying special topics in educational administration. Topic will be Topics to be announced before each offering of the course.

592. Clinical Practice in School Administration. Graduate standing, completion of at least 12 hours in the program. (3).

School-based experience designed to expand candidate's awareness of nature and demands of school administration and to apply administrative theories, concepts and best practices under the mentorship of a veteran cooperating administrator and a university supervisor. Offered on line using computer-mediated technology to link faculty, administrators and candidates at various sites across the region for communication, instruction and networking activities. *Also listed as EDL 660*.

593. Practicum in Research Design. *Graduate standing. Open only to students who have completed at least 18 hours in the MPA program.* (3).

Development of a research design for the Practicum in Applied Research project, working with the instructor and project readers. *Also listed as HCR 593. Graded ABCDE/Y*.

594. Grantwriting and Administration in Public and Nonprofit Agency Settings. Graduate standing. (3).

Comprehensive approach to grantwriting and administration in public agencies and non-profit organizations, with emphasis on elements and characteristics of effective proposals and proven, pratical techniques for their development. Students prepare a grant proposal addressing a need in the organization in which they are currently employed. Offered on-line. *Also listed as EDL 545*.

595. Practicum in Applied Research. PUB 539 or 593. (3).

Implementation of the research design developed in PUB 593. Research conducted in close consultation with a faculty advisor and results presented in a substantial paper demonstrating integration of important topics of public administration. Also listed as HCR 595. Graded ABCDE/Y.

School of Education and Human Services

The University of Michigan-Flint's School of Education and Human Services offers a Master of Arts (MA) degree in Education with-concentrations in Early Childhood Education, Literacy (K-12), Special Education, and Technology in Education, and a concentration in Elementary Education with Certification (MAC program). Specialist endorsements in Early Childhood Education, Reading, Special Education (Cognitive Impairment or Learning Disabilities), and Educational Technology are also available.

Master of Arts in Education

430 David M. French Hall (810) 424-5215 or (810) 762-3260 FAX (810) 424-5539 or (810) 762-3102 Website: http://graduateprograms.umich.edu/

Graduate Program Director: Beverly Schumer Administrative Assistant: Rachel Biocchi Department Chair: Michael Pardales

Program Faculty: Judith Ableser (Education), Sharman Siebenthal Adams (Education), Janice Bernsten (English), Wei Cao (Education), Rose Casement (Education), Aviva Dorfman (Early Childhood Education), Patricia Emenyonu (English), Mary Jo Finney (Education), Patricia Gallant (Education), Susan Gano-Phillips (Psychology), Kazuko Hiramatsu (English), Suzanne Knezek (Education), Suzanne Knight (English), Jeffrey Kupperman (Education), Marianne McGrath (Psychology), Michael Pardales (Education), Linda Pickett (Early Childhood Education), Beverly Schumer (Early Chidhood Education), Sapna Taggar (Education), Traki Taylor - Webb (Education), Li-Hsuan Yang (Education).

The Master of Arts in Education includes concentrations in Early Childhood Education, Literacy (K-12), Special Education and Technology in Education, as well as a concentration in Elementary Education with Certification (MAC program). These degree programs provide advanced study for persons who wish to enhance their knowledge base and professional background in educational fields that have an urban focus. Endorsement programs for Early Childhood Specialist (ZA), Reading Specialist (BR), Cognitive Impairment Specialist (SA), Learning Disabilities Specialist (SM), and Educational Technology Specialist (NP) are also offered.

Endorsement and certification programs are responsive to changes mandated by the Michigan Department of Education. Students should consult the Graduate Programs website or their advisor for the most current information. Special announcements, such as changes in course scheduling, are sent to students' university email accounts.

The Master of Arts Degree Program is designed to offer students:

Awareness of the unique characteristics and needs of diverse

- student populations in an urban setting
- Understanding of principles of motivation and learning and how these translate into the classroom
- Awareness of the historical, sociological, political, and philosophical factors that promote equal educational opportunity
- Opportunity to examine school and classroom environments and to develop strategies that will both improve instruction in elementary and secondary school settings and enhance University/school partnership opportunities
- Enhanced skills as instructional decision makers
- Theoretical and practical information on both integrated and discipline-based curriculum models
- Pedagogical-content knowledge necessary to make appropriate instructional decisions
- Exposure to current research and theory in education
- Knowledge and experience with a variety of educational research techniques
- Opportunity to enhance multidisciplinary understandings through integrated and cross-discipline study

Department Mission and Program Assessment

The mission of the Education Department's teacher education program is to prepare teachers and educational personnel who understand and value the disciplines they teach; comprehend psychological principals and variations of human development, behavior, and potential; recognize factors that promote equal educational opportunity; possess necessary pedagogical-content knowledge; discern ethical obligations; and can demonstrate their ability to use their knowledge in working with children. The program participates in the University-wide effort to assess its academic programs. Information on assessment plans, including methods and outcomes is available http://assessment.umflint.edu.

Admission Requirements

The number of individuals admitted into the Master of Arts in Education program is limited. The application deadline for the MAC program is November 15 for the one-year full-time program beginning in Spring term, and March 15 for the two-year part-time program beginning in Fall semester. Application deadlines for the other concentration programs must be received by July 15 for Fall semester, by Nov. November 15 for Winter semester, by March 15 for Spring semester, and by May 15 for Summer semester. The application deadline for the MAC program is once per year: November 15 prior to the Spring semester for which the applicant is seeking admission. Later applications will be considered if space permits and all materials are complete at the time of submission. Admission is selective and is determined by the Education Department Graduate Committee. Applicants must meet the following requirements to apply for admission:

- A. Bachelor's degree from an accredited institution. (MAC students must have completed a bachelor's degree with not less than 40 semester hours in a program of general or liberal education.)
- B. A valid teaching certificate (not applicable to students applying to the MAC program). As noted in the descriptions which follow, for certain concentrations, individuals with unique expertise in the subject area may petition to have this requirement waived.
- C. 3.0 or higher undergraduate overall grade-point average based on a 4.0 scale.

- D. Completion of an application form for the Master of Arts in Education (available in the Office of Graduate Programs, 251 FWTL). This application must be accompanied by:
 - An official transcript from each college or university attended (for students applying to the MAC program, two official transcripts from the institution granting their bachelor's degree and one from any other institutions attended).
 - · Three letters of recommendation
 - A personal statement of purpose
 - A copy of a currently held teaching certificate (certified teachers only)
 - A \$55 application fee
- E. For students applying to the MAC program:
 - Completion of at least half the credit hours required for each teaching major and minor, with an undergraduate grade point average of 2.75 or higher (based on a 4.0 scale) in each major and minor at the time of application.
 - A passing score on the Michigan Test for Teacher Certification (MTTC) in Basic Skills prior to admission. Conditional admission may be granted pending report of satisfactory test results.
 - Effective Fall 2007, all students must undertake a criminal background check that includes fingerprinting prior to their admission. Students are responsible for any cost incurred for this requirement.

Transfer of Credit

Up to six (6) hours of graduate credit (which includes UM-Flint Graduate Extension) may be accepted for transfer into Master of Arts in Education programs. Students seeking to transfer credits that are not designated as program requirements or electives should contact the program director. (Students in the MAC program may not apply graduate transfer credits toward the requirements for the MA, but they may be used to fulfill the major/minor requirements.)

Grading System

The following grading system is used by the Master of Arts in Education program. Courses in which grades of D or E are earned cannot be used in fulfillment of degree requirements. This scale is different than the 4.0 undergraduate scale used to determine admission to the graduate program and the major/minor grade point average for students applying or admitted to the MAC program.

Honor Points
9
8
7
6
5
4
3
2
1
0
0

Cumulative grade point averages are computed by dividing the total number of honor points by the total number of credit hours attempted. A final grade point average of at least 5.0 is required for successful completion of the Master of Arts in Education.

Academic Rules and Regulations

The Master of Arts in Education requires a minimum of 33 to 36 credits of coursework at the graduate level. The Early Childhood Education endorsement requires 21 graduate credits. The Special Education endorsements each require 18 credits.

All graduate level courses are numbered 500 and higher and are open only to graduate students. Students must be formerly admitted to the concentration program for which they have completed the degree requirements to be recommended for graduation.

Contact the Office of Graduate Programs for further information concerning academic rules and regulations.

MA with Early Childhood Education Concentration

This concentration is designed for individuals who currently have or are seeking careers as educators of young children, birth through eight years of age. It focuses on educational issues and practices appropriate for this population. Coursework outside of the concentration strand has been designed to support and enhance the concepts presented. Students select the thesis option (33 credits) or non-thesis option (36 credits). Individuals who wish to pursue a research career, administrative position and/or doctoral degree in education are encouraged to select the thesis option. The program complies with the standards of the National Association for the Education of Young Children.

The Early Childhood Education concentration is open to individuals who hold elementary teaching certification. Individuals with extensive backgrounds in child development who do not hold an elementary teaching certificate may also be considered for admission. Upon successful completion of the concentration, the Michigan Test for Teacher Certification in Early Childhood Education (Test Code 82), and a minimum of 150 contact hours with each of two of the three following age groups: infant-toddler, preprimary, and K-3rd grade, graduates with teaching certificates from the State of Michigan will be eligible for a certificate endorsement in early childhood education (coded ZA in Michigan).

Requirements.

- A. Core education courses (6 credits) EDE 500 or 601; EDE 670.
- B. Early childhood education strand (18 credits).
 - 1. ECE 500, 522, 541, 645.
 - Two from: ECE 520, 649, 660, 661, 662; EDE 545, 580, 585; EDN 510; EDR 520, 530, 645.
 Students who do not have the State of Michigan Early Childhood Endorsement (ZA) and who wish to receive it with this degree program must elect two courses from ECE 660, 661, 662. Students who already have the ZA endorsement can elect any 6 credits from the list.
- C. Cognate courses (6 credits).

Two from: LIN 520, 521; PSY 500.

- D. Thesis or non-thesis option (33-36 credits).
 - Non-thesis option (6 credits).
 Additional courses listed under A or B2 above, and/or EDE 520.
 - Thesis option (3 credits).
 EDE 679 (prerequisite: completion of at least 24 credit hours).

Early Childhood Certificate Endorsement

This 21-credit-program is developed for individuals who hold elementary teaching certification and wish to add the Early Childhood endorsement to their teaching certificates. All coursework applied toward the endorsement may also be applied toward a Master's degree in Education with a concentration in Early Childhood Education. Upon successful completion of the endorsement program and the Michigan Test for Teacher Certification in Early Childhood Education, individuals will be eligible for a certificate endorsement in early childhood education (coded ZA in Michigan). A minimum of 300 contact hours in two of the three following age groups: infant-toddler, pre-primary and K-3rd grade (150 hours in each setting selected). Students should consult an early childhood advisor before registering for field courses.

Requirements.

- A. Core early childhood courses (18 Credits).
 - 1. ECE 500, 522, 541, 645.
 - 2. Two from: ECE 660, 661, 662.
- B. Electives (3 Credits).

One from: ECE 500, 520, 601; EDE 545 (prerequisite: EDE 432/532), 585; EDN 510; EDR 520, 530, 532, 535, 645; LIN 520, 521; PSY 500.

C. A minimum of 150 contact hours with each of two of the three following age groups: infant-toddler, preprimary, and K-3rd grade.

MA with Literacy (K-12) Concentration

This concentration offers courses that focus on issues and practices related to an integrated language arts curriculum, and material, and prepares teachers for Reading Specialist endorsement. Material is considered in terms of learners from diverse backgrounds and school settings. Coursework outside of the concentration strand has been designed to support and enhance the concepts presented. Students select the thesis option (33 credits) or non-thesis option (36 credits).

The concentration prepares individuals with elementary or secondary teaching certification to apply for Reading Specialist endorsement. Individuals who wish to pursue a research career, administrative position and/or doctoral degree in education are encouraged to select the thesis option. The Literacy concentration complies with the guidelines on Advanced Reading Education of the International Reading Association.

Requirements.

- A. Core education courses (6 credits). EDE 500 or 601; EDE 670.
- B. Literacy strand (18 credits).
 - 1. EDR 543, 544, 641, 645.
 - 2. Two from: EDR 520, 530, 532, 535, 537, 699; EDR 546/ENG 512; EDE 580; EDT 641; ENG 532, 533; ENG/THE 534.
- C. Cognate course (6 credits). LIN 520, 521.
- D. Thesis or non-thesis option (33-36 credits).

Students must select either the 36-credit non-thesis option or the 33-credit thesis option.

- 1. Non-thesis option (6 credits). Additional courses listed under A or B2 above and/or EDE 520.
- Thesis option (3 credits). EDE 698 (prerequisite: completion of at least 24 credit

Reading Specialist Certificate Endorsement

Upon successful completion of the MA in Education with Literacy concentration and the Reading Specialist (Test Code 92) Michigan Test for Teacher Certification, graduates with teaching certificates from the State of Michigan will be eligible for Reading Specialist certificate endorsement (coded BR in Michigan). endorsement allows teachers to teach reading and language arts as a special subject in grades K-12.

MA in Education with Special Education Concentration

This concentration is designed to produce highly qualified K-12 special education teachers with endorsement in Learning Disabilities or Cognitive Impairments. These teachers will demonstrate competencies in research-based and specialized knowledge and skills, and use best practices in the field.

The program requires 36 credits of planned coursework, including two six-week internships. All students complete six special education core courses, the Learning Disabilities or the Cognitive Impairment option, each of which includes three additional courses and two six-week internships, and a research

The program is aligned with State of Michigan requirements, Council for Exceptional Children/National Council for Accreditation of Teacher Educators (CEC/NCATE) standards, and The No Child Left Behind Act (NCLB).

Requirements.

- Core courses (18 credits). EDN 500, 501, 502, 540, 541, 544.
- B. One of the following endorsement options (15 credits).

Learning Disabilities endorsement. EDN 600, 640, 660, 662; EDR 645.

Cognitive Impairment endorsement. EDN 601, 641, 661, 663; EDR 645.

- C. Research seminar (3 credits). EDE 670.
- D. Electives (for transfer students requiring additional credits). EDN 506, 602; other courses approved by advisor.

Special Education Certificate Endorsement

Successful completion of the MA in Education with Special Education concentration, minus the research seminar, fulfills the 33credit State of Michigan requirement for a single endorsement in Learning Disabilities (coded SM in Michigan) or Cognitive Impairment (coded SA) graduates with teaching certificates from the State of Michigan.

Individuals who already possess one endorsement earned at the undergraduate level may complete a second endorsement with as few as 18 additional credits. However, if a Master's degree is desired along with the second endorsement, 36 credits at the graduate level are required. Some of these may be electives approved by the Education Department advisor. Transfer credits from other Special Education programs also may be considered on an individual basis. See the Education Department for further information.

MA with Technology in Education Concentration

This concentration is for individuals who wish to enhance their knowledge and skills in the use of technology as it relates to education, and prepares teachers for Educational Technology endorsement. The concentration focuses on enactment of innovative projects within learning environments, while providing opportunities for students to create individualized projects and build a network with other innovative educators. Courses in the concentration are offered in a mixed-mode format, which blends Internet-based coursework with limited on-campus meetings. Cognates are selected in consultation with an advisor, and should strengthen subject matter knowledge relevant to the student's main area of interest and professional goals. Students are responsible for meeting any cognate course prerequisites.

The concentration is designed for teachers, instructional technologists, educational administrators, and others who seek relevant, practical grounding in tools and concepts related to the use of technology in educational settings. Teaching certification is not required. Students select the thesis option (33 credits) or non-thesis option (36 credits). Individuals who wish to pursue a research careeer, coordinative/administrative position, and/or doctoral degree in education are encouraged to select the thesis option.

Requirements.

- A. Core education courses (6 credits) EDE 500 or 601; EDE 670.
- B. Technology in education strand (18 credits).
 - 1. EDT 510, 542, 543, 660.
 - 2. Two from: EDT 520, 521, 544, 580, 640, 641, 699.
- C. Cognate courses (6 credits).

Two from: AMC 501, 502, 504, 598, 599; ANT 515; ART 509; ENG 512, 533, 548, 574; HIS 531, 557; LIN 520, 521; MUS 522; POL 501; POL/PUB 510; PUB 501, 538, 550, 562, 566; PUB/SWK 582; SOC 545, 569; THE/ENG 534; THE 549; WGS 540. Other courses may be accepted upon approval by the student's faculty advisor and the Director of Graduate Programs in Education.

- D. Thesis or Non-Thesis option (33-36 credits).
 - Non-Thesis Option (6 credits).
 Additional courses listed under A or B2 above and/or EDE 520.
 - Thesis Option (3 credits).
 EDE 698 (prerequisite: completion of at least 24 credit hours)

Educational Technology Certificate Endorsement

For individuals with teaching certificates from the State of Michigan, successful completion of EDT 510, 540, 542, 543, 640 and 660 fulfills the State of Michigan requirement for an endorsement in Educational Technology (coded NP in Michigan).

MA with Elementary Education Concentration and

Certification Specialization (MAC)

This is a 38-credit program leading to an MA in Education degree and elementary teacher certification. The MAC is a teacher preparation program offering student cohorts with mentoring by faculty and cooperating teachers, service-agency and school-based field placements integrated with coursework, and a two-semester sequence of pre-service teaching. A two-year part-time program and an accelerated one-year full-time program are available. Through the MAC program, students enjoy a more enhanced field experiences, pedagogical training in all major disciplines, and earlier eligibility for a Professional Teaching Certificate. Guaranteed course enrollment makes it possible for students to complete this advanced degree within 12 months.

The Elementary Education with Certification concentration is designed for highly motivated students who have an earned bachelor's degree and are seeking an advanced degree and elementary certification. In addition to the requirements for the master's degree, students must complete requirements for one teaching major and minor or three minors to be eligible for a Provisional Teaching Certificate. Prospective students are encouraged to have the majority of coursework completed in their major/minor teaching areas prior to starting courses in education. Approved transfer courses may be applied toward the major/minor requirements. For teacher certification, an undergraduate grade point average of 2.75 or better (based on the UM-Flint undergraduate 4.0 scale) is required in each major and minor. Please contact the program director for further details.

Requirements.

- A. Core education courses (9 credits) EDE 510, 601; EDN 510; EDT 501.
- B. Elementary education concentration (15 credits). EDE 542, 543, 544; EDR 553, 554.
- C. Teaching practicum and student teaching (11 credits). EDE 560, 669, 699.
- D. Majors and minors (50-60 credits).
 - In addition to the requirements for the master's degree listed in A-D, students must complete a teaching major (30-36 credits) and a minor (20-24 credits), or three minors. Approved transfer courses may be applied. Refer to the "Elementary Education Major and Minors" section in the undergraduate education portion of the Catalog for acceptable majors and minors and their requirements.
- E. Passing score on the MTTC in Elementary Education prior to certification. Individuals seeking additional certification areas in grades 6-8 may also take appropriate subject area tests.
- F. Satisfactory rating in Student Teaching.
- G. Proof of completion of an approved course in adult and child CPR and first aid.
- H. Passing MTTC Basic Skills test prior to admission.

Graduate Courses in Early Childhood Education (ECE)

500. (EDU 558). Current Trends and Issues in Early Childhood Education. *Graduate standing.* (3).

Group study of a variety of topics and questions of fundamental

importance and interest to the field of early childhood education; topics may change. Consideration of historical context of issues; examination of educational and professional implications.

520. (EDU 506). Early Childhood Special Education. *Graduate standing.* (3).

Introduction to working with young children (birth-8) with special needs. Developmental and ecological perspectives on young children with special needs, assessment, identification, IFSPs, IEPs, least restrictive environments, early childhood special education and intervention programs, strategies and techniques, ancillary supports, family supports, transition to primary grades and ongoing supports in the primary grades. *Also listed as EDN 520*.

522. (EDU 557). Understanding and Working with Parents of Young Children. *Graduate standing.* (3).

Systematic study of effective communication techniques, strategies for establishing and maintaining collaborative relationships with families, and positive involvement techniques to be used with parents and parent figures of normal and exceptional children. Examination of factors such as socioeconomic conditions, ethnicity, culture, and language as they influence the self-definition of parents and their goals for children. Specific sessions devoted to working with parents of exceptional children.

541. (EDU 555). Developmental Assessment of Young Children's Learning. *Graduate standing.* (3).

Focus on analyzing and evaluating assessment and testing practices in the early childhood classroom, documenting student skills and knowledge, and interpreting program outcomes. Emphasis on communicating assessment results, integrating assessment results from others, and becoming an active participant in development and implementation of Individual Education Plan (IEP) and Individual Family Service Plan (IFSP) goals for children with special developmental and learning needs.

580. Independent Study in Early Childhood Education. *Graduate standing, consent of instructor and advisor.* (1-3).

Research, readings, or special projects tailored to academic needs and interests of the student, on a topic related to early childhood education. Students should consult with advisor about applying credits to an MA in Education specialization. May be repeated to a maximum of 4 credits.

585. Special Topics in Early Childhood Education. *Graduate standing.* (1-6).

Focus on various topics, including intensive study of specific areas related to early childhood education. May follow a non-traditional university calendar schedule and may be delivered in non-traditional formats. Section titles vary based on topic of study. Students should consult with advisor about applying credits to an MA in Education specialization. May be repeated to a maximum of 6 credits when topics vary.

645. (EDU 556). Advanced Study of Early Childhood Integrated Curriculum. Graduate standing. (3).

Comprehensive study of developmentally appropriate integrated

curriculum for children pre-kindergarten through third grade. Special emphasis on the relationship between curricular content and current research and theory regarding children's intellectual, social, emotional and physical development.

649. (EDU 554). Administration, Organization and Operation of Early Childhood Programs. *Graduate standing.* (3).

Introduction to basic principles of administration, organization, and operation of various types of early childhood educational settings. Special emphasis on licensing requirements, selection of materials and equipment, identifying personnel, supervising staff and volunteers, program evaluation, program models, staff development, and community relationships.

660. (EDU 551). Advanced Supervised Field Experience in Infant-Toddler Settings. *Graduate standing.* (3).

Field experience in appropriate infant-toddler setting with joint supervision and advisement from the University and infant-toddler personnel. During weekly seminar sessions, students explore a variety of issues and theories that influence developmentally appropriate practices. *Graded Pass/Fail/Y*.

661. (EDU 552). Advanced Supervised Field Experience in Pre-Primary Settings. *Graduate standing.* (3).

Field experience in appropriate pre-primary setting with joint supervision and advisement from the University and preschool personnel. During weekly seminar sessions, students explore a variety of issues and theories that influence developmentally appropriate practices. *Graded Pass/Fail/Y*.

662. (EDU 553). Advanced Supervised Field Experience in Primary Settings. *Graduate standing.* (3).

Field experience in appropriate primary setting with joint supervision and advisement from the University and preschool personnel. During weekly seminar sessions, students explore a variety of issues and theories that influence developmentally appropriate practices. *Graded Pass/Fail/Y*.

Graduate Courses in Elementary Education (EDE)

500. (EDU 530). Contemporary Issues in Learning and Teaching. *Graduate standing.* (3).

Critical examination of issues of learning, instruction, motivation, assessment, and student diversity pertinent to K-12 educational contexts. Topics investigated from cognitive-developmental, cognitive science, social constructivist, and motivational perspectives. Specific emphasis on facilitating the application of psychological research to problems of practice at classroom and school levels.

501. (EDU **569**). Sociology of Education. Graduate standing; SOC 100 or consent of instructor. (3).

Critical examination of schools and schooling in American society. Contemporary relationship of education to political, economic and social structures of society. Alternative perspectives on education. Not open to students with credit for EDE 401 (EDU 452) or SOC 452. Also listed as SOC

569.

502. (EDU 582). Schools and Communities. *Graduate standing.* (3).

The role of schools in building community. Emphasis on interplay between schools and community agencies in provision of educational and social services to youth, parents, and community members. Concrete programs and policies for connecting schools and communities. Not open to students with credit for EDE/SWR 402 (EDU/SWK 482) or PUB 482. Also listed as PUB 582 and SWR 502.

503. (EDU 570). History of American Urban Schooling. Graduate standing. (3).

Investigation of the development and expansion of urban schooling in the U.S. from the mid-19th century to the present. Special emphasis on organization and administration of schools in central cities.

510. Child Development and Learning for Elementary Teachers. *Graduate standing.* (3).

Exploration of child development and learning, focused on issues related to K-8 settings. Includes human growth and development, diversity, and motivation, as applied to learning and teaching.

520. (EDU **504**). Beginning Teacher Seminar. Graduate standing. (3).

The Beginning Teacher Seminar focuses on the components of professional practice. Students explore issues that impact the effectiveness of the learning environment. *Graded ABCDE/Y*.

521. (EDU 502). Structuring the Classroom for Success. *Graduate standing.* (3).

Developing upon a foundation based on the articulation of students' personal teaching philosophies, exploration and critique of methods for providing classroom environments that enable learning while emphasizing affective development.

522. (EDU 503). Educational Equality. Graduate standing.

Intensive investigation of the interplay among the issues of race, class, and gender as they exist in schools today. Additional emphasis on critique of approaches aimed at the alleviation of problems associated with these themes.

525. (EDU 571). Equality and Excellence. *Graduate standing.* (3).

Investigation of the historical and contemporary competition between equity and excellence in the schools. Focus on the issues and values related to these movements and their effect on urban schools and diverse student populations.

530. (EDU 572). Students in Urban Schools. Graduate standing. (3).

Seminar with rotating topics. Focus on problems encountered by students, and current views on solutions. Among the issues to be covered: marginality, substance abuse, delinquency, violence. **531.** (EDU 573). Seminar in Urban Education. *Graduate standing.* (3).

In-depth study of particular issues related to urban education; topics to vary semester to semester. Among the topics to be included: school restructuring, school-community relations.

532. (EDU 538). Multicultural Education: Concepts and Strategies. *Graduate standing.* (3).

Designed to prepare certified and pre-certified teachers in multicultural education. Emphasis on design, development, and practical implementation of teaching strategies, theoretical constructs, and curriculum. Not open to students with credit for EDE 432 (EDU 438) or PUB 438. Also listed as PUB 538

533. (EDU 540). Girls, Culture and Education. *Graduate standing.* (3).

Interdisciplinary introduction to empirical research and critical inquiry on the education of girls in the U.S. Study of contemporary educational thought on the gendered social and cultural context of schooling. *Not open to students with credit for EDE 433 (EDU 440) or WGS 440. Also listed as WGS 540.*

540. (EDU 500). Classroom Management. *Graduate standing.* (3).

Theory and practice. Mastery of fundamentals of classroom discipline and management. Emphasis on low profile techniques to focus student attention on lesson content. *Not open to students with credit for EDE 440 (EDU 400).*

542. (EDU 505). Seminar in Mathematics Teaching. *Graduate standing.* (3).

Current conceptions and new directions in mathematics, along with attention to issues of diversity.

543. (EDU 525). Seminar in Social Studies Teaching. *Graduate standing.* (3).

Current conceptions and new directions in social sciences, along with attention to issues of diversity. *Not open to students with credit for EDE 343*.

544. (EDU 515). Seminar in Science Teaching. *Graduate standing.* (3).

Current conceptions and new directions in science, along with attention to issues of diversity.

545. (EDU 501). Instructional Issues in Multicultural Education. *Graduate standing; EDE 432 or 532. (3).*

Exploration of issues and concepts of multicultural education. Special emphasis on problems and prospects of teaching to diverse groups and accounting for diverse learners from a variety of perspectives.

560. (EDU **595**). Field Practicum and Seminar. Admission to the Master of Arts in Education program. Passing score on MTTC Basic Skills exam. Graduate standing. (3).

Field placement in elementary school, accompanied by seminar designed as introduction to teaching profession. Students learn about teaching by participating in a public school classroom under the guidance of a mentor/teacher. Emphasis on use of critical thinking, reflection, and clinical observation to describe and analyze the role of classroom teachers in teaching and learning. Graded Pass/Fail/Y.

- 561. (EDU 598). International and Global Perspectives in Education. Graduate standing and PSY 100; consent of instructor. (3).
- 580. (EDU 599). Independent Study in Elementary Education. Graduate standing; consent of instructor. (1-3).

Research, readings, or special projects tailored to academic needs and interests of the student, on a topic related to elementary education. Students should consult with advisor about applying credits to an MA in Education specialization. May be repeated to a maximum of 4 credits. Graded ABCDE/Y.

585. (EDU 507). Special Topics in Elementary Education. *Graduate standing.* (1-6).

Focus on various topics, including intensive study of specific areas related to elementary education. May follow a nontraditional university calendar schedule and may be delivered in non-traditional formats. Section titles vary based on topic of study. Students should consult with advisor about applying credits to an MA in Education specialization. May be repeated to a maximum of 6 credits when topics vary.

587 Special Topics for Professional Development. Graduate standing. (1-6).

Relevant professional development for K-12 professionals. Section titles vary based on topic of study. Students should consult with advisor about applying credits to an MA in Education specialization. May be repeated to a maximum of 6 credits when topics vary.

601. (EDU 520). Contemporary Issues in Educational Policy in a Pluralistic Society. Graduate standing. (3).

Inquiry into historical, philosophical, and social forces that impinge upon contemporary educational policy. Topics include relationships between education and issues of gender, race and class, school reform, and other factors which influence educational thought and practice. Analysis of conflicting points of view emphasized in interpretation of current educational issues and problems.

602. Historical and Current Perspectives of Teaching and School Structure. Admission to Vocational-Teacher Cadet Program. (2).

Review of the development of education in America; structure, funding and governance of public education; current trends and issues facing education, including recruitment of future teachers, certification processes, and employment and teaching in diverse settings.

625. (EDU 604). Using Technology to Investigate Math.

Graduate standing. (3).

Exploration, investigation, application, and evaluation of the use of current technological tools in teaching middle and high school mathematics. Students will focus on innovative uses of technology to support new ways of thinking and learning, with attention to topics such as arithmetic, geometry, algebra and statistics.

669. (EDU 596). Student Teaching in Elementary School. Admission to the Master of Arts in Education program; passing score on MTTC Basic Skills exam; no less than a B- (4.0) in the following courses: EDE 510, 542, 543, 544, 560, 601, EDN 510, EDR 543, 544, EDT 501, overall GPA of at least 5.0; GPA of at least 2.75 (on a 4.0 undergraduate scale) in major and minor subject areas; concurrent election of EDE 699. (6).

Full-time teaching internship in a classroom for 14 weeks under the joint supervision of University and school personnel. Designed to develop the special knowledge and skills required of teachers through supervised full-time participation in classroom work. Weekly seminar provides opportunity for discussion and evaluation of the student teaching experience. Additional clinical experiences and independent study may be required on an individual basis where deemed necessary by University and school personnel. Students should keep other course elections to a minimum during the semester of student teaching. Pass/Fail/Y.

670. (EDU 561). Research Seminar. Graduate standing; a course from specialization strand. (3).

Seminar providing support for professional development and evaluation and execution of research.

698. (EDU 560). Master's Project. Graduate standing; at least 24 credit hours in specialization. (3).

Research, conducted under the supervision of a member of the graduate education faculty, that investigates an issue, problem, or approach in the student's field of study. Graded ABCDE/Y.

699. (EDU 597). Student Teaching Seminar. Admission to the Master of Arts in Education program; concurrent election of EDE 669. (2).

Group discussions, projects, and activities designed by students in student teaching to aid in looking beyond the details of the student teaching experience and in conceptualizing the teaching and learning process. Graded Pass/Fail/Y

Graduate Courses in Educational Leadership (EDL)

503. (EDU 562). Management of Educational Systems. Graduate standing. (3).

Systems approach to examination of educational administrative leadership tasks, personnel management, and organizational structures which determine interaction within the school organization and between the school and the community. Emphasis on strategies for organizational change in decision making, program design, two-way communication, performance evaluation, staff motivation and morale issues. Particular attention to the area of community relations and involvement of parents, community groups and civic organizations in planning and assessment of school objectives. *Also listed as PUB 562*.

510. (EDU 550). Leadership Theory and Practice. Graduate standing. (3).

Theory and practice related to supervision and management functions in public administration; attention to private sector management practices. Traditional and innovative group leadership and motivational techniques. Relationships with superiors, subordinates, peers, clients, customers. Computerassisted and group practice of skills which induce rather than coerce productivity, including skills of conflict resolution and negotiation. Highly clinical. Not open to students with credit for EDE 440 (EDU 400) or EDL 410 (EDU 450) or PUB 450. Also listed as PUB 550.

520. (EDU 563). Introduction to School Law. Graduate standing. (3).

Administrative, judicial and statutory factors related to educational institutions. Legal aspects of evaluating staff personnel and students; court decisions regarding teacher academic freedom and student rights; legal issues of race, religion, liability, tort and contracts. Also listed as PUB 563.

525. (EDU 564). School Finance and Business Administration. *Graduate standing.* (3).

Principles and issues of public school finance: theory, revenues, expenditures, federal/local finance issues. Overview of principles and practices governing management of business affairs in educational institutions, including accounting, auditing, reporting, and applications of electronic data processing as a management tool. *Also listed as PUB 564*.

527. (EDU 565). Supervision. Graduate standing. (3).

Critical analysis of the purpose and functions of organizational supervision. Principles, practices and strategies in the supervision of personnel. Supervisory terms, tasks and perspectives, particularly in school district organizations. *Also listed as PUB 565*.

529. (EDU 566). Curriculum Development. Graduate standing. (3).

Assessment and understanding of principles involved in curriculum development and design; practices and skills necessary in organization and implementation of scope and sequence curriculum planning. Internal and external influences impacting curriculum development. Also listed as PUB 566.

531. (EDU 567). The Principalship. *Graduate standing.* (3).

Administrative leadership responsibilities and functions of the school building principal. Knowledge and skills for program administration; personnel selection, supervision and evaluation; curriculum planning; joint decision-making; consensus problem-solving; community relations; human relations; staff/student motivation. Emphasis on application of skills and behaviors through simulated problem-solving techniques such as in-basket and case study exercises. *Also listed as PUB 567*.

540. (EDU 568). Instructional Practice and Evaluation. *Graduate standing.* (3).

Contemporary theories of instruction and evaluation with their application to classroom practice. Emphasis on the building and central office administrator as an instructional leader. *Also listed as PUB 568*.

545. (EDU 594). Grantwriting and Administration in Public and Nonprofit Agency Settings. *Graduate standing.* (3).

Comprehensive approach to grantwriting and administration in public agencies and non-profit organizations, with emphasis on elements and characteristics of effective proposals and proven, pratical techniques for their development. Students prepare a grant proposal addressing a need in the organization in which they are currently employed. Offered on-line. *Also listed as PUB 594*.

580. Independent Study in Educational Leadership. *Graduate standing, consent of instructor and advisor.* (1-3).

Research, readings or special projects tailored to academic needs and interests of the student in a topic related to educational leadership. Students should consult with advisor about applying credits to an MA in Education specialization. May be repeated to a maximum of 4 credits.

585. Special Topics in Educational Leadership. *Graduate standing*, (1-6).

Focus on various topics, including intensive study of specific areas related to educational leadership. May follow a non-traditional university calendar schedule and may be delivered in non-traditional formats. Section titles vary based on topic of study. Students should consult with advisor about applying credits to an MA in Education specialization. May be repeated to a maximum of 6 credits when topics vary.

660. (EDU 592). Clinical Practice in School Administration. Graduate standing, completion of at least 12 hours in the program. (3).

School-based experience designed to expand candidate's awareness of nature and demands of school administration and to apply administrative theories, concepts and best practices under the mentorship of a veteran cooperating administrator and a university supervisor. Offered on line using computer-mediated technology to link faculty, administrators and candidates at various sites across the region for communication, instruction and networking activities. *Also listed as PUB 592*.

670. (EDU 585). Applied Research Methods for Administrators. *Graduate standing.* (3).

Introduction to the principles and practices of applied research for administrators. Topical coverage of both qualitative and quantitative data and analytic methods. *Also listed as PUB 585*.

Graduate Courses in Education of Students with Special Needs (EDN)

500. (EDU 508). Individuals with Special Needs. Graduate standing. (3).

Provides the teacher with an in-depth understanding of the range of disabilities/exceptionalities for a developmental, learning theory, and ecological perspective through life span. EDN 500 and 501 are the prerequisite courses for the Special Education endorsement.

501. (EDU 509). Special Education in American Schools. *Graduate standing.* (3).

Focus on special education in American schools from organizational, instructional, historical, philosophical, and legal perspectives. Emphasis on range of program delivery systems (inclusion, resource rooms, self-contained classrooms, special and alternative programs), appropriate curriculum and instructional models, including classroom adaptations and assistive technology. Includes site-visits and observations in a variety of programs.

502. (EDU 514). Family, School and Community Collaboration for Students with Special Needs. Graduate standing and prior or concurrent election of EDN 500 or EDN 501. (3).

Knowledge and skills required for work as part of a multidisciplinary team to provide comprehensive services for individuals with special needs. Working collaboratively within the school setting, using co-teaching, team teaching, consultative and specialist models; strategies for collaborating with family and community agencies. Teachers develop skills in effective team-building, understanding leadership styles, improving communication, problem-solving, advocacy, and decisionmaking.

510. (EDU 532). Teaching in the Inclusive Classroom. Graduate standing. (3).

Introduction to and critique of theory and practice of inclusion, education of all students with disabilities in the regular classroom. Philosophy and goals of inclusive education as related to general school and classroom level practices that support the success of all students regardless of ability; skill development in inclusion strategies. Not open to students with credit for EDN 410 (EDU 432).

520. (EDU 506). Early Childhood Special Education. Graduate standing. (3).

Introduction to working with young children (birth-8) with special needs. Developmental and ecological perspectives on young children with special needs, assessment, identification, IFSPs, IEPs, least restrictive environments, early childhood special education and intervention programs, strategies and techniques, ancillary supports, family supports, transition to primary grades and ongoing supports in the primary grades. Also listed as ECE 520.

540. (EDU 513). Behavioral and Instructional Interventions for Students with Special Needs. Prior or concurrent election of EDN 500 or 501. (3).

Techniques for teachers to adapt instruction to meet behavioral and curricular needs of special education students. Interventions including positive behavioral supports, behavioral analysis, development of pro-social, transition, and life skills. Creating effective learning environments to enhance academic success and quality of life including the use of adaptive and assistive technology. Multicultural perspectives on how behavior and learning are shaped within cultural contexts.

541. (EDU 511). Assessment, Identification, and Program Planning for Students with Special Needs. Prior or concurrent election of EDN 500 or 501. (3).

Knowledge and skills required in assessing, teaching, and evaluating students with special needs. Teachers learn to administer and interpret various language, social, emotional, cognitive, academic functional, and adaptive behavior assessments in order to develop individual education plans.

544. (EDU 533). Assistive Technology for Students with Special **Needs.** Prior or concurrent election of EDN 500 or EDN 501.

Introduction to appropriate technology and assistive devices for supporting students with special needs. Assessment of individual needs and the appropriate accommodations, adaptations, and use of technology. Recent technological innovations examined in light of research and legislations about special needs learners. Also listed as EDT 544.

580. Independent Study in Special Education. Graduate standing, consent of instructor and advisor. (1-3).

Research, readings or special projects tailored to academic needs and interests of the student, on a topic related to the education of children with special needs. Students should consult with advisor about applying credits to an MA in Education specialization. May be repeated to a maximum of 4 credits.

585. Special Topics in Special Education. Graduate standing. (1-

Focus on various topics, including intensive study of specific areas related to the education of children with special needs. May follow a non-traditional university calendar schedule and may be delivered in non-traditional formats. Section titles vary based on topic of study. Students should consult with advisor about applying credits to an MA in Education specialization. May be repeated to a maximum of 6 credits when topics vary.

600. (EDU 600). Comprehensive Overview of Learning Disabilities. EDN 500, 501, 502, 540, 541. (3).

Comprehensive overview of children, adolescents and adults with learning disabilities. Current research on identification, definitions, characteristics of specific learning disabilities, etiology, prevalence, ways to support individuals and their families. Observations required.

(EDU 602). Comprehensive Overview of Cognitive **Impairments.** EDN 500, 501, 502, 540, 541. (3).

Comprehensive overview of the range of individuals with cognitive impairments. Current research on identification, definitions, characteristics of cognitive impairments, etiology, prevalence, ways to support individuals and their families.

Observations required.

602. (EDU 612). Issues and Trends in Special Education. *Graduate standing.* (3).

Students analyze and explore current issues and trends in special education. Required of special education students completing more than one endorsement or with transfer credits from another institution; elective for other graduate students interested in the area.

640. (EDU 601). Program Planning, Curriculum and Instructional Strategies for Students with Learning Disabilities. Graduate standing; prior or concurrent election of EDN 600, EDR 645. (3).

Focus on best research based practices involving assessment, IEP planning and methods for specific learning disabilities will be applied in a range of settings. Methods of instruction will involve information-processing, cognitive-developmental, and behavioral approaches including adaptive and assistive technology, academic and curricular modifications, self-determination, transition planning, and community and family supports. In addition, the teacher will learn to apply the skills and roles as a multi-disciplinary team member.

641. (EDU 603). Program Planning, Curriculum and Instructional Strategies for Students with Cognitive Impairments. Graduate standing; prior or concurrent election of EDN 601, EDR 645. (3).

Focus on best research-based practices involving assessment, IEP planning and methods for specific cognitive impairments applied in a range of settings. Information-processing, cognitive-developmental, and behavioral approaches; including adaptive and assistive technology, academic and curricular modifications, self-determination, transition planning, and community and family supports. Teachers learn to apply skills and roles as a multi-disciplinary team member.

660. Learning Disabilities Elementary Practicum. *Prior or concurrent election of EDN 640. (3).*

Six-week full-time student teaching placement in a K-8 setting serving student with learning disabilities, appropriate placement determined by Director of Educational Field Experiences. Teacher candidates required to develop a professional portfolio and demonstrate reflective practice through seminar/discussions.

661. Cognitive Impairments Elementary Practicum. Prior or concurrent election of EDN 641. (3).

Six-week full-time student teaching placement in a K-8 setting serving student with cognitive impairments, appropriate placement determined by Director of Educational Field Experiences. Teacher candidates required to develop a professional portfolio and demonstrate reflective practice through seminar/discussions.

662. Learning Disabilities Secondary Practicum. *Prior or concurrent election of EDN 640. (3).*

Six-week full-time student teaching placement in a 6-12 setting serving student with cognitive impairments, appropriate placement determined by Director of Educational Field Experiences. Teacher candidates required to develop a

professional portfolio and demonstrate reflective practice through seminar/discussions.

663. Cognitive Impairments Secondary Practicum. Prior or concurrent election of EDN 641. (3).

Six-week full-time student teaching placement in a 6-12 setting serving student with cognitive impairments, appropriate placement determined by Director of Educational Field Experiences. Teacher candidates required to develop a professional portfolio and demonstrate reflective practice through seminar/discussions.

Graduate Courses in Reading & Language Arts (EDR)

520. (EDU 543). Reading and Writing Development of Young Children. *Graduate standing.* (3).

Focus on the development of young children's literacy in the home, the developmental patterns of reading and writing that precede conventional literacy, and the ways in which this development may be fostered.

530. (EDU 548). Children's Literature. Graduate standing. (3).

Survey of content and literary merit of books read by the elementary school child. Common and divergent elements of the various forms of literature. Criteria to be considered in selecting books for children. Not open to students with credit for EDR 430 (EDU 448) or ENG 448. Also listed as ENG 548.

532. (EDU 547). Multicultural Children's Literature. *Graduate standing.* (3).

Study of multicultural literature for elementary and middle school children. Focus on literature by and about African Americans, Asian Americans, Native Americans, and Hispanic Americans.

535. (EDU 549). Folklore and Storytelling. Graduate standing. (3).

Study of folklore and its relationship to the storytelling process. Emphasis on techniques of preparing and telling stories. Course involves attendance at the Michigan Storytellers' Festival. Not open for students with credit for EDR 435 (EDU 449) or THE 449. Also listed as THE 549.

537. (EDU 574). Adolescent Literature. *Graduate standing.* (3).

Survey of the content and literary merit of books read by middle and high school students. Consideration of criteria for the selection of reading material; emphasis on approaches for teaching with such materials in a variety of school contexts. Not open to students with credit for EDR 437 (EDU 474) or ENG 474. Also listed as ENG 574.

543. (EDU 545). Foundations of Literacy. *Graduate standing.* (3).

Overview of the reading process with emphasis on theoretical

perspectives and their application to classroom instruction. Language acquisition, word recognition, comprehension, reading-writing connections, and methods of enhancing all students' literacy. Emphasis on study of practices relevant to contemporary classroom.

544. (EDU 546). Integrated Language Arts throughout the Curriculum: Theory into Practice. Graduate standing: EDR 543. (3).

Current approaches to an integrated language arts curriculum, including such topics as connecting literacy instruction to all content areas, whole language, interdisciplinary teaching, materials selection to meet the needs of diverse learners, and authentic assessment. Students apply concepts and methods to unit, course, and curriculum design.

545. (EDU 510). Improvement of Reading in the Middle and **Secondary School.** *Graduate standing.* (3).

Designed to acquaint middle and secondary school teachers with the nature of the reading process, reading curriculum, methods of teaching reading for special content, classroom diagnostic and remedial procedures, materials and equipment, and current reading programs at the middle and secondary school levels. Not open to students with credit for EDR 445 (EDU 410) or ENG 410. Also listed as ENG 510.

546. (EDU 512). Writing for Middle and Secondary School **Teachers.** Graduate standing. (3).

Rationale, theory, and methods for teaching composition to middle and secondary school students in both language arts and content area fields. Concepts of the writing process; techniques for generating, responding to, and evaluating writing; writing across the curriculum; structuring writing courses and programs. Requires field experience in local schools or preparation of an in-service presentation. Not open to students with credit for EDR 446 (EDU 412) or ENG 412. Also listed as ENG 512.

553. Foundations of Literacy for Elementary and Middle **School.** *Admission to the MAC program.* (3).

Exploration of current views of the reading process as it relates to instructional strategies and techniques for improving student learning. Emphasis on language acquisition, word recognition, comprehension, and reading-writing connections as they relate to elementary and middle school teaching.

554. Integrated Language Arts for Elementary and Middle **School.** *Admission to the MAC program.* (3).

Examination of the interrelated nature of reading, writing, speaking, listening, viewing and visually representing. Includes strategies and techniques for developing literacy instruction across content areas, selection of materials to meet the needs of diverse learners, and appropriate classroom assessment techniques.

580. Independent Study in Reading and Language Arts. Graduate standing, consent of instructor and advisor. (1-3).

Research, readings or special projects tailored to academic needs and interests of the student, on a topic related to literacy education. Students should consult with advisor about applying credits to an MA in Education specialization. May

be repeated to a maximum of 4 credits.

585. Special Topics in Reading and Language Arts. Graduate standing. (1-6).

Focus on various topics, including intensive study of specific areas related to literacy education. May follow a non-traditional university calendar schedule and may be delivered in nontraditional formats. Section titles vary based on topic of study. Students should consult with advisor about applying credits to an MA in Education specialization. May be repeated to a maximum of 6 credits when topics vary.

641. (EDU 581). Literacy Assessment in Elementary/Middle **School.** *EDR* 543. (3).

Examination of the role of assessment in students' reading and writing in the K-8 classroom. Informal assessment measures, individualized and small group instructional strategies, standardized testing, and their function in students' literacy development. Not open to students with credit for EDR 441 (EDU 481).

645. (EDU 580). Literacy Instruction for Students Identified with Special Needs. EDR 543. (3).

Introduction to and critique of current practices in literacy (reading, writing, listening, speaking) instruction for children identified as having special instructional needs. Focus on the current theories and understandings of child development and literacy acquisition that support practices in literacy instruction. Use this theoretical framework to investigate literacy practices that will support the success in the area of literacy for all students.

699. (EDU 535). Seminar in Literacy. Graduate standing. (3).

In-depth study of particular issues related to literacy, with topics chosen by the instructor, varying from semester to semester. Specific emphasis on emerging issues, current research, and new perspectives on literacy.

Graduate Courses in Secondary Education (EDS)

580. Independent Study in Secondary Education. Graduate standing, consent of instructor and advisor. (1-3).

Research, readings or special projects tailored to academic needs and interests of the student, on a topic related to secondary education. Students should consult with advisor about applying credits to an MA in Education specialization. May be repeated to a maximum of 4 credits.

585. Special Topics in Secondary Education. Graduate standing, (1-6).

Focus on various topics, including intensive study of specific areas related to secondary education. May follow a nontraditional university calendar schedule and may be delivered in non-traditional formats. Section titles vary based on topic of study. Students should consult with advisor about applying credits to an MA in Education specialization. May be repeated to a maximum of 6 credits when topics vary.

Graduate Courses in Technology Education (EDT)

501. (EDU 521). Using Technology in Education. Graduate standing. (3).

Introduction to uses of technology in education and technological resources for teaching. Focus on innovative uses of computer and the Internet to support student learning. Students participate in or design an educational project that uses technology, and discuss possibilities and challenges of integrating technology into teaching. Assumes basic word processing skills. *Mixed mode:* Meets partially on-line and partially on-campus. Not open to students with credit for EDT 401 (EDU 421).

510. (EDU 522). Foundations of Technology in Education. Graduate standing; concentration in Technology in Education. (3).

Introduction to foundational issues of technology in the field of education; innovative uses of computer and the Internet to support student learning; possibilities and challenges of integrating technology into teaching environments. Students design lesson plan units that integrate technology into the classroom. Basic word processing skills assumed.

520. (EDU 527). Mentor Seminar for Educational Programs. EDT 542. (3).

Online mentoring and management of a web-based educational project, while addressing pedagogy and content in Social Studies, Language Arts, Science, or Visual Arts. Students taking this course meet in seminar format and interact online with K-12 students in diverse geographic locations. Not open to students with credit for EDT 420 (EDU 427).

521. (EDU 529). Technology Skills for Educators. Concentration in Technology in Education and graduate standing or permission of instructor. (1-3).

A series of mini-courses that build skills using computers or other educational technologies. Partcipants may choose from approved mini-courses offered on-line, on campus, and at offcampus locations.

530. Global Program Seminar. Admission to the Global Program. (3).

Provides foundation for concepts and skills used throughout the program, including web development and educational project design. Conducted online.

532. Online Communities for Social Change. Graduate standing. (3).

Students use online tools to promote positive social change, while participating in an online social activism project. Perspectives on online communities, civic education, and use of technology in service learning. Offered online, with some off-line activity as necessary.

542. (EDU 523). Educational Project Design. Graduate standing. (3).

Design, creation, and implementation of web-based educational programs. Students enrolled in this course will apply fundamental concepts in teaching and learning while learning to employ sophisticated web-based technologies in constructing online educational environments. Emphasis is given to designing web environments and encouraging thoughtful and socially responsible interaction among peers, both online and offline. Not open to students with credit for EDT 442 (EDU 423).

543. (EDU 524). Advanced Educational Project Design. EDT 542. (3).

Advanced design, creation, and implementation of web-based educational programs. Students enrolled in this course will apply knowledge of online educational project design to the construction of sophisticated online educational environments. Not open to students with credit for EDT 443 (EDU 424).

544. (EDU 533). Assistive Technology for Students with **Special Needs.** Prior or concurrent election of EDN 500, EDN 501. (3).

Introduction to appropriate technology and assistive devices for supporting students with special needs. Assessment of individual needs and the appropriate accommodations, adaptations, and use of technology. Recent technological innovations examined in light of research and legislations about special needs learners. Also listed as EDN 544.

580. Independent Study in Technology Education. Graduate standing, consent of instructor and advisor. (1-3).

Research, readings or special projects tailored to academic needs and interests of the student in a topic related to technology in education. Students should consult with advisor about applying credits to an MA in Education specialization. May be repeated to a maximum of 4 credits.

585. Special Topics in Technology Education. Graduate standing. (1-6).

Focus on various topics, including intensive study of specific areas related to technology in education. May follow a nontraditional university calendar schedule and may be delivered in non-traditional formats. Section titles vary based on topic of study. Students should consult with advisor about applying credits to an MA in Education specialization. May be repeated to a maximum of 6 credits when topics vary.

640. (EDU 542). Digital Video Production. Graduate standing. (3).

Intensive, hands-on introduction to creating videos for educational purposes, including basic filming and digital editing techniques. Focus both on creating video as instructional material, and on involving students in video production. Additional topics include using video in web sites, curriculum integration, and ethical and legal issues.

641. (EDU 544). Technology: Focus on Literacy Learning and Instruction. Graduate standing. (3).

Focus on the impact of technology on reading, writing, and literacy development. Emphasis on computers, but other technologies also considered. Readings and discussion of theoretical and research literature; hands-on use and evaluation of various software packages that support the processes of reading and writing.

644. (EDU 516). Technological Applications in Science Education. Graduate standing. (3).

How technological tools support new ways of thinking and learning. Assists preservice and inservice teachers of grades 5-12 in evaluating the role of technology, such as robotics, software, web page authoring, and laboratory probeware, in the learning process. Not open to students with credit for EDT 444 (EDU 416).

660. (EDU 526). Classroom Enactment of Educational **Programs.** Graduate standing. (3).

Facilitation of a group of K-12 students participating in a webbased project run by the Interative Communications and Simulations group. Students will also discuss and reflect on pedagogical issues related to the enactment of the project. A choice of projects for various grade levels and subject matter will be available. This class is designed for practicing educators who can dedicate at least 12 hours of instructional time to a project over the course of a semester. Meets online.

690. Global Program Capstone Seminar. Admission to the Global Program. (3)

Focus on synthesis of concepts introduced throughout the program, dissemination of student projects to a broad audience, and strategies for continuing communities of practice beyond the end of the program.

699. (EDU 528). Leadership of Educational Programs. Consent of instructor; EDT 520 or 542 or 660. (3)

This course is designed for graduate students who are interested in becoming leaders of web-based educational projects, while addressing fundamental issues of learning theory and pedagogy related to using technology in education.

School of Health Professions and Studies Programs

The University of Michigan-Flint offers four graduate degree programs through the School of Health Professions and Studies: the Master of Science in Anesthesia (MS), the Master of Science in Health Education (MS), the Master of Science in Nursing (MSN), and the Doctor of Physical Therapy (DPT).

Academic Rules and Regulations

See the School of Health Professions and Studies section of this Catalog for academic rules and regulations pertaining to graduate programs offered by the School.

Master of Science in Anesthesia

Department of Anesthesiology Hurley Medical Center (810) 257-9264 FAX (810) 760-0839 Website: www.umflint.edu/graduate programs 2102 W. S. White Building (810) 762-3172 FAX (810) 762-3003

Director: Lynn L. Lebeck, CRNA, Ph.D. Educational Coordinator: Shawn Fryzel, CRNA, MS Secretary: Deb Berg

Program Faculty: Lynn L. Lebeck (Anesthesia), Steve Myers (Biology), Suzanne Selig (Health Sciences and Administration), Harland Verrill (Health Sciences and Administration), Margaret Ware (Biology).

Lecturers: Jerry Dawes, Hemant Desai, S. Rao Gutta, James Hiscock, Cheryl Hopkins, Mary Lou Jones, Haissam Khouri, Angela Lickey, David Louwsma, Evia McGee, Wayne Prokott, Marti Reigle, John Rzyhak, Karen Selley, Jennifer Stone, Larry Stump, Surya Thota, Janie Tischler, Terri Winterlee, Sally Woodward-Volz, Ronald Zuwala.

The Master of Science in Anesthesia is offered through the Department of Health Sciences and Administration in the School of Health Professions and Studies in conjunction with Hurley Medical Center. The 24 month track enables a registered nurse holding a Bachelor of Science degree in nursing (BSN) or other appropriate baccalaureate degree to become a certified registered nurse anesthetist (CRNA).

The anesthesia program combines academic and clinical anesthesia courses taught at Hurley Medical Center and the University of Michigan-Flint. The program is dedicated to its graduates' achievement of full professional competency. These competencies include selection and administration of preoperative medication, anesthesia, and management of post-anesthetic recovery. Graduates are eligible to sit for the National Certification Examination.

The curriculum provides current knowledge and skills required of a nurse anesthetist to enter into anesthesia practice. Classroom and clinical experience exceed the minimum requirements of the Council on Accreditation for Nurse Anesthesia Educational Programs.

The anesthesia program is open only to registered nurses who meet specific admission requirements. The anesthesia program has received full accreditation status granted by the Council on Accreditation for Nurse Anesthesia Educational Programs through 2014, a specialized accrediting body recognized by the U.S. Department of Education. Council for Accreditation for Nurse Anesthesia Educational Programs, 222 S. Prospect Ave., Ste. 304, Park Ridge, IL 60068-4010, (847) 692-7050.

Program Mission and Assessment

The mission of the Anesthesia Program is to support the graduate education of nurse anesthetists and ensure our graduates have the knowledge, skills and abilities to provide quality anesthesia care and service. The mission is predicated on the common goals of the University of Michigan-Flint and Hurley Medical Center to provide quality education and clinical service to the community. The Program participates in the University-wide effort to assess its academic programs. Information on assessment plans, including goals, methods and outcomes is available at http://assessment.umflint.edu.

Admission to the MS in Anesthesia Program

Admission applications and prospective student guides are available online and from the Office of Graduate Programs. Students who have earned the bachelor's degree at an accredited college or university in the United States, or its equivalent in another country, are considered for admission without regard to sex, color, religion, national origin or ancestry, age, marital status, or handicap.

Admission procedures include filing a completed application, an official transcript from each college or university attended, formal transcript evaluation of degree earned outside the United States (contact the Office of Graduate Programs for further information), a copy of State of Michigan RN licensure, certificate of current advanced cardiac life support and current pediatric advanced life support, GRE scores, three letters of recommendation from: immediate registered nurse supervisor, Director of Nursing School, and RN or CRNA co-worker; and submission of a professional autobiography delineating personal goals of graduate study. Applicants must have at least one year of experience as a registered nurse in a critical care area. Minimum overall grade point averages of 3.0 overall and in required prerequisite undergraduate courses are required. A personal interview is conducted by the admissions committee comprised of faculty of the University of Michigan-Flint and Hurley Medical Center.

Normally fourteen to eighteen students per year are admitted into the two-year clinical track leading to the Master of Science in Anesthesia and CRNA designation.

Drug-Free Learning Environment

To assure a drug-free learning environment which provides the public with safe anesthesia care, the Anesthesia Program has adopted a policy which prohibits the unlawful manufacture, distribution, dispensation, possession or use of an illegal and/or controlled substance and/or alcoholic beverages. Anesthesia students will have a drug/alcohol screen along with their entrance physical examination as required by Hurley Medical Center. Drug/alcohol screening may be requested of a student at any time during the program if there is cause to believe that substance abuse is affecting a student's ability to perform his/her duties.

Admission Criteria

- A. Licensure as a registered nurse in the State of Michigan.
- B. Bachelor of Science degree in nursing (BSN) or other appropriate bachelors degree (such as a BS in Biology) from an accredited institution
- C. Minimum of one year experience in acute care as an RN, preferably in the critical care nursing area (such as SICU, MICU, CCU or ER).
- D. Professional academic competence confirmed by three letters of recommendation from: immediate registered nurse supervisor, Director of Nursing School, and CRNA or RN co-worker.
- E. Overall GPA of 3.0 and a minimum average of 3.0 in the required prerequisite undergraduate courses (or their equivalents).
- F. Submission of a professional autobiography delineating personal goals for graduate study.
- G. Personal interview to be conducted by faculty of the UM-Flint/Hurley Medical Center Anesthesia Program.
- H. Current Advanced Cardiac Life Support Certificate (ACLS) and current Pediatric Advanced Life Support (PALS).
- I. GRE Scores.
- J. Application Fee.

Academic Prerequisites for the University of Michigan-Flint/Hurley Medical Center MS in Anesthesia Program (24 Month Track)

Students are required to complete the following undergraduate

prerequisites prior to admission into this track:

- A. A semester of General or Inorganic Chemistry (CHM 160; CHM 161 preferred, lab strongly recommended).
- B. CHM 220, Organic Chemistry (or equivalent).
- C. Completion of 1 or 2.
 - 1. BIO 135, 167, 168.
 - 2. BIO 111, 326, 432.
- D. One course in statistics.
- E. MTH 111, College Algebra, or demonstrated competence through the math placement test.

Complete information about the clinical is available at the Office of Graduate Programs or the Health Sciences and Administration Department. Applications for this program may be obtained by contacting the Office of Graduate Programs.

Grading System

The following grading system is used by the MS in Anesthesia program. Courses in which grades of C, D or E are earned cannot be used in fulfillment of degree requirements.

Letter Grade	Honor Points
A+	9
A	8
A-	7
B+	6
В	5
B-	4
C+	3
C	2
C-	1
D	0
Е	0

Cumulative grade point averages are computed by dividing the total number of honor points earned by the total number of credit hours attempted. A final grade point average of at least 5.0 is required for successful completion of the MS in Anesthesia program.

Courses in Anesthesia (ANE)

500. Professional Components. Admission to the graduate program in anesthesia. (3).

History and theoretical basis for nurse anesthesia practice. Issues related to anesthesia practice. Ethical issues and their anesthetic implications. Methods of administration in an anesthesia department.

510. Pharmacology I. *Admission to the graduate program in anesthesia.* (2).

Basic pharmacological agents used in anesthesia practice. Pharmacological properties and physiologic effects of these drugs.

511. Pharmacology II. ANE 510. (2).

Accessory drugs used in anesthesia (i.e., sedatives, muscle relaxants). Pharmacodynamics and biological disposition of drugs related to anesthesia practice.

512. Advanced Pharmacology. Admission to the graduate program in anesthesia. (3).

Correlation of basic and clinical pharmacology of adjunct drugs to anesthesia practice. Integration of current research and literature related to adjunct drugs and anesthesia practice.

515. Principles of Anesthesia I. *Admission to the graduate program in anesthesia.* (3).

Principles of physical assessment. Use of anesthetic equipment and underlying mechanisms of operation. Specific anesthetic techniques. Clinical and professional orientation to anesthesia practice.

516. Principles of Anesthesia II. ANE 515 and admission to the graduate program in anesthesia. (4).

Physiologic, pathophysiologic and pharmacological concepts to determine anesthesia care. Anesthesia for specialty procedures (i.e., obstetrics, outpatient).

517. Principles of Anesthesia III. *ANE 516 and admission to the graduate program in anesthesia.* (3).

Basic knowledge of crisis management in anesthesia practice and associated principles of dynamic decison making, triggering events, problem prevention and simulation training.

520. Regional Anesthesia. *Admission to the graduate program in anesthesia.* (2).

Principles of administering specific regional anesthetic techniques. Mechanism of action and pharmacokinetics of local anesthetics. Current trends in regional anesthesia and implications of related research.

533. Regional Human Anatomy. Admission to the graduate program in anesthesia; or consent of instructor.(3).

Regional human anatomy as a foundation for nurse anesthesia students. Emphasis on head, neck, upper extremity and spinal column anatomy. Lecture and laboratory; laboratory includes cadaver dissection. Also suitable for graduate students with an interest in human anatomy.

540. Anatomy and Physiology I. *Admission to the graduate program in anesthesia.* (2).

Theoretical basis for respiration and cellular function. Mechanisms of respiration, cellular transport and electrical potentials. Current research and literature regarding respiratory and cellular physiology.

541. Renal Physiology. Admission to the graduate program in anesthesia. (1).

Advanced treatment of renal physiology as a foundation course for nurse anesthesia students. Lecture. Also listed as BIO 541.

542. Endocrine Physiology. Admission to the graduate program in anesthesia. (1).

Detailed study of the anatomy, physiology and major diseases of the endocrine system of the human. Assessment of function,

description of major clinical manifestations and effects of the anesthetic process on the endocrine hypothalamus, pituitary, thyroid, parathyroid, adrenal and pancreas. Lecture. *Also listed as BIO 542*.

- 543. Anatomy & Physiology II. Admission to the graduate program in anesthesia. (2).

 Mechanisms underlying cardiovascular physiology. Physiological changes associated with normal and abnormal cardiovascular states. Integration of current cardiovascular research into physiological functions.
- **544.** Neuroanatomy and Physiology. Admission to the graduate program in anesthesia. (3).

Principles of neuroanatomy and neurophysiology as a foundation course for nurse anesthesia students. Lecture and recitation/laboratory. *Also listed as BIO 544*.

545. Pathophysiology. *Admission to the graduate program in anesthesia.* (2).

Pathophysiologic basis of various disease states. Correlation of anesthesia management to pathophysiologic changes. Respiratory disorders, treatment and anesthetic implications.

550. Applied Chemistry & Physics. *Admission to the graduate program in anesthesia.* (2).

Theoretical basis of biochemical processes and physical laws related to anesthesia. Current biomedical technology used in anesthesia practice and the chemical/physical mechanisms of operation.

551. Biochemistry for Anesthetists. One semester of sophomore level organic chemistry (e.g. CHM 220) and admission to the graduate program in anesthesia; or consent of the Chemistry department. (2).

Relationships involving basic biochemical principles and anesthetic agents used in a clinical setting. Focuses on the biological effects of anesthetic agents at the molecular level. *Also listed as CHM 551*.

560. Introduction to Research. *Admission to the graduate program in anesthesia.* (2).

Basic components of research process. Steps in developing a research project. Critical review of research studies. Formation of research questions and hypotheses, literature review and methodology. Exploratory studies, construction and analysis of experiments and other research designs; fundamental statistical concepts for health care research.

580. Pharmacology III. (1).

Discuss aspects of additional medications utilized in anethesia practice.

581. Seminar I. *Admission to the graduate program in anesthesia.* (1).

Current practices and trends in anesthesia. Literature and research related to current anesthesia practice. Anesthesia case management and any related complications.

582. Seminar II. Admission to the graduate program in anesthesia. (1).

Current practices and trends in anesthesia. Literature and research related to current anesthesia practice. Anesthesia case management and any related complications.

583. Seminar III. *Admission to the graduate program in anesthesia.* (1).

Current practices and trends in anesthesia. Literature and research related to current anesthesia practice. Anesthesia case management and any related complications.

585. Thesis Development I. Admission to the graduate program in anesthesia. (1).

Development of a masters project which addresses a current area of anesthetic practice. *Graded ABCDE/Y*.

586. Thesis Development II. Admission to the graduate program in anesthesia. (1).

Further development of a masters project which addresses a current area of anesthetic practice. *Graded ABCDE/Y*.

587. Masters' Thesis. *Admission to the graduate program in anesthesia.* (3).

Completion of a masters project which addresses a current area of anesthetic practice. *Graded ABCDE/Y*.

590. Clinical Practicum II. Admission to the graduate program in anesthesia. (1).

Continuation of clinical skill development with more advanced clinical anesthesia skills and techniques. Student manages more complicated clinical assignments and patients with various disorders. *Graded Pass/Fail*.

591. Clinical Practicum III. ANE 590. (2).

Continuation of ANE 590 with gradual development of more advanced clinical anesthesia skills and techniques. *Graded Pass/Fail*.

592. Clinical Practicum IV. ANE 591. (2).

Continuation of ANE 591 with gradual development of more advanced clinical anesthesia skills and techniques. *Graded Pass/Fail*.

593. Clinical Practicum V. ANE 592. (2).

Continuation of ANE 592 with gradual development of more advanced clinical anesthesia skills and techniques. *Graded Pass/Fail*.

594. Clinical Practicum VI. ANE 593. (2).

Continuation of ANE 593 with gradual development of more advanced clinical anesthesia skills and techniques. *Graded Pass/Fail*.

Master of Science in Health Education (HED)

2102 W.S. White Building (810) 762-3172 FAX (810) 762-3003

Website: http://www.umflint.edu/hsa

Program Director: Dr. Suzanne Selig

Program Faculty: Professor Suzanne Selig; Associate Professors Kristine Mulhorn and Shan Parker; Assistant Professor John Sonnega; Lecturers Kimberly Barber and Carrie Chanter.

The Master of Science in Health Education makes an advanced degree possible for those students already working in the field, as well as students who have recently completed an undergraduate degree in health education or a related field. This program offers instruction in health behavior change theory and practice; program planning; marketing, health communications and program evaluation; and research techniques.

The Master of Science in Health Education is designed to accommodate both part-time and full-time students and working health professionals by offering evening courses. Full-time students are able to complete the program within 18 months.

Masters level health educators have employment opportunities in a variety of professional settings. These include worksite health promotion programs, non-profit community health agencies, university student health centers, state and local health departments, for-profit corporations, governmental agencies, faith-based settings, and health care systems such as hospitals, clinics, and managed care plans. There is a wide range of jobs filled by graduates. Examples include director of a corporate wellness program, health educator for an AIDS Prevention program, or a researcher on a disease management or prevention program.

Necessary skills for health educators include the assessment of community assets and needs, cultural competence to assure effective health intervention strategies for diverse populations, and the ability to interact effectively with the community. Typical responsibilities of a health educator include the preparation and dissemination of health education materials, coordination and management of health education programs, and the planning, implementation, and evaluation of health education programs.

This program is designed to provide students with the required competencies needed to take the Certified Health Education Specialist (CHES) exam.

Program Mission and Assessment

The mission of the Health Education Program is to promote the health and well-being of the community by preparing community-oriented health educators with expertise in theory-based practice, to contribute to the knowledge base of health education, and to serve as a resource to the community. The Program participates in the University-wide effort to assess its academic programs. Information on assessment plans, including goals, methods and outcomes is available at http://assessment.umflint.edu.

Admission Requirements

An application packet may be requested from the Office of Graduate Programs or from http://graduateprograms.umflint.edu. Admission decisions are made by a committee upon review of the following:

A. Baccalaureate degree from an accredited institution.

- B. Minimum GPA of 2.8.C. Written statement of purpose.
- D. Prerequisite courses.
- E. GRE scores (optional).
- F. Three letters of recommendation.

Transfer Credits and Course Waivers

Up to six graduate credits may be transferred and applied to the program from either another accredited institution or taken as a Life Long Learning student at UM-Flint.

Additional credits will be reviewed for students on an individual basis. This flexibility offers students every opportunity to pursue their interests in health education.

Grading System

The following grading system is used by the MS in Health Education program. Cumulative grade point averages are computed by dividing the total number of honor points earned by the total number of credit hours attempted.

Letter Grade	Honor Points
A+	9
A	8
A-	7
B+	6
В	5
B-	4
C+	3
C	2
C-	1
D	0
E	0

Students must receive a minimum of B- in any course taken while in the MS in Health Education program. Any course or grade lower must be re-taken for an acceptable grade the next semester in which it is offered, and can only be re-taken once. A final grade point average of at least 5.0 is required for successful completion of the MS in Health Education program.

Prerequisites.

- A. BIO 167 or 168 or an equivalent course in anatomy and physiology.
- B. COM/THE 210 or an equivalent course in public speaking.
- C. PSY 237 or an equivalent course in developmental psychology.

Requirements.

- A. Health education foundations (18 credits). HCR 500; HED 540, 541, 542, 543, 544.
- B. Methods (12 credits). HCR/PUB 506; HED 545, 546, 547.
- C. Electives (6 credits). Six additional credits not used in "A" above from: PUB/HCR 505, 577; HCR/PSY/PUB 527; HED 562, 584.
- D. Internship (0-6 credits). HED 590. The internship is not required of those currently in professional health education positions.

- E. Thesis Preparation Seminar (1 credit). HED 594 (optional).
- F. Thesis/Applied Project (3 credits). HED 595 or HED 596.

Courses in Health Education (HED)

- 540. Health Education Theory and Strategies. Admission to the Health Education program or consent of instructor. (3). Basic overview of theories and strategies used in health promotion to influence behavior change among individuals, organizations, and communities. Theories including the transtheoretical model of stages of change, health belief model, social learning theory, and value expectancy. Strategies including various educational approaches, mass media, social marketing, focus groups, and normative group processes as applied to the community and organizations.
- 541. Program Planning and Program Design. Admission to the Health Education program. HED 540 strongly recommended (3).

Focus on knowledge and skills needed to plan and design effective health education programs for various populations. Topics include examination of methods to identify priorities, strategies to assess community strengths and needs, overview of planning models, program intervention design, implementation, and evaluation.

542. Administration and Management of Health Education **Programs.** Admission to the Health Education program. (3).

Focus on specific skills needed to administer health education programs including budgeting, effective personnel selection and evaluation, evaluation of program goals and objectives and coordinating activities with other disciplines. Topics include: strategies for program management, conflict management, organizational behavior, quality assurance, and fund-raising.

543. Community Assessment. Admission to the Health Education program. (3).

Provides a broad understanding of the concepts involved in the process of community organization, including assessing the socio-political structure of communities, developing strategies for change within a community, and the role of the health educator in this process. Topics include: definition of a community, a review of social factors that impact disease, community assessment methods, models of community organization, and strategies of community organizing. Attention to skills for work with diverse groups and the role of formal and informal networks.

544. Psychosocial Aspects of Health. Admission to the Health Education program. (3).

Examination of the social, behavioral, and educational aspects of disease prevention and health promotion. Discussion of different interventions and strategies, which address community and psychosocial aspects of public health, in an effort to explain how social, cultural, economic and political factors influence perceptions of health. The relationship of health knowledge, beliefs, attitudes, intentions, and behavior to preventive strategies, illness, sickrole, and health utilization behaviors also explored.

545. Health Communication. Admission to the Health Education program. (3).

Introduction to the theory and practice of planning, implementing and evaluating marketing and communication programs in health promotion. Topics include the development of effective health communication strategies, basic health communication literacy, use of theory to design messages, utilization of emerging technologies and review of presentation skills. Examination of the use and effectiveness of mass media to both report health-related news and to promote health behavior change.

546. Evaluation of Health Education and Promotion Programs. Admission to the Health Education Program. (3).

Overview of program evaluation, including the methods and procedures for planning and conducting evaluation of public health education programs and interventions. The evaluation process, selecting the appropriate type of evaluation design, methodological issues, development and selection of valid and reliable measures, and guidelines for compiling, analyzing, summarizing, and reporting results of evaluations.

547. Biostatistics for Health Professionals. HCR 500 and admission to the Health Education Program. (3).

Statistical analysis of data for professionals in health education with emphasis on variability, hypothesis testing, significance levels, confidence intervals and application of statistical tools commonly used in public health and health education, e.g. SPSS. No prior knowledge of statistics required.

562. Cultural Competence in Health Care. (3)

The multi-dimensional nature of cultural competence and complexities in providing heath service to culturally diverse populations. Students' self-awareness, knowledge and skills addressed through discussions of reading, videos and practice exercises. *Not open to students with credit for HCR 362*.

584. Special Topics in Health Education. *Graduate standing.* (3)

Current research topics, applications and issues in health education. Topics announced before each offering of the course.

588. Directed Studies in Health Education. (1-3).

Directed reading or research on a topic relevant to health care/health education, under instructor's supervision. *By special arrangement only. Graded ABCDE/Y*.

590. Internship. *Admission to the Health Education program and consent of instructor.* (3-6).

Students intern in agencies under supervision of agency personnel and faculty, and attend seminars to discuss field experience. Not required of those currently in professional health education positions. Graded Pass/Fail/Y.

594. Thesis Preparation Seminar. Eighteen credits from: HED 540, 541, 542, 543, 544, 545, 546; admission to the Health Education program. (1).

Overview of the research process, designed to help students

develop realistic timelines, enhance information about the process, and prompt students to use their classwork to prepare for the thesis.

595. Thesis. Graduate standing, HED 594, and consent of instructor. (3).

Research, to be done under the supervision of a member of the program faculty. The research prospectus and the final paper must be submitted to both the supervisor and at least one other faculty member for approval. *Graded ABCDE/Y*.

596. Applied Project in Health Education. *Graduate standing, HED 594, and consent of instructor.* (1-6).

Application of health education knowledge, skills, and methods to identification and understanding of a significant health issue, problem, or gap in service in a "real-world" setting. *Graded Pass/Fail/Y*.

597. Thesis Continuation. *Graduate standing, HED 595, and consent of instructor.* (1).

Continuation of thesis preparation.

Master of Science in Nursing (MSN)

Department of Nursing 2180 William S. White Building

(810) 762-3420 FAX: 810-766-6851

MSN Web Address: http://www.umflint.edu/nursing.msn

Assistant Director for Graduate Program: Connie Creech Program Faculty: Associate Professors Janet Barnfather, Marilyn McFarland; Assistant Professor Hiba Wehbe-Alamah; Clinical Assistant Professor Kristi George; Adjunct Professor John Thornburg; Lecturers Charles Johnston, D. Kay Taylor; Adjunct Clinical Lecturer Diane Towers.

The University of Michigan-Flint Master of Science in Nursing (MSN) part time program produces skilled nurse practitioners in Primary Health Care. As Advanced Practice Nurses (APNs) the graduates: 1. Make independent and collaborative health care decisions; 2. Engage in active practice as expert clinicians who perform history and physical exams, interpret laboratory and diagnostic tests, treat common illnesses and injuries, prescribe medications (depending on state practice laws) and evaluate outcomes; 3. Demonstrate leadership as consultants, educators, and beginning researchers; and 4. Participate in legislative and professional activities to promote professional advancement and health related social policies. Career opportunities for APNs are continually expanding and include positions in hospitals, outpatient clinics, home health care agencies, schools, universities, industry, nursing homes, wellness centers, employee health programs, physicians' office practices, community mental health agencies, public health agencies and private practice.

The program consists of three tracks: the Family Nurse Practitioner (FNP) track, the Adult/Psychiatric Mental Health Nurse Practitioner (PMHNP) track, and the Adult Nurse Practitioner (ANP) track. The FNP track prepares advanced practice nurses who provide nursing and selected medical services to individuals, families and groups, emphasizing health promotion

and disease prevention across the life span. They manage acute and chronic illnesses and treat minor injuries. Graduates will be eligible to sit for the Family Nurse Practitioner national certification examination. Credentialed to practice independently, they value and seek ongoing consultative relationships with the interdisciplinary health care team.

The Adult/Psychiatric Mental Health Nurse Practitioner (PMHNP) track is unique and on the cutting edge of mental health care. Changes in the Michigan Mental Health Code have paved the way for new opportunities for PMHNPs. PMHNPs are capable of medical, pharmacological and psychotherapeutic intervention in acute, crisis and chronic situations, as well as being skilled in disease prevention and health maintenance planning. Credentialed to practice independently, they value and seek ongoing consultative relationships with the interdisciplinary health care team. Graduates will be qualified to sit for the Psychiatric Mental Health Nurse Practitioner certification examination as well as the Adult Nurse Practitioner examination.

The Adult Nurse Practitioner is a provider of direct health care services. Within this role, the ANP synthesizes theoretical, scientific and contemporary clinical knowledge for the assessment and management of both health and illness states. The population in adult primary care practice includes adolescents and young, middle and older adults. The particular expertise of the adult primary care nurse practitioner emphasizes disease prevention, health promotion, and the management of patients with acute and chronic multi-system health problems. Delivering patient care with respect to cultural and spiritual beliefs and making health care resources available to patients from diverse cultures is an important role component. An interdisciplinary collaborative model of delivering care is valued. Graduates will sit for the Adult Nurse Practitioner certification examination.

The MSN program faculty are sensitive to students' busy lives and as such have designed the program for the part time student. Lecture/discussion courses are generally offered on a single day each week. The research/theory component has been designed as five (5) one-credit courses, which will culminate in a completed Masters Thesis. Students are permitted to work in pairs to accomplish their scholarly project. Students are expected to complete the program in three years. A "rolling" admission policy allows applications to be submitted throughout the year. Completion of the MSN application is required through the Office of Graduate Programs. Once the student completes the application packet, the packet is reviewed. Upon favorable review of the materials, the candidate is invited for a personal interview with a faculty team comprised of two graduate faculty members. This is followed by a letter to the student supporting the acceptance or rejection of the candidate. The application deadline for priority acceptance is May 1.

Transfer Credit

Up to nine hours of graduate credit may be accepted for transfer into the MSN program. Transfers are made in accordance with the policies of the MSN graduate program committee.

Program Mission and Assessment

The mission of the University of Michigan-Flint's Masters of Science in Nursing Program is to prepare advanced practice nurses who will deliver high quality, cost effective primary health care. Our graduates meet the health care needs of society in general and underserved populations specifically, through theory based nursing practice and scholarly endeavors. The graduate program faculty promote the mission and vision of the University of Michigan-Flint and the University of Michigan-Flint Department of Nursing by supporting the further development of critical thinking, humanistic and scientific inquiry, and understanding human and cultural diversity. The mission is enhanced by faculty maintaining clinical expertise, academic excellence and a sensitivity to our partners in the diverse communities which we serve. The Program participates in the University-wide effort to assess its academic programs. Information on assessment plans, including goals, methods and outcomes is available at http://assessment.umflint.edu.

Admission Requirements

For Students with a BSN

- 3 or more credits of college level chemistry (C+ or better)
- College level statistics (C+ or better)
- Current Michigan RN license
- Written statement of professional philosophy
- Written statement of goals
- 3 letters of selected professional references
- Interview with Graduate Faculty
- 3.0 Undergraduate GPA

Additional Requirements

For Students who do not have a BSN degree

- Letter of Intent
- Undergraduate Research*
- Undergraduate Bioethics*
- Basic Health Assessment*
- NUR 300*
- NUR 410*

Grading System

The following grading system is used by the MS in Nursing program. Courses in which a C or below is earned cannot be used in fulfillment of degree requirements.

Letter Grade	Honor Points
A+	9
A	8
A-	7
B+	6
В	5
B-	4
C+	3
C	2
C-	1
D	0
E	0

Cumulative grade point averages are computed by dividing the total number of honor points earned by the total number of credit hours attempted. A final cumulative grade point average of at least 5.0 is required for successful completion of the Master of Science in Nursing program. See student Progression Statement in the Graduate Student Handbook.

Accreditation

The curriculum for the University of Michigan-Flint Master of Science in Nursing Graduate Nurse Practitioner Program is grounded in criteria for advanced nursing practice developed by five major nursing organizations:

- National Organization of Nurse Practitioner Faculties (NONPF)
- American Nurses Association (ANA)
- American Association of Colleges of Nursing (AACN)

^{*}Grade of B or better required.

- American Academy of Nurse Practitioners
- National Task Force on Quality Nurse Practitioner Education

The UM-Flint Master of Science in Nursing was granted full 10year accreditation in April 2006 by the Commission on Collegiate Nursing Education, the accrediting body of the American Association of Colleges of Nursing. You may contact them at CCNE; One Dupont Circle, NW, Suite 530, Washington, DC 20036-1120; telephone (202) 887-6791; fax (202) 887-8476.

Part-Time Curriculum

A minimum of 40 credits is required to complete the MSN. ANP-40 credits FNP-49 credits PMHNP- 53 credits.

Year One:

Fall Semester

NSC 503 Graduate Pathophysiology NSC 502 Epidemiology*

NUR 501 Health Promotion*

Winter Semester

NSC 504 Graduate Pharmacology*

NUR 520 Physical Diagnosis Adult Theory

NUR 595 Research/Theory I

Spring/Summer Semester

NUR 521 Physical Diagnosis Adult Practicum

NUR 596 Research/Theory II

Year Two:

Fall Semester

NUR 524 Mgt Adult Acute/Chronic Theory

NUR 525 Mgt Adult Acute/Chronic Practicum (2)

NUR 597 Research/Theory III

Winter Semester

NUR 507 Dynamics of Family Counseling

NUR 526 Pediatric H&P Theory and Practicum**

NUR 531 Women's Health Theory & Practicum

NUR 598 Research/Theory IV

Spring/Summer Semester

NUR 525 Mgt Adult Acute/Chronic Practicum (2)

NUR 560 Psychiatric Diagnosis Theory***

NUR 561 Psychiatric Diagnosis Practicum***

Year Three:

Fall Semester

NUR 528 Mgt Pediatric Acute/Chronic Theory **

NUR 529 Mgt Pediatric Acute/Chronic Practicum**

NUR 535 Care of The Older Adult Tapt

NUR 599 Research/Theory V

NUR 570 Individual/Couple/Family Theory***

NUR 571 Individual/Couple/Family Psychotherapy

Practicum***

Winter Semester

NUR 510 Office and Minor Emergency Procedures

NUR 540 Advanced Practice Role Theory

NUR 541 Advanced Practice Role Practicum

NUR 580 Group Psychotherapy Theory***

Thesis Requirement:

NUR 594 Thesis Development

Two credits total required. Credits may be taken any time prior or concurrent with NUR 599.

*NCS 501, 502, and 504 may be offered online.

**NUR 526, 528, and 529 are required only for students who will sit for the Family Nurse Practitioner certification exam.

***Required for those who will sit for the PMHNP exam and required for those who will sit for the Adult NP Certification exam

Nursing Support Courses (NSC)

502. Epidemiology. (1).

Provides a basic understanding of epidemiology as the study of disease within a population and its distribution. Exploration of significant contemporary problems of global and community concern discussed; exploration of current research for theories of probable cause and effect.

503. Graduate Pathophysiology. (3).

In-depth exploration of physiological alterations associated with various disease processes across the lifespan. Provides data for the development of clinical decision-making necessary in the diagnosis and management of disease. Biochemistry content is an integral component of this course.

504. Graduate Pharmacology. (3).

In-depth exploration of phases of pharmacokinetics, including those chemical processes that impact on drug absorption, distribution, metabolism and excretion. Highlight on clinical applications of major drug categories in management of illness through safe prescribing, dosing and evaluation of efficacy.

552. Psychopharmacology. (3).

Based on knowledge gained in NSC 504, builds expertise in the pharmacokinetics of drugs used in the treatment of psychiatric disorders. Emphasis on safe management of psycho pharmacotherapy, including concomitant use with other drug classifications and physical disorders.

Courses in Nursing (NUR)

501. Health Promotion. *Concurrent enrollment in NSC* 502. (2).

Built on the premise that health is a state of physical, emotional, mental and spiritual well being, not merely the absence of disease prevention explored as they relate to individuals, families, community and cultural groups.

507. Dynamics of Family Counseling. (3).

Designed to assist the Family Nurse Practitioner in thinking about the family system while providing primary health care. Bowen Family Systems Theory and Schaal's Model of Family Practice provide the theoretical underpinnings along with other mid-range theories. Assessment and intervention in selected mental health problems across the lifespan (substance abuse, family violence, depression); appropriate referral process and community resources.

510. Office and Minor Emergency Procedures - Theory & **Practicum.** (1).

Theory and technical skills basic to the beginning management of common office and emergency situations. Supervised laboratory practice for basic suturing techniques, application of splints and casts, incision and drainage of abscesses, management of the hostile patient, collection of medical evidence and others. Graded ABCDE/Y.

520. Physical Diagnosis Adult Theory. (2).

Theoretical and technical information needed to complete the database and diagnostic work-up of the adult. Emphasis on differential diagnosis and clinical decision-making.

521. Physical Diagnosis Adult - Practicum. (3).

Students gain experience in assessment diagnostic work-up, and written and verbal presentation of clinical data; exposure to diagnostic testing. Collaboration with a clinical preceptor to enhance acquisition of differential diagnostic skills. 12 supervised clinical hours weekly. Graded ABCDE/Y.

524. Management of Adult Acute/Chronic Problems -**Theory.** (3).

Theories and concepts from physical, behavioral and holistic sciences as they relate to diagnosis and management of common acute/chronic episodic health problems for the adult. Special attention to problems endemic to underserved populations. 16 supervised clinical hours weekly.

525. Management of Adult Acute/Chronic Problems -Practicum. (2).

Application of critical thinking using theories and concepts of physical, behavioral and holistic sciences, as well as medical decision-making applied to diagnosis and management of common acute/chronic episodic health problems of the adult. Emphasis on critical thinking in the clinical setting. To be taken twice for a total of 4 credits.

526. Pediatric History and Physical - Theory & Practicum. (2).

Draws upon theories and techniques of physical, psychosocial and family systems science to develop a complete database including history, physical examination and developmental profile of the child. Opportunity to apply these skills in well-child environments with emphasis on the underserved at risk pediatric population. *Graded ABCDE/Y*.

528. Management of Pediatric Acute/Chronic Problems -Theory. (3).

Theoretical and technical information needed for assessment and diagnostic work-up of the pediatric population experiencing acute/chronic episodic health problems. Emphasis on differential diagnosis and clinical decisionmaking in the pediatric environment.

529. Management of Pediatric Acute/Chronic Problems -Practicum. (4).

Students apply theories and concepts of physical, behavioral and holistic sciences, clinical decision-making to diagnosis and management of common acute/chronic episodic problems of the pediatric age group. 16 supervised clinical hours weekly.

531. Women's Health. (2).

Focus on physical and emotional health of women and men during the childbearing years. Emphasis on the preconceptual, prenatal and post-partum experience, and the healthy development of family. Minimum 16 supervised clinical hours per semester.

535. Advanced Practice Nursing Care of the Older Adult Theory and Practicum. Concurrent enrollment in NUR *599.* (*3*).

Theories and concepts from physical, behavioral, holistic and nursing sciences as they relate to assessment, diagnosis and management of health, disease, illness, and developmental, functional and clinical problems of older adults; information on health disparities of and culturally competent care for culturally diverse elders. Emphasis on evidence-based strategies for nurse practitioners related to health promotion and diagnosis and management of disease and illness of the older adult in community contexts (assisted living and longterm care settings).

540. Nurse Practitioner Role Theory. (2).

Provides theoretical insight; a forum to discuss professional, practice, legal, political, business, management and managed care content related to the nurse practitioner role. Emphasis on American Nurses Credentialing Center requirements for certification and State of Michigan requirements for practice as an advanced practice registered nurse. The Adult Psychiatric Mental Health student will be exposed to the role of the psychiatric mental health consultant.

541. Nurse Practitioner Role – Practicum. (4).

Final practicum synthesizing the learning experience. Continued clinical exposure to enhance professional identity and role development as an independent/interdependent provider of primary care. Students in the Adult Psychiatric Mental Health Nurse Practitioner track will develop and lead psychotherapy groups. 16 supervised clinical hours weekly.

560. Psychiatric Diagnosis - Theory. (2).

Application of previously acquired critical thinking skills to diagnosis and treatment of clients with specific psychiatric disorders. Utilization of clinical case studies to illustrate development of an empirical data base including comprehensive history, physical examination, interpretation of laboratory and nuclear medicine data, DSM-IV-R multiaxial classification, dynamic formulation. Emphasis on clinical interviewing techniques and selection of appropriate therapies. Graded ABCDE/Y.

561. Psychiatric Diagnosis - Practicum. (2).

Advances diagnostic skills by applying the critical thinking pathway to clients currently experiencing psychiatric disorders. Students guided and supervised by clinical preceptors and faculty practitioners. Graded ABCDE/Y.

570. Individual/Couple/Family Psychotherapy- Theory. (3).

Introduction to principles and techniques of short-term outcome oriented psychotherapy, couples counseling and family systems psychotherapy. Emphasis on the work of Ellis, Beck, Burns, Perls, Minuchin, Bowen, Paplau and Erickson.

Individual/Couple/Family Psychotherapy - Practicum. (4).

Application of the principles learned in NUR 570 to individuals, couples and families experiencing actual or potential mental health problems. Students guided and supervised by clinical preceptors and faculty practitioners.

580. Group Psychotherapy - Theory. (2).

Introduction to principles and process of Short Term Outpatient Group Psychotherapy. Theories of Beck, Yalom and Gestalt discussed as applied to groups. Phases of group, group process and content, problems arising within groups, medical problems amenable to group work and economics of group therapy.

594. Thesis Development. (1-2).

Two credits total required. Credits may be taken anytime prior to or concurrent with NUR 599. *Course may be repeated. Graded Pass/Fail/Y.*

595. Nursing Research/Theory I. (1).

Introduction to structure and function of extant theories of nursing as a basis for conceptual framework for nursing. Emphasis on nursing science as foundation for integrating nursing theory, practice and research. Focus on understanding elements of nursing theory, analyzing nursing theories and implementing a specific theory into the research process. Qualitative and quantitative research methods explored. Steps of the research process implemented throughout the curriculum culminating in a completed master's thesis. *Graded ABCDE/Y*.

596. Nursing Research/Theory II. (1).

NUR 596 builds upon NUR 595 and is the second of five consecutive research/theory courses. NUR 596 continues to emphasize nursing science as the foundation for integrating nursing theory, practice and research. The focus is on research design; internal and external validity; sampling design; procedures; data collection; reliability and validity of measures and ethical issues with human subjects. *Graded ABCDE/Y*.

597. Nursing Research/Theory III. (1).

NUR 597 is a continuation of the steps in the research process that includes emphasis on nursing science as a foundation for integrating nursing theory, practice, and research. The course builds on a basic statistics prerequisite and provides an introduction of strategies involved in data analysis, including statistical procedures and interpretation of data for nursing research. Students will apply knowledge of selected descriptive, parametric, and non-parametric approaches to data analysis. Emphasis will be on interpretation of statistical results and on evaluation of published research and its applicability to clinical practice. Computers will be used for introduction to data analysis. *Graded ABCDEIY*.

598. Nursing Research/Theory IV. (1).

NUR 598 builds upon NUR597 and is the fourth of five consecutive research/theory courses. This course is a continuation of the steps in the research process that includes emphasis on nursing science as a foundation for integrating nursing theory, practice, and research. The content and organization of this course reflects the scientific publishing

tradition for the last two chapters of a thesis. The focus is on report writing for results and discussion sections of the student's thesis. *Graded ABCDE/Y*.

599. Nursing Research/Theory V. (1).

NUR 599 is the fifth of the five-theory/research courses and builds upon NUR 598. This course is the culmination of the steps in the research process that includes emphasis on nursing science as a foundation for integrating nursing theory, practice and research. The content and organization of this course reflects the last two chapters of the master's thesis, the integration of the thesis chapters and dissemination of findings. *Graded ABCDE/Y*.

Doctor of Physical Therapy (DPT)

2157 William S. White Building

(810) 762-3373 FAX (810) 766-6668

website: http://www.umflint.edu/PT

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Professor Emeritus: Richard E. Darnell
Associate Professor Emeritus: Paulette Cebulski

Physical therapists are licensed health care professionals whose aim is to restore, maintain and promote optimal physical function, wellness and fitness in persons of all ages. This is accomplished through the evaluation and management of movement dysfunction, which may result from diseases, disorders, health conditions or injuries.

Physical therapists diagnose within the scope of physical therapy practice and manage movement dysfunction in four body systems: the cardiopulmonary system, the musculoskeletal system, the nervous system, and the integumentary (skin) system. Examples of interventions used for each of these systems are fitness conditioning, prevention of joint deformity, pain reduction and wound care. Interventions are selected to prevent the onset and progression of impairments and may include various forms of exercise, soft tissue management, heat, cold, electricity, and ultrasound.

Physical therapists work closely with and frequently refer patients to other professionals in a variety of settings including hospitals, clinics, rehabilitation facilities, nursing homes, school systems, home health care, industrial clinics and public health agencies. Physical therapists are also involved in administration, physical therapist and physical therapist assistant education, research and consultation. Clinical Specialization is now available in eight practice areas to the experienced clinician.

Physical therapy is an integral part of the spectrum of health care. The profession is evolving to take on a more independent role in providing health care in a direct access market. Direct access allows the patient to enter the health care system directly through the services of the physical therapist without seeking the

services of other health care practitioners first.

Program Mission and Assessment

The Professional Doctor of Physical Therapy (DPT) Program at the University of Michigan-Flint (UM-F) prepares graduates educated in all areas of current physical therapy practice to enter the field as competent general physical therapy practitioners. Graduates are prepared to assume the roles to practice within the contemporary parameters of physical therapy practice, prepared to assume roles consistent with various practice patterns throughout the United States, provided with skills and knowledge to adapt to future practice patterns in Michigan and encouraged to be lifelong learners including but not limited to the use of current technology in the learning process. The graduates are prepared for discharging their duties and responsibilities to the recipients of their services in a manner which promotes optimal health and function for the recipients, and enhances the profession of physical therapy, the public health and welfare of the citizens of Michigan, the Flint community, the University of Michigan-Flint and their own continuing personal and professional growth. Please see the website complete Mission Statement (www.umflint.edu/departments/pt/mission). The Program participates in the University-wide effort to assess its academic programs. Information on assessment plans, including goals, methods and outcomes is available at http://assessment.umflint.edu.

Professional Program in Physical Therapy (Doctor of Physical Therapy)

The University of Michigan-Flint (UM-F) Physical Therapy (PT) program offers a Doctor of Physical Therapy (DPT) degree. The DPT degree is a professional degree, not a post-professional degree equivalent to a Ph.D. or other advanced academic degree. It is, rather, comparable to other entry-level professional degrees, such as the Doctor of Podiatric Medicine (DPM) or Doctor of Pharmacology (Pharm.D) that prepare graduates as practitioners within their respective disciplines. The professional DPT program at the University of Michigan-Flint is accredited by the Commission on Accreditation in Physical Therapy (CAPTE) of the American Physical Therapy Association, 1111 North Fairfax Street, Alexandria, Virginia 22314; telephone: 703-706-3245; email: accreditation@apta.org; website: www.capteonline.org.

Physical therapy education is built on a solid foundation in the basic sciences of biology, chemistry, physics, anatomy, physiology and pathology. Study of humanities and behavior sciences provides an important preparation for the interpersonal relationships that the physical therapist must successfully establish with patients and their family members, health care professionals, and community health-care agencies.

The DPT program operates under a guiding philosophy that entry-level physical therapists should be competent to treat persons from infancy through the elder years. This lifespan approach enables our graduates to value and respect diversity of gender, race, culture and disability, regardless of age. Our graduates are critical thinkers, recognizing the value of and using the scientific literature to make sound clinical judgments. Our graduates understand the scope of physical therapy practice, recognizing when a patient needs medical management in substitution for or in addition to physical therapy.

The PT faculty mentor students into the profession using a collegial model which incorporates mutual respect and understanding between the faculty, staff, and physical therapy students as they proceed through the program. The collegial model and small class size encourage faculty and students to form close, effective working relationships that enhance student learning. The faculty has a consistent record of scholarly and service activity at the

state, regional and national levels of the profession and therefore mentor students in leadership and service to the profession and community.

The curriculum of the professional Doctor of Physical Therapy Program provides students with multiple opportunities to enhance their learning. A variety of teaching formats are used, including but not limited to didactic teaching, hands-on laboratory experiences and student group projects and presentations, among others. A modular course curriculum is used, supplemented by a self-instructional audio-visual system, extensive notes and background materials, and the opportunity to pursue independent studies in physical therapy. Students are expected to adequately expose head, trunk and extremities in laboratory sessions with multiple student partners (male/female) in order to become familiar with surface anatomy and to develop handling skills necessary for the practice of physical therapy. Students are also responsible for the provision and appropriate utilization of laboratory attire and for conducting themselves in a professional manner. Faculty of the Physical Therapy Department are responsible for review, revision and implementation of curriculum. Students admitted to the program are expected to abide by faculty decisions about revisions of curriculum.

Clinical education is an important aspect of the program. Initial exposure to clinical practice occurs in Fall, Year 1; Winter, Year 2; and Spring/Summer, Year 2. The student is then placed into full-time clinical experience for Fall, Year 3. Following the satisfactory completion of all didactic courses, students engage in three ten-week full-time clinical rotations. This full-time clinical experience provides students an opportunity to engage in supervised work and study in selected clinical facilities.

Students may be assigned to hospitals or other institutions in Flint, other cities in Michigan, or other states. Approximately 147 facilities/agencies at nearly 400 different sites participate in the clinical education program. Students are responsible for arranging transportation and housing for these clinical education experiences. Projected costs for physical therapy students are available from the Physical Therapy Department.

Degree Requirements

The DPT degree requires completion of a three-year academic program following satisfactory completion of clinical education courses. Curriculum information is available on the Department web site: http://www.umflint.edu/pt/curriculum.php.

All coursework and clinical education must be successfully completed to fulfill the degree requirements for the DPT. To complete the DPT program, students must earn a minimum cumulative GPA of 5.0 (B) on a 9.0 scale. The program is completed in three consecutive years on a full-time basis. A part-time curriculum is also available.

Admission to the DPT Program

Admission to the program is highly competitive, and students are admitted in the fall semester only. Positions in the class are assigned to those candidates ranking highest among the group eligible for consideration. The number of available spaces in the class is currently 40 which may include up to 2 part-time positions.

Admission to the professional DPT Program is the prerogative of the faculty of the program. Applicants are reminded that the supplemental application and reference forms are data sources that provide quantitative data and qualitative data. The faculty interprets these sources in making the final admissions decisions.

Admission Requirements All admission requirements must be successfully completed prior to starting the program should the applicant be admitted. Failure to successfully complete the requirements will result in withdrawal of the admission offer.

- A. Bachelor's degree from an accredited institution.
- B. Overall undergraduate grade point average of 3.0 or higher.
- C. Completion of the following prerequisite classes, with a minimum 2.75 grade point average and a grade of at least C (2.0) in each course. Prerequisite courses should be completed within 7 years of applying to the program; prerequisite courses taken more than 7 years prior will be reviewed on a case-by-case basis.
 - 1. Biology (not botany) with lab (8 credits).
 - 2. Chemistry with lab (8 credits).
 - 3. Physics with lab (8 credits).
 - 4. Human anatomy with lab (4 credits).
 - Human physiology with lab (4 credits). [If a 5-6 credit combination Human Anatomy/Physiology class is taken, an additional 3-credit Human (not Exercise) Physiology class is required.]
 - 6. Statistics (3 credits).
 - College algebra and trigonometry or precalculus (3-4 credits).
 - 8. General and developmental psychology (6 credits).
 - 9. Medical terminology (1 credit).
- D. Completion of the Graduate Record Examination (GRE) general test.
- E. Current CPR (Adult, Child, and Infant) and First Aid certification.

Application Process

To be considered for admission, an applicant must submit the following materials by the application deadline to the Office of Graduate Programs, 251 Thompson Library. The admissions committee will evaluate the applicant's file only after all items are received.

- Completed Application either online or paper form.
- \$55 application fee (non-refundable) payable to the University of Michigan-Flint (credit card required for online application).
- Completed Supplemental Application for the DPT program, including essay questions concerning the applicant's life experience and career decision of physical therapy (available online from the Department of Physical Therapy at http://www.umflint.edu/pt/applicants.php).
- Official transcripts from each college and university attended.
- GRE scores (general test) sent to the University of Michigan-Flint (Institutional Code #1853).
- Two letters of recommendation, including one from a Physical Therapist who has supervised the applicant's physical therapy experience and one from a university professor from whom the applicant has taken a course or who has acted as the applicant's advisor. Two clinical references may be submitted, provided one of the references is from a PT. Acceptable secondary clinical references would be from other rehabilitation professionals such as occupational therapists, speech therapists, and nurses.
- Clinical Observation Form (available online from the Department of Physical Therapy at http://www.umflint.edu/pt/applicants.php). To be competitive in the applicant pool, students should volunteer for a minimum of 50 hours of observation, under the supervision of a licensed physical therapist in at least two

different patient settings. The clinical experience may be as a student, volunteer or employee. The different patient settings may be at a single site but involving different types of clinical experiences; e.g., at a hospital where both inpatient and out-patients are seen, or a clinic where pediatric and geriatric patients are seen.

- Copy of CPR card (adult, child, infant).
- Copy of First Aid card.

International Applicants must submit additional documentation. For further information please refer to the Graduate Study portion of the catalog.

Application Deadlines

Students are admitted for the fall semester only. The Early Admissions deadline is November 15. A 3.3 GPA is required for early admission. The Standard Admissions deadline is January 15.

Desired Qualifications Doctor of Physical Therapy Program Applicants

Since the physical therapist works closely with patients who are ill or physically challenged and in cooperation with diverse populations, high standards of conduct, as well as academic achievement, are necessary for success. Selection is made on the basis of academic record, aptitude, and personal qualifications. The Physical Therapy Department is committed in both its admissions process and its educational program to provide reasonable accommodations to maximize opportunities for students with disabilities. Admission is highly competitive. The following attributes enhance an applicant's degree of competitiveness.

- Knowledge of the physical therapist's role in health care.
- Ability to work with diverse populations.
- An academic record that displays consistent performance or improvement over time.
- Personal maturity reflected in the values of self-motivation, self-regulation, and accountability for actions.
- Effective written and verbal communication skills.
- Capacity and commitment to complete the professional program in the established time schedule, independent of personal obligations or responsibilities.
- Commitment to learning and adopting professional behaviors.
- Willingness to abide by the policies and procedures of the Physical Therapy Department and the School of Health Professions and Studies.

Part-Time Professional Doctor of Physical Therapy Program

The University of Michigan-Flint offers a part-time course of study that, when completed, awards the Doctor of Physical Therapy (DPT), the professional degree for professional practice. The part-time program is specifically designed to accommodate those students who are unable to or otherwise choose not to attend the University on a full-time basis.

Students are admitted in the fall semester only. Positions in the classes are assigned to those candidates ranking highest among the group eligible for consideration. The number of available part-time spaces in each class is limited.

The sequence of courses in the part-time program is predetermined. Since courses are scheduled according to many constraints in the overall program sequence, students in the parttime track may not elect and schedule courses to meet their own

personal, employment, or other needs. The part-time program involves a reduced credit load per semester but not a limited number of days per week on campus.

General Part-time Student Guidelines

Students:

- A. Remain in part-time status (as defined by the University) for at least two years.
- B. Follow a predetermined part-time curriculum plan.
- C. Complete the professional DPT program within a 5 year period.
- D. Enroll full-time in Year 3.

Costs

Students should be aware that they will be required to purchase clinical attire, evaluation tools to be used in the classroom or clinical practice, professional liability insurance, and professional textbooks. Clinical Education III, IV, V and VI require many students to leave the Flint area, some to distant cities in other states. Students must provide their own transportation for travel to all clinical assignments. The student may be required to make his/her own arrangements for housing, as most facilities are no longer able to provide housing arrangements. A physical examination, immunizations, TB test and health insurance will be required of students at their own expense at appropriate points throughout the program. Part-time employment is discouraged during the professional part of the professional DPT program because of demands made by the nature and scheduling of the program. Current estimates of costs students can anticipate are available to applicants through the Physical Therapy Department. Tuition and fees are subject to change without notice.

Applicants with Special Educational Needs

The University of Michigan-Flint is committed to prohibiting discrimination based on disability and is committed to insuring equal access for qualified individuals with disabilities. As prescribed by Section 504 of the 1973 Rehabilitation Act, the Americans with Disabilities Act, and the Michigan Handicappers' Civil Rights Act, the University of Michigan-Flint will provide reasonable accommodation to academically qualified students with disabilities so that they can fully participate in the University's educational programs and activities. The University is not required to alter fundamentally the nature or essential curricular components of its programs. The University will insure that the requirements of its programs are not discriminatory in nature.

In order to insure non-discrimination in the admissions process, no prior inquiry is made regarding the applicant's capacity to successfully complete the course of studies. However, applicants should be aware that a high level of cognitive, psychomotor and affective function is required in classroom, laboratory and clinical education. The Physical Therapy Department at the University of Michigan-Flint educates general practitioners and therefore its graduates must be able to successfully complete the clinical courses in the curriculum. The applicant may use as a point of departure for consideration the description of job duties of a physical therapist cited in the Dictionary of Occupational Titles and the American Physical Therapy Association's Guide to Physical Therapy Practice, as well as the Competency Assessment Report criteria specifically utilized in the Professional DPT Program at the University of Michigan-Flint. All documents are available for review at the Physical Therapy Department. The responsibility for determination of reasonable accommodation in clinical education rests with the specific clinical institutions to which the student is assigned.

Applicants who are admitted are given the opportunity to identify any special needs which require accommodation in order to participate in their educational program. The capacity of the Physical Therapy Department to respond to individual needs is made on a case-by-case basis by the Director of the Physical Therapy Department and the University Accessibility Coordinator, with any necessary special resources provided by the University if it is reasonably capable of doing so.

Given the above, the possibility exists that a student whose needs cannot be reasonably accommodated may be admitted. In such rare cases, admission may have to be rescinded. It is also possible that a student may be admitted, but clinical education may not be available.

Inquiries prior to or during the admissions process or complaints after admission may be addressed to the Accessibility Coordinator, Student Development Center, Room 264 UCEN, University of Michigan-Flint, Flint, MI 48502. Phone: (810) 762-3456, TTY: (810) 766-6727.

Academic Regulations and Procedures

Students are expected to maintain satisfactory performance in their academic standing, clinical practice, and ethical conduct. While engaged in the professional portion of the professional DPT Program, the student is subject to the policies and procedures of the program with regard to the maintenance of quality. Because the student is enrolled in the School of Health Professions and Studies, the student is subject also to the policies and procedures of that school.

All regulations of the University of Michigan-Flint apply to students in the Physical Therapy Department of the School of Health Professions and Studies. Students should make note of these regulations, which appear in other sections of this Catalog. Specific rules and regulations adopted by the faculty of the Physical Therapy Department are presented in the following sections.

Grading System

The following grading system is used for the professional DPT Program: A, excellent; B, good; E, failure; I, incomplete; Y, work in progress; W, officially withdrawn (without penalty). The following scale is used in computing grade-point averages:

Honor Point
9.0
5.0
0.0

(For students admitted prior to Fall 2006, a 4.0 scale is used.)

Grade point averages are computed by dividing the total number of honor points by the total number of credits. The computation is limited to points and credits earned at the University of Michigan-Flint or transferred from other schools and colleges of the University of Michigan. The report of I (incomplete) may be made by the instructor if the student is unable to meet the course requirements within the specified time. An I grade may be made up while a student is not enrolled and must be made up by the end of the fifth week of the next semester (Fall or Winter) in which a student is enrolled. If, for sufficient reason, a student cannot remove the incomplete within the fiveweek period, an extension request form must be approved by both the course instructor and the Department Director and forwarded to the Office of the Registrar. Failure to either make up the grade within the allotted time or to have an extension approved will result in the I automatically being changed to a grade of E. A grade once reported (with the exception of I) may be changed

only to correct a demonstrable error.

Credit Without Grade (Pass/Fail)

The pass/fail option applies only to specific courses so designated in the course schedule by individual SHPS departments. Courses elected for credit without grade are not included in the calculation of the grade point average.

Changes in Course Elections (Drop/Add)

Changes in course elections include dropping and adding courses. It is the student's responsibility to adhere to the published deadlines for dropping and/or adding a course.

Granting withdrawal from the Professional DPT Program (with or without intention to return) is a prerogative of the Physical Therapy Department Faculty.

Academic Standing

The faculty of the Department, acting on behalf of the University, has the responsibility of defining academic standards and reserves the right to remove from the professional DPT program any student whose academic standing, in the judgment of the faculty, is regarded as unsatisfactory.

To maintain satisfactory academic standing, a student must have a minimum cumulative graduate grade point average of "B" (5.0) for all graduate courses taken for credit and applied toward the degree program.

The academic records of all students are reviewed by the administrative staff of the Physical Therapy Department at the end of each semester, according to the Academic Progression Policy and Procedure, and cases of students whose cumulative graduate grade point averages fall below a "B" (5.0) in a given term are reviewed by the Director of the Department. If the Director deems it necessary, the student will be informed, orally and in writing, that the student's case will be reviewed at a forthcoming meeting of the faculty and the Director. The complete policy can be found in the Physical Therapy Department Student Handbook.

Appeals Procedure

Students admitted to the professional DPT program agree to follow established policies and procedures which govern academic performance, clinical competency, and ethical standards. Specific appeals procedures are outlined in the Physical Therapy Department Student Handbook. For problems involving a faculty member, the appeal procedure should be initiated after consultation with the faculty member whenever possible.

For problems of a discriminatory or sexually harassing nature, the student should consult with the Office of Equity & Diversity Services or the Dean of the School of Health Professions and Studies. Formal complaints must be filed with the Office of Equity & Diversity Services.

Sequence Requirements

Courses in the professional preparation program are intended to be taken in a prescribed sequence. It is important for students to recognize that the Physical Therapy Professional Preparation Program is not just a series of courses but instead a professional preparation program in which appropriate sequence is critical for assuring intended educational outcomes. Waiver of courses in Years 1-3 taken prior to admission to the program remains the prerogative of the Physical Therapy faculty.

Courses in Physical Therapy (PTP)

The Physical Therapy Department is undergoing an extensive curriculum revision which will begin in 2007. For course descriptions, please refer to the online course catalog at http://www.umflint.edu/departments/catalog/.

Course in Pre-Physical Therapy

201. Introduction to Physical Therapy. (1).

Overview of physical therapy and its relationship to other health professions; designed to aid the student in making an appropriate career choice. Taught as a service course to the University community; not a component of the professional preparation program of physical therapy.

Courses in Professional and Post Professional Programs

400. Independent Study. *Admission to the professional or post-professional program in physical therapy.* (1-2).

Individually negotiated learning experiences appropriate to the interests and background of physical therapy students.

401. Independent Study in Physical Therapy. *Matriculation for bachelor's degree in allied health disciplines, nursing, education, or psychology.* (1-5).

Individually negotiated learning experiences appropriate to the interests, capacities, and needs of members of other disciplines. *By arrangement.*

441. Clinical Neurology. Admission to the professional or post-professional program in physical therapy. (2).

Coordinated presentation of information from various health care practitioners. Foundation for physical therapy courses which develop clinical skills in the evaluation and treatment of neurological conditions. Lecture and demonstration.

480. Clinical Embryology. BIO 111, BIO 434/PTP 410; admission to the professional program in physical therapy or consent of instructor. (1).

Lecture and discussion of human embryology with an emphasis on the causes of congenital malformations. *Also listed as BIO* 470.

Courses in Graduate Physical Therapy

500. Independent Study for Physical Therapists. *Graduation from approved school of physical therapy and matriculation toward advanced degree in related fields.* (1-5).

Individually negotiated learning experiences appropriate to background experiences and career objectives of PTs matriculating toward advanced degree in related fields. *By arrangement*.

501. Independent Study in Physical Therapy. Open only to students in allied health fields, business, education, psychology, or nursing and matriculating for graduate degrees. (1-5).

Individually negotiated learning experiences appropriate to interests, capacities, and needs of members of other health care professions or related disciplines. *By arrangement*.

502. Independent Research. *Matriculation towards advanced degree in physical therapy or related field.* (2-10).

Individually negotiated experiences related to the development of new knowledge in the field of physical therapy. *By arrangement*.

503. Independent Study for Physical Therapy Students. Admission to the professional or post-professional program in physical therapy. (1-5).

Individually negotiated learning experiences appropriate to the interests and background of graduate level physical therapy students.

507. Ethics Seminar for Physical Therapy. HCR/PHL 304 or consent of instructor; admission to the doctoral program in physical therapy. (1).

Seminar focusing on moral issues for physical therapists. *Also listed as HCR 507*.

510. Human Anatomy. *Admission to the doctoral program in physical therapy, or graduate standing and consent of instructor.* (6).

Detailed study of the gross structure of the human body. Laboratory involves cadaver dissection. Lecture and laboratory. *Not open to students with credit for BIO 434. Also listed as BIO 534.*

511. Kinesiology and Applied Anatomy. Admission to the doctoral program in physical therapy. (4).

Application of gross anatomy and biomechanics to achieve a clinically based understanding of human movement. Emphasis on familiarization with the living human body. Basic principles of normal human movement, and analysis of underlying determinants of the character of that movement.

512. Neuroscience. Admission to the professional program in physical therapy; or graduate standing and consent of instructor. (4).

Principles of neuroanatomy and neurophysiology as a foundation course for physical therapy students. Also suitable for other students wishing a solid framework for understanding the structure and function of the nervous system. Lecture and laboratory. Not open to students with credit for BIO 482. Also listed as BIO 582.

513. Physiology and Exercise. Admission to DPT program or consent of instructor. (3).

Physiological basis of physical activity and exercise training effects on the various body systems in health adults and children. Emphasis on practical applications of theoretical concepts, with particular respect to the role of physical therapy and exercise training in health and fitness. Lecture and laboratory.

515. Clinical Exercise in Practice. Admission to DPT program or consent of instructor. (3).

In-depth study of the physiological basis of physical activity and

acute and chronic exercise effects on the various body systems. Emphasis will be placed on practical applications of theoretical concepts with particular respect to the role of physical activity and exercise in both health and fitness.

517. Medical Terminology. *Admission to the doctoral program in physical therapy.* (1).

Introduction to medical language used in health care settings with focus on terms describing disease states and diagnostic procedures. *Also listed as MTP 521*.

521. Musculoskeletal Disease and Disorders. *Admission to the professional program in physical therapy.* (2).

Musculoskeletal medical conditions commonly seen in physical therapy practice with pertinent histology, pathology, etiology, clinical course, prognosis and medical management. Focus will be on the exploration of muscle, bone, nerve, tendon, joint, ligament, and fascial tissue as it relates to musculoskeletal disorders.

522. Clinical Screening and Examination. Admission to the professional or post-professional program in physical therapy. (3).

Introduction to systems review and identification of clinical problems requiring referral and/or collaborative approach. Focus on advanced clinical judgment and decision making.

530. Introduction to Clinical Practice. *Admission to DPT program or consent of instructor.* (1).

Introduction to the clinical setting and application of fundamental examination techniques.

531. Clinical Orientation I. Admission to DPT program or consent of instructor. (1).

Planned clinical learning experience of an introductory nature, coordinated and supervised by academic faculty and clinicians in the Flint area. Emphasis on observation and interaction with patients demonstrating orthopedic problems.

532. Clinical Orientation II. Admission to the professional or post-professional program in physical therapy. (1).

Continuation of Clinical Orientation I. Emphasis on observation and interaction with patients demonstrating neurological disorders.

533. Clinical Correlations. Admission to the professional or post-professional program in physical therapy. (2).

Series of case presentations and demonstrations related to selected clinical diagnoses. Student-patient interaction and program planning.

534. Clinical Education I. Admission to the professional or post-professional program in physical therapy. (2).

Supervised clinical experience in designated clinical education sites. Two two-week affiliations at two different sites.

535. Clinical Education II. Admission to the professional or post-professional program in physical therapy. (4).

Eight weeks of full-time supervised clinical experiences in

health care agencies in Michigan and other states. *Graded ABCDE/Y*.

536. Clinical Education III. Admission to professional preparation program. (4)

Eight weeks of full time supervised clinical experience in health care agencies in Michigan and other states. *Graded ABCDE/Y*.

537. Clinical Education IV. Admission to professional preparation program. (4)

Eight weeks of full time supervised clinical experience in health care agencies in Michigan and other states. *Graded ABCDE/Y*.

540. Physical Therapy Management of Medical/Surgical Conditions. Admission to the professional or post-professional program in physical therapy. (5).

Emphasis on the role of the physical therapist in all three levels of intervention (primary, secondary and tertiary prevention) as health care providers. The course provides the foundation for physical therapy management of patients with conditions and diseases and related problems often addressed by a multi-disciplinary invention approach.

541. Orthopedic Regional Assessment. Admission to the professional MPT program. (2).

Physical therapy exam, evaluation, diagnosis and prognosis of representative orthopedic and medical/surgical conditions commonly seen by physical therapists; review of evaluation procedures, exams, tests and measures. Focus on screening, assessment, data bases and implications for management of patients.

543. Introduction to Patient Management. *Admission to the doctoral program in physical therapy.* (1).

Introduction to basic concepts of body mechanics, transfers, and mobility training.

544. Patient Management Techniques & Equipment. Admission to the professional or post-professional program in physical therapy. (3).

Coordinated presentation of techniques for management of functional, physiologic, safety and emergency needs in physical therapy practice to include biotechnological equipment and advances used in physical therapy.

545. Orthotics and Prosthetics. Admission to the professional or post-professional program in physical therapy. (3).

Comprehensive study of orthotics and prosthetics in prevention and treatment. Medical indications, biomechanical basis, and the management of the patient with orthotic or prosthetic needs. Lecture, demonstration and laboratory practice.

546. Pharmacology in Practice. Admission to DPT program or consent of instructor. (3).

Basic principles of pharmacology, drug interventions that impact the musculoskeltal, cardippulmonary, neuromuscular, and integumentary systems as well as pediatric and geriatric concerns are examined. Mechanisms of action, indications for use, side effects, and common examples which have an impact

on physical therapy are given.

550. Physical Agents I. Admission to DPT program or consent of instructor. (3).

Physical basis and physiological effects of superficial heat and cold, massage, diathermy, ultrasound and ultraviolet: practice in therapeutic application. Lecture and laboratory experiences.

551. Physical Agents II. *Admission to the professional or post-professional program in physical therapy. (3).*

Physical basis and physiological effects of various forms of electrical current and their therapeutic uses. Lecture and laboratory experiences with practice in application.

560. Research Methods. *Admission to the professional program in physical therapy.* (3).

Introduction to principles of clinical research methods. Emphasis is on database and statistical applications with computerized statistical package SPSS, for clinical research and provides the foundation for subsequent clinical inquiry project.

561. Critical Evaluation of Professional Literature. Admission to the professional or post-professional program in physical therapy. (1).

Introduction to areas of clinical specialization through examination of current research literature. Students present and lead discussion on topics of interest. Application of research processes presented in PTP 460 applied through critical review of published manuscripts with special emphasis on implications for practice.

562. Scholarly Activity Practicum I. Admission to the professional or post-professional program in physical therapy. (2-5).

Supervised experience in designing and conducting a pilot study consistent with research design. Builds on previous research courses. *Graded ABCDE/Y*.

563. Scholarly Activity Practicum II. Admission to the professional or post-professional program in physical therapy. (2-5).

Continuation of Research Practicum I. Includes completion of a research project, preparation and submission of a publication of manuscript quality, and public presentation of the project. *Graded ABCDE/Y*.

564. Clinical Observation Skills and Communication. *Admission to the doctoral program in physical therapy.* (2).

Orientation to the clinical education program, including patient confidentiality, communication, and common barriers to effective communication.

565. Fundamental Tests and Measures in Examination.

Admission to the professional program in physical therapy.

(5).

Theoretical basis for measurement, sources of error, and clinical interpretation of tests and measures will be applied to examination techniques common to all areas of physical therapy practice.

566. Evaluation Procedures II. Admission to DPT program or consent of instructor. (3).

Data collection methods and interpretation for neurologically based disorders. Includes lecture and laboratory experiences in nervous system evaluation and application to various neurological conditions. Relates to content presented in clinical neurology.

567. Neurologic Diseases and Disorders. Admission to DPT program or consent of instructor. (2).

Adult-onset neuromuscular medical conditions commonly seen in physical therapy practice with pertinent histology, embryology, risk factors, pathology/pathophysiology, etiology, clinical course, prognosis, and surgical/medical/pharmacological management. Sensory, motor, autonomic, cognitive, and functional considerations are emphasized.

570. Therapeutic Exercise I. Admission to the professional or post-professional program in physical therapy. (3).

Basic principles and techniques employed in exercise programs. Motor control and motor learning are covered with an emphasis on applying the knowledge to therapeutic exercise. Builds upon principles of exercise physiology, neuroanatomy, and teaching and learning applied to psychomotor activities.

571. Therapeutic Exercise II. Admission to the professional or post-professional program in physical therapy. (2).

Comprehensive approach to physical therapy and treatment of cardiopulmonary conditions. Cardiovascular rehabilitation from the acute to subacute stages and as a preventative medicine tool for high risk patients. Lecture, demonstration, and laboratory experiences.

572. Therapeutic Exercise III. Admission to the professional or post-professional program in physical therapy. (3).

Comprehensive approaches to therapeutic exercise in the treatment of neurological disorders. Builds upon knowledge and skills gained in PTP 421, Evaluation Procedures II; PTP 441, Clinical Neurology; and PTP 570, Therapeutic Exercise I. Lecture, demonstration and laboratory practice.

573. Therapeutic Exercise IV. Admission to the professional or post-professional program in physical therapy. (2).

Incorporation of joint and soft tissue mobilization into regional evaluation and treatment of orthopedic conditions. Students utilize manual therapy techniques as part of a comprehensive approach to evaluation and treatment of body segments.

580. Professionalism and Ethics. Admission to the doctoral program in physical therapy. (2).

Introduction to the profession of physical therapy, the developments and trends influencing the profession, and professional practice expectations.

581. Teaching, Learning and Health Education. Admission to DPT program or consent of instructor. (3).

Introduction to principles of teaching and learning as applied to professional presentations and individual and group patient health education.

582. Body Systems Through the Life Span. Admission to DPT

program or consent of instructor. (1).

Developmental theories and factors pertaining to growth, maturation, and aging from birth to death. Developmental changes in basic human neuro-motor development, sensory integration, and body systems phsiology are integrated with cognitive and psychosocial development for lifespan age periods emphasizing a holistic approach to the typically developing person.

584. Impact of Physical Disability on Psycho-Social Dynamics II. Admission to the professional or post-professional program in physical therapy. (2).

Continuation of fundamental elements of the psycho-social dynamics relevant to disability. Political, social factors related to disability, cross-cultural considerations, special aspects of disability related to specific life stages and specific disabilities.

585. Therapeutic Relationships and Cultural Competency. Admission to the doctoral program in physical therapy. (2).

Principles of the therapeutic relationship in terms of somatopsychology; reaction to physical challenges and cultural issues by therapists, patients, family and society.

591. Ethics in Health Care in Physical Therapy. Admission to the doctoral program in physical therapy; or consent of instructor. (3).

Ethical and philosophical issues which impact upon physical therapy practice and research. Conflicts and issues arising out of interpersonal, professional and client relationships. Also listed as HCR 504.

592. Health Education and Community Resources. *Admission* to the doctoral program in physical therapy; or consent of

Appropriate health education strategies for families, support groups and communities. Identification, utilization and evaluation of community and other resources. Also listed as HCR 581.

593. Management Theory and Practice. Admission to the professional or post-professional program in physical therapy or consent of instructor. (2).

Basic principles and practices of management, evaluation of management thought, and development of scientific management. Major administrative disciplines, human resource management, motivation, communications, transforming inputs into outputs; analytical models and quantitative tools; and management information systems. Cases used extensively. Also listed as BUS 585.

594. Issues in Physical Therapy. *Admission to the professional or* post-professional program in physical therapy. (2).

Addresses trends, forces and contemporary issues impacting physical therapy. Exploration of role of physical therapy in the health care industry.

595. Management of Physical Therapy Practice. Admission to the professional or post-professional program in physical therapy. (2).

Application of management theory, principles and practice to physical therapy practice in a wide array of practice settings. Legal concerns, group dynamics, quality assurance, productivity, facility planning and management functions as specifically related to physical therapy practice.

596. Seminar in PT. Admission to the professional or post-professional program in physical therapy. (1-3).

Current research topics and issues in physical therapy. Topics announced before each offering of the course.

597. Practicum in PT. *Admission to the professional or post-professional level program in physical therapy. (1-6).*

Planning clinical learning experiences in a specialty area of physical therapy in designated clinical education sites.

621. Management of Peripheral Musculoskeletal Disorders. *Admission to DPT program or consent of instructor.* (3).

Physical therapy patient management of common peripheral musculoskeletal diseases, disorders and injuries throughout the continuum of care, from examination, evaluation, diagnosis and prognosis to intervention and outcomes.

622. Management of Spinal Musculoskeletal Disorders. *Admission to DPT program or consent of instructor.* (4).

Physical therapy patient management of common spinal musculoskeletal diseases, disorders and injuries throughout the continuum of care, from examination, evaluation, diagnosis and prognosis to intervention and outcomes.

644. Metabolic, Endocrine & Integument Diseases and Disorders. Admission to DPT program or consent of instructor. (1).

Metabolic, endocrine and integument diseases and disorders commonly seen in physical therapy practice, including pertinent histology, embryology, pathology, etiology, comorbidities, aging effects, risk factors, prevention, signs and symptoms, clinical course, and pharmacology.

645. Metabolic, Endocrine & Integument Examination in Practice. Admission to DPT program or consent of instructor. (2).

Examination, evaluation, diagnosis and prognosis of individuals with or at risk for metabolic, endocrine and integument diseases, disorders and conditions.

646. Metabolic, Endocrine & Integument Condition Interventions in Practice. Admission to DPT program or consent of instructor. (3).

Application of physical therapy interventions for individuals with or at risk for metabolic, endocrine and integument diseases, disorders and conditions.

660. Critical Inquiry Project. Admission to DPT program or consent of instructor. (3).

Supervised experience in designing and conducting a clinical

scholarly project. Includes literature review, proposal development and presentation, and human subjects review (as necessary); initial planning, implementation stages and completion of the project; preparation of a journal manuscript on the project; and oral presentation of the project findings.

668. Neuromuscular Disorder Interventions. Admission to DPT program or consent of instructor. (2).

Application of physical therapy interventions for adult neurological disorders.

670. Fundamental Procedural Interventions. Admission to DPT program or consent of instructor. (5).

Theoretical basis for clinical decision making, applying evidence-based practice specific to procedural intervention techniques common to all areas of physical therapy practice. Psychomotor skills in these common interventions emphasized.

671. Cardiopulmonary Diseases and Disorders. Admission to DPT program or consent of instructor. (2).

Cardiopulmonary disease, disorders and conditions commonly seen in physical therapy practice, including pertinent histology, embryology, pathology, etiology, co-morbidities, aging effects, risk factors, prevention, signs and symptoms, clinical course, and pharmacology.

672. Cardiopulmonary Examination in Practice. *Admission to DPT program or consent of instructor.* (1).

Examination, evaluation, diagnosis and prognosis of individuals with or at risk for cardiopulmonary diseases, disorders and conditions.

673. Cardiac and Pulmonary Condition Interventions in Practice. Admission to DPT program or consent of instructor. (2).

Application of physical therapy interventions for individuals with or at risk for cardiac and pulmonary diseases, disorders and conditions.

682. Pediatric Diseases and Disorders and Examination in Practice. Admission to DPT program or consent of instructor. (2).

Pediatric diseases and disorders commonly seen in physical therapy practice, including pertinent histology, embryology, risk factors, pathology/pathophysiology, etiology, clinical course, and surgical/medical/pharmacological management. Examination, evaluation, diagnosis and prognosis for common pediatric diseases, disorders and conditions.

683. Pediatric Interventions in Practice. Admission to DPT program or consent of instructor. (3).

Pediatric physical therapy interventions using evidence-based practice.

685. Therapeutic Relationships and Cultural Competency II. Admission to DPT program or consent of instructor. (2).

Complex aspects of psycho-social dynamics inherent in the

optimal therapeutic relationship between the physical therapist and the patient/client. Emphasis on cultural considerations, specific mental health conditions, chronic pain, life stage factors, recreation/sport and vocational patient needs. Lecture.

694. Professional Service Learning I. Admission to DPT program or consent of instructor. (1).

Service experience in non-direct patient care health-related activities. Independent study format, with final outcome a scholarly product generated by the student under guidance of a faculty mentor and a community health care professional.

701. Pediatric and Geriatric Physical Therapy Practice. Admission to professional physical therapy program. (2).

Pediatric and geriatric physical therapy practice will be explored in depth for various practice settings. Builds upon knowledge and skills gained in PTP 382, Development and Maturation Across the Life Span and PTP 385, Impact of Physical Disability on Psychological Dynamics I.

761. Evidence-Based Practice. Admission to DPT program or consent of instructor. (1).

Development of case reports within the four practice patterns in the "Guide," based on patient's clinical and physical circumstances, best research evidence, patient's preferences, and clinical expertise.

770. Assistive Technology in Accessibility. Admission to DPT program or consent of instructor. (1).

Accessibility standards and the Americans with Disabilities Act (ADA) outlined in conjunction with assistive technology predominantly used to enhance accessibility in multiple environments.

780. Clinical Decision Making in Complex Clinical Problems. Admission to entry-level DPT program. (4).

Application of the five elements of the patient-client management model to case-based clinical decision making using evidence-based practice and the Guide to Physical Therapy Practice. Includes re-examination and outcomes measurement. Emphasis on safe practice in primary care, open referral and direct access settings.

783. Geriatric Physical Therapy. Admission to DPT program or consent of instructor. (2).

Physiologic, psycho-social and legal/ethical aspects of geriatric care in a variety of physical therapy practice settings.

785. Therapeutic Relationships and Cultural Competency **III.** Admission to DPT program or consent of instructor. (1).

Psycho-social dynamics relevant to disability adjustment and professional interactions in the clinic, utilizing students' prior clinical experiences as a point of departure for classroom discussion. Emphasis on analysis and synthesis of clinical problems, personal development, and professional growth.

794. Professional Service Learning II. Admission to DPT program or consent of instructor. (1).

Continuation of PTP 694. Service experience in non-direct

patient care health-related activities highly individualized to suit academic faculty, clinical faculty and student needs and interests. Independent study format, with final outcome a scholarly product generated by the student under guidance of a faculty mentor and a community health care professional.

801. Advanced Practicum. Admission to professional preparation program. (2).

Individually negotiated learning experience with the final outcome of the course being a scholarly product generated by the student with guidance from both an academic faculty mentor and a community health related professional preceptor. Graded Pass/Fail/Y.

School of Management Program

3180 William S. White Building (810) 762-3163

Dean: I. Douglas Moon

Special Assistant to the Dean: Yener Kandogan Director, MBA Programs: D. Nicol Taylor-Vargo

The University of Michigan-Flint offers one graduate degree through the School of Management: the Master of Business Administration (MBA). This program is offered in two delivery modes to accommodate working adults: the Traditional program (evening classroom sessions) and the mixed-mode NetPlus! program (online and weekend classroom sessions).

School of Management business programs are accredited by AACSB International – The Association to Advance Collegiate Schools of Business (http://www.aacsb.edu).

Mission of the School

As part of the internationally recognized University of Michigan system, our mission is to provide high-quality management education to prepare our students for intellectual growth, productive careers, and professional development. We are committed to excellence in teaching, learning, intellectual contributions and creative endeavors.

We use our professional skills to provide service to the university, professional organizations, alumni, and the community as we engage them to enrich our intellectual pursuits and instructional activities.

We deliver our programs to a diverse group of graduate and undergraduate students primarily in Michigan and the surrounding region using a variety of learning/teaching approaches that focus on skills, abilities, technology and knowledge vital to organizations. We will also expand these programs to reach out to the national and international community in order to link our students and faculty to the global marketplace.

Admission to the MBA Program

Admission to the MBA program is open to qualified graduates of accredited colleges and universities of the United States and elsewhere, whether the bachelor's degree is in the arts, sciences, engineering or business administration.

Applications for admission are available from the School of

Management MBA Program Office, the MBA website, http://mba.umflint.edu, or from the Office of Graduate Programs. Admission to the program is not granted until the following materials are submitted and reviewed:

- A. Completed application for graduate admission.
- B. Official transcripts of all colleges and universities attended.
- A professional resume including work experience and extracurricular activities.
- Three letters of recommendation (professional and/or academic).
- E. Scores from the graduate management admission test (GMAT).
- F. Statement of purpose.

Applicants should have a strong quantitative aptitude and at least one year of formal college preparation in mathematics including a course in either finite mathematics or calculus.

In addition, international students are required to submit the following:

- G. A transcript evaluation by a nationally-recognized credentialing agency.
- H. Official TOEFL scores.
- I. Notarized affidavit of financial support.
- J. Bank statement.

In evaluating applications, consideration is given to these indicators of aptitude and preparedness for graduate study in management. The School of Management weighs these materials in making admission decisions, in conjunction with relevant business and managerial experience. Admission decisions are guided by a desire to draw participants from diverse organizations and backgrounds, balancing class composition to ensure wide ranging experiences and perspectives.

Priority application deadlines are August 1 (Traditional) and August 15 (NetPlus!) for fall entry and February 15 (NetPlus!) for spring entry. Completed files received by the deadline receive priority in review; files completed after the deadline are reviewed if seats remain.

Completed applications should be received by the Office of Graduate Programs by the published deadlines. For additional information consult:

D. Nicol Taylor-Vargo Director, MBA Programs School of Management University of Michigan-Flint 303 East Kearsley Street Flint, MI 48502-1950 (810) 762-3163

Master of Business Administration (MBA)

The MBA program provides:

- A. Convenient accessible delivery in two tracks: (1) Traditional MBA evening classes and (2) *NetPlus!* MBA, a mixed-mode combination of online learning and weekend residencies. Visit http://www.mba.umflint.edu for detailed information on both modes.
- B. Understanding of the fundamental disciplines and skills essential to decision making: behavioral science, economics, communication, and quantitative methods.
- C. Knowledge of the functional areas of business: accounting, finance, organizational behavior, marketing, and operations management.
- D. Understanding of the environment external to business and the integration of activities within the firm and of the firm within society.
- E. If desired, in-depth competency in specialized areas of business through concentration areas: accounting, finance, health care management, international business, lean manufacturing, and organizational leadership.

Modes of Delivery

- A. The Traditional MBA mode of delivery includes on campus classes held in the evenings once a week per course. Students typically enroll in two courses in the fall and winter terms, and one course in the spring or summer term. International students in the Traditional MBA program are required to be full-time students and take at least 6 credit hours of course work in the fall and winter terms. Traditional MBA students who wish to get a concentration may be required to take the concentration courses in the Netplus! MBA mode of delivery. Normal completion time is 20-32 months.
- B. The NetPlus! MBA mode of delivery blends the personal interaction of traditional classroom activities with the anytime, anywhere convenience of modern online learning. Weekend campus sessions are held twice in a semester on Fridays and Saturdays and enhance the quality of the learning experience. Students typically enroll in two courses in the fall, winter, spring and summer terms (12-week terms). Normal completion time is 15-24 months.

Program Assessment

The School of Management participates in the University-wide effort to assess its academic programs. Information on assessment plans, including goals, methods and outcomes is available at http://assessment.umflint.edu.

Grades

Grades are assigned by letters, some with + and - suffixes. Grades of P (pass) and F (fail) do not affect the grade point average. Cumulative grade point averages are computed by dividing the total number of honor points earned by the total number of credit hours attempted. In computing grade point averages, the following scale of grade equivalents is used by the School of Management MBA program.

Letter Grade Honor Points A+ 9

A	8
A-	7
B+	6
В	5
B-	4
C+	3
C	2
C-	1
D	0
E	0

A grade of I (incomplete) is recorded as a failing grade if all work is not satisfactorily completed by the end of the fifth week of the next official semester.

Academic Rules and Regulations

See the School of Management section of this *Catalog* for academic rules and regulations pertaining to graduate programs offered by the School.

Requirements

- A. Completion of 30-45 credit hours (33-45 for an MBA with a concentration) of graduate-level coursework, as follows:
- 1. Foundation courses (12 credit hours).

MGT 512, Applied Quantitative Analysis (3)

MGT 521, Accounting for Managers (3)

MGT 541, Organizational Behavior (3)

MGT 551, Business Economics (3)

2. MBA core courses (24 credit hours).

Functional

MGT 531, Marketing Management (3)

MGT 561, Financial Management (3)

MGT 571, Operations Management (3)

External Environment/Managerial Support/Integrative MGT 501, Interpersonal & Organizational Communication (3)

MGT 552, Business and Society (3)

MGT 581, Management Information Systems (3)

MGT 585, Global Dimensions of Management (3)

Capstone

MGT 589, Strategic Management (3)

3. Elective/concentration courses (6-9 credit hours).

General MBA

At least two MGT electives totaling six (6) credit hours.

Accounting Concentration

a. MGT 527, 528.

b. One from: MGT 522, 523, 525, 567; PUB 523.

Finance Concentration

Three from: MGT 562, 563, 565, 566, 567, 568

Health Care Management Concentration

a. HCR 505, 525.

b. One from: HCR 509, 577.

International Business Concentration ECN 566; MGT 536, 566.

Lean Manufacturing Concentration

MFGO 633, 635, 637. (These courses are offered through Kettering University.)

Organizational Leadership Concentration

a. MGT 542, 549.

- b. MGT 545 or 573.
- B. All requirements must be completed within seven calendar years of initial enrollment in the program.
- C. An overall grade point average of at least 5.0 is required for program completion. A grade point average of less than 5.0 constitutes a sufficient basis for probationary status and, if the grade point average is not improved, dismissal from the program. Students with probationary status must make progress toward "good standing." Failure to do so may result in required reduction in the maximum courses the student may enroll in or other actions. Credit toward satisfaction of degree requirements is not granted for courses in which a grade below C (e.g., C-) is received. Courses in which a grade below B is received may be retaken once for credit. In such cases, both the original grade and the grade received when the course is retaken appear on the transcript and are used in determining the student's grade point average.
- D. Transfer credit is limited to no more than nine credits and must have been completed in the last 7 years with a grade of B or better in graduate courses while enrolled as a graduate student at an AACSB accredited program, and must not be part of another degree. Exceptions to this rule are accepted only in unusual circumstances and then only by approval of the SOM Graduate Programs Committee.
- E. Course waivers for similar undergraduate or graduate course work are limited to foundation courses. Only equivalent courses completed with a grade of B or better and taken as part of a degree program completed within the previous ten years will be considered for waiver. Equivalency is determined by AACSB-International accreditation status of the institution, or by the School of Management Graduate Programs Committee. Waivers reduce the number of credits required to complete the MBA degree. However, completion of a minimum of 30 graduate credit hours (33 for a MBA with a concentration) at the University of Michigan-Flint is required to graduate.

MSMO/MBA Dual Degree Program

Dean: I. Douglas Moon

Special Assistant to the Dean: Yener Kandogan Director, MBA Programs: D. Nicol Taylor-Vargo

The MSMO/MBA dual degree program offered through Kettering University and the University of Michigan-Flint provides a broad foundation of business knowledge and specialized expertise of lean production systems. Students in the dual degree program take fewer courses (12 semester credit hours) than if they had completed both programs separately.

The programs are offered jointly and are completed in sequence (one degree following the other). Graduates earn two master's degrees, a Master of Science in Manufacturing Operations (MSMO) from Kettering University, and a Master of Business Administration (MBA) with a Lean Manufacturing Concentration from the University of Michigan-Flint.

Detailed program information is available online at http://mba.umflint.edu.

Courses in Management (MGT)

These courses are open only to students formally admitted to the MBA Program.

501. Interpersonal and Organizational Communication. (3).

Emphasis on development of effective communication skills for the executive role. Communication proficiency, grammar review, listening, sensitivity to receivers, giving feedback, helping relationships, and diagnosing the communication health of the organization, sensitivity to receivers; response to the organizational environment. Emphasis on clarity, persuasiveness, performance in speaking and writing. Includes various contexts likely to be part of the organization dynamic: interpersonal, dyadic, small group, and public speaking.

502, 503, 504. Selected Readings I, II, III. (1).

Readings chosen to bring participant into contact with classical and current literature underlying concepts of management written by great minds of our civilization. May include political theory, philosophy, futurism, economics, leadership and management. *Graded Pass/Fail/Y*.

512. Applied Quantitative Analysis. (3).

Survey of statistical techniques for business and economic decision making. Review of probability, statistical inferences, and regression analysis; topics in linear programming, decision theory and project management. Computer packages used for data analysis. Emphasis on application of techniques for business decision making.

521. Accounting for Managers. (3).

Understanding financial statements and the fundamental accounting principles underlying their preparation and interpretation and decision making in firms where generation, analysis or reporting of financial information is involved. Understanding concepts and techniques of management planning and control systems with consideration of behavioral implications. Use of accounting data in setting organizational objectives, budgeting, setting standards for and evaluation of performance. Multidivisional organizations and problems of control, cost behavior, product costs, contribution margins, transfer pricing, capital expenditure analysis.

522. Advanced Federal Income Taxation Theory and Research. MGT 521 or equivalent. (3).

Subjects include advanced federal income tax concepts, related to corporations, shareholders, "S" corporations, partnerships, trusts and estates. Coursework requirements include research of taxation literature and research reports. *Not open to students with credit for BUS 422*.

523. Advanced Governmental and Nonprofit Accounting and Financial Reporting. MGT 521 or equivalent. (3).

Comprehensive study and analysis of accounting practices of

government and nonprofit entities. Includes the accounting cycle; government accounting; budget process; principles of fund accounting; accounting for education institutions and health care and welfare organizations; use of accounting data. Coursework requirements include research of governmental and nonprofit financial reporting issues.

525. Advanced Financial Reporting. MGT 521 or equivalent. (3).

Subject matter includes accounting for business combinations and consolidated statements, partnerships, installment sales, segment and interim reporting, governmental/fund accounting, financial accounting and reporting theory, and other topics. Coursework requirements include research of business combinations and other financial reporting issues. *Not open to students with credit for BUS 425*.

527. Seminar in Professional Accountancy. MGT 521 or equivalent. (3).

Intensive study of theoretical issues and current practices in financial reporting and auditing. The regulatory environment, demand and supply for auditing and other professional services, current issues in financial reporting, auditing auditors.

528. Seminar in Management Accounting. MGT 521 or equivalent. (3).

Examination of a variety of advanced cost management issues faced by service and manufacturing organizations. Activity-based costing and management, the balanced scorecard, process improvement and re-engineering, total quality management, strategic cost management, transfer pricing, cost management issues in a global environment.

531. Marketing Management. MGT 512. (3).

Introduction to marketing management. Marketing environment, markets, buyer behavior and characteristics, market segmentation and target marketing; consumer, industrial and international marketing; product policies, promotion strategies, distribution and pricing decisions.

532. Marketing Strategy. MGT 531. (3).

Traditional concepts such as market segmentation and product life cycle; new concepts such as product positioning, market structure analysis, portfolio management, and consumer measurement. Theory and models applicable to product development; emphasis on consumer measurement techniques and new product planning. Focus on strategic issues of the marketing planning process and its integration with the new product development process.

536. International and Global Marketing Management. *MGT* 531 or equivalent. (3).

International marketing and its role in multinational firms. Appraising international marketing opportunity; product, price, promotion and distribution policies; analysis of the foreign marketing environment. *Not open to students with credit for BUS 432.*

541. Organizational Behavior. (3).

Research-and theory-based examination of human behavior in organizations, with emphasis on management of human

resources. Contributions of historical and organizational theorists; contemporary trends in organizations. Examination of individual elements of motivation, personality, perception and diversity (including global/international differences), and group issues of power, conflict, group dynamics, and team building. Personal and organizational ethics; leadership and decision making; use of organizational human resource policies and their affect on human behavior.

542. Strategic Human Resource Management. MGT 541. (3).

Effective use of human resources within an organization; behavioral forces which affect decision making and leadership behavior. Personnel policies and procedures, employment training, merit rating, wage administration, labor relations, cross-cultural differences in people and organizations, and international personnel problems.

545. Innovation Management/Entrepreneurship. *Graduate standing.* (3).

Qualities and requirements of both entrepreneurship and intrapreneurship; management of entrepreneurial efforts and innovations. Case studies, discussions and lecture. Students develop own plans for a new endeavor.

549. Contemporary Issues in Leadership. (3).

Applied research and discussion of recent developments and trends that affect organizational behavior and human resource management; exploration of how to affect organization-wide change. *Not open to students with credit for BUS 449*.

551. Business Economics. *MGT 512.* (3).

Analysis of the economic environment; major forces and government policies affecting business conditions. Macro and micro economic theory analyzed and applied to efficient operation. Measuring business conditions, monetary and fiscal policy, inflation, interest rates, employment, and demand analysis for the firm and industry, short- and long-run production and costs, market structures, determination of prices, and non-price aspects of competition.

552. Business and Society. (3).

Focus on the external (social, political, legal) environment within which organizations operate, from a managerial perspective. Ethical and corporate social responsibility; public issues management within the corporation, including environmental scanning, public policy analysis, and political action.

554. Managerial Economics. *Graduate standing; ECN 201, 202; or consent of instructor. (3).*

Application of economic theory to the analysis of business problems. Empirical demand and supply analysis, pricing practices, price regulation and antitrust policy, investment decisions, research and development policy, and forecasting. Problems and case studies. *Not open to students with credit for ECN 469. Also listed as ECN 569.*

561. Financial Management. *MGT* 521, 551. (3).

Introduction to tools of financial management in a large modern corporation. Core topics include valuation, risk-return

relationships, capital budgeting, capital structure, long-term financing, dividend policy and international finance. Overall emphasis on understanding analytical models for financial decision making.

562. Advanced Corporate Finance: Application and Financial Strategy. *MGT 561 or equivalent.* (3).

Study of major decision-making areas of managerial finance and topics in financial theory. Theory and empirical evidence related to the investment and financing policies of the firm; development of decision-making abilities. Emphasis on case study; applications to specific areas.

564. Investments Analysis and Portfolio Management. *MGT* 561 or equivalent. (3).

Concepts of portfolio analysis in the general area of institutional investment management. Principles for managing financial assests such as corporate pension funds, bank-administered trust and other institutional funds, including many of the latest quantitative approaches. Students learn how to establish appropriate investment objectives, develop optimal portfolio strategies, estimate risk-return tradeoffs, and evaluate investment performance.

565. Financial Engineering and Risk Management. MGT 561 or equivalent. (3).

Skills necessary to value and employ options, futures, and related financial contracts as risk management strategies. Valuation of futures contracts on stock indices, commodities and treasury instruments; valuation of options; empirical evidence; strategies with respect to these assets; dynamic asset allocation strategies including portfolio insurance; swaps; the use (and misuse) of derivatives in context of corporate applications. *Not open to students with credit for BUS 463*.

566. International and Global Financial Management. *MGT* 561 or equivalent. (3).

Analysis of financial problems faced by corporations operating in an international environment. Corporate strategy and the decision to invest abroad; forecasting exchange rates; international portfolio diversification; managing currency risk; taxation issues; cost of capital and financial structure in the multinational firm; sources of funding. *Not open to students with credit for BUS 466.*

567. Financial Statement Analysis. MGT 561 or equivalent. (3).

Focus on uses and interpretation of public financial statements and economic data from the markets. Quantitative methods to analyze, forecast, and examine market reactions to data. Emphasis on real world cases, research, and communication of results. *Not open to students with credit for BUS 467*.

568. Financial Markets and Institutions. *MGT 561 or equivalent.* (3).

Provides a framework for understanding our financial environment, including markets, institutions, and securities. Each type of market and how financial institutions use it, its internationalization, and recent events that have affected it. *Not open to students with credit for BUS 468*.

571. Operations Management. MGT 512. (3).

Introduction to operations management; issues relevant to effective integration of human and technical elements of productive systems. Decision making framework for assessing and evaluating a wide range of operating alternatives relative to design, scheduling and control in both manufacturing and service organizations. Key characteristics, management tasks, and means of organization and control in different types of operating systems.

573. Topics in Quality Management. MGT 571 or equivalent. (3).

Total quality management concepts, management issues related to quality improvement, Baldrige Award criteria, TQM implementation issues and strategies, and international standards. Statistical tools for quality improvement such as statistical process control, problem-solving methods, quality engineering (Taguchi methods), re-engineering and quality function deployment also will be discussed with emphasis on applications. *Not open to students with credit for BUS 473*.

581. Management Information Systems. (3).

Concepts, techniques and equipment required for information systems supporting management decisions. Information requirements for decisions. Systems for collecting, processing, storing, retrieving and distributing information. Critical decisions in the design of a management information system.

585. Global Dimensions of Management. (3).

Understanding the relationship between business strategy and structure in global context; and how managerial actions impact global strategy. Students develop skills and competencies related to information gathering, strategic analysis and interpretation, judgment, and forecasting in a global context.

589. Strategic Management. All core MBA courses. (3).

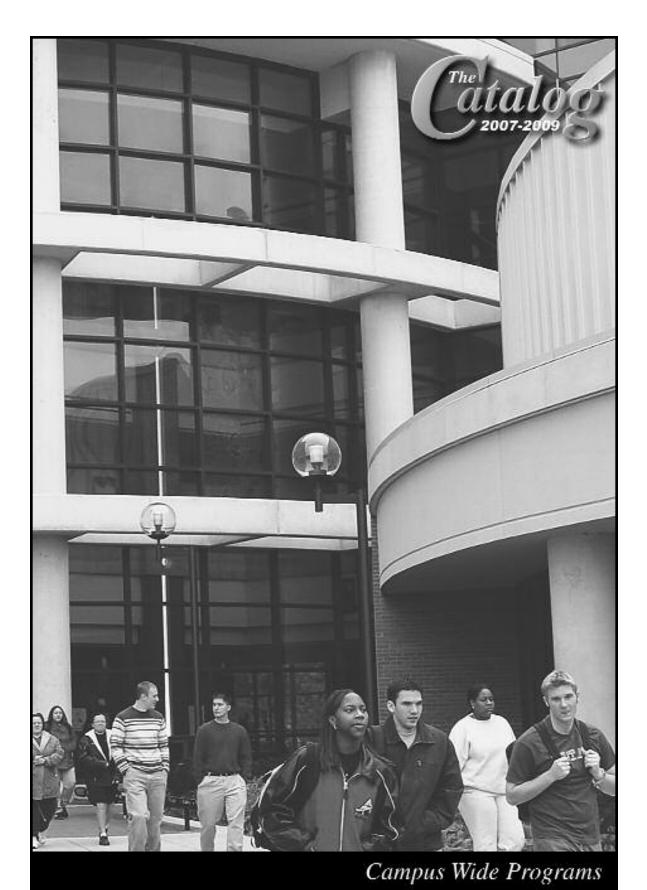
Examination of macro organization issues (stages, technology, structure, culture, environment) that influence and demonstrate the organization's strategic choices. Development of a framework for strategy formulation and implementation, including identification of alernatives; study of the total organization as viewed by top management; analysis, synthesis and presentation of policies and action plans.

591. Applied Research Project. *Third year of program; selection and agreement of advisor.* (3).

Independent work with guidance by a faculty advisor of choice on an applied research project demonstrating command of material, ability to relate material to a real problem, and including analysis and conclusions. In-depth study of a management problem; the student is encouraged to choose a job-related topic whose solution will benefit student's employer and career. *Graded ABCDE/Y*.

599. Special Topics in Management. (3).

Specific topics to be announced in advanced of registration. Offered at irregular intervals.



UNIVERSITY HONORS PROGRAM

326 French Hall (English Dept.)

Program Director: Dr. Maureen Thum Principal Secretary: Rhonda Broadworth

Contact Information:

General Information: (810) 762 3234. Ask for Rhonda Broadworth.

Honors Director: (810) 762 3467 email: mthum@umflint.edu Program Council: Profs. Lois Alexander (MUS), Janet Barnfather (NUR), Harry D'Souza (MTH), John Ellis (HIS), Lauren Friesen (THE), Judith Kollmann (ENG), Rafael Mojica (SPN), Gary Pace (BIO), Betty Velthouse (SOM).

Department Representatives: Profs. Guluma Gemeda (AFA), Gary Pace (BIO), Bob Stach (CHM), Steve Ralston, Heather Seipke (COM), R. Shantaram (CSC), Larry Koch (CRJ), Martin Kaufman (ERS), Paula Nas (ECN), Eric Worch (EDU), Judith Kollmann (ENG), Imane Hakam (FRN), John Ellis (HIS), Harry D'Souza (MTH), Lois Alexander (MUS/ART), Janet Barnfather (NUR), Richard Gull (PHL), Peggy Kahn (POL), Susan Gano-Phillips (PSY), Albert Price (PUB), Betty Velthouse (SOM), Mark Perry (SOM/ECN), Rafael Mojica (SPN), Charles Bailey (SWK), Judy Rosenthal/Larry Koch (SOC/ANT), Lauren Friesen (THE).

Since its founding in 1979, the University of Michigan-Flint Honors Scholar Program has offered qualified students the opportunity to enhance their education in the challenging and rewarding atmosphere of small, enriched core classes with close faculty guidance and one-on-one learning and research partnerships with specialists in their field.

The Honors Program is designed to promote education across the disciplines in an environment that emphasizes a high degree of literacy, critical thinking and humanistic and scientific inquiry and to encourage a high level of academic achievement and scholarly research.

Programs in Honors

The University of Michigan-Flint offers two programs in Honors:

- The four-year University Honors Scholar Program. This program, designed for entering freshman, consists of a Freshman/Sophomore phase and a Junior/Senior phase, parallels the regular university non-honors curriculum from freshman through senior years.
- The two-year Junior/Senior University Honors Scholar Program. This program, designed for transfer students and students who do not apply to the Honors Program until the end of their sophomore year, parallels the second phase of the four-year Honors Scholar Program and includes similar requirements.

Note: Honors courses are fully complementary to the regular non-honors degree program. With few exceptions, students in the Honors Program are not required to complete additional or "addon" courses - that is, courses taken in addition to the regular requirements for graduation. In the Freshman/Sophomore phase

of the program, the core honors courses also fulfill general education requirements (ENG 111, 112, humanities, and social sciences). In the Junior/Senior phase of the program, honors courses fulfill the requirements for upper-level courses (those numbered 300 or higher) in the major area of concentration.

The University Honors Scholar Program

The two-phase Honors Scholar Program consists of a Freshman/Sophomore core curriculum of Honors courses and a Junior/Senior concentration that includes an Off-Campus Study Semester, a Senior Thesis, and a Senior Honors Seminar.

Students completing the entire two-phase program are named University Honors Program Scholars and have such recorded on their transcripts and diplomas along with departmental and/or school honors. Students completing the two-year Junior/Senior Honors Scholar Program are named Junior/Senior University Honors Program Scholars and have such recorded on their transcripts and diplomas along with departmental and/or school honors. (See description of the two-year Junior/Senior Program below.)

Admission Requirements

- Entering freshmen who have been accepted into the University of Michigan-Flint submit a separate application for the Honors Program (available from Admissions).
- Selection is based on strength and diversity of curriculum and extracurricular activities, letters of recommendation, a writing sample, ACT scores, grade point average, class rank and an interview.
- GPA of 3.5 or higher and Composite ACT score of 26 or higher are recommended.

Phase One: Freshman/Sophomore Program

During freshman and sophomore years, Honors students together as a class complete a core curriculum of four Honors courses. The four courses (HON 155, 156, 251, 252) are intended to encourage the students to look beyond the confines of their own disciplines and to develop a more complex, multi-disciplinary perspective. As part of the curriculum, freshmen also participate in an annual day-trip to the Festival Theater in Stratford, Canada, to attend a theater performance.

Advisor: Honors Program Director. Students should also seek the advice of an advisor in the department of their major area of concentration.

Requirements.

- A. HON 155, 156, 251, 252.
- B. Completion of a foreign language requirement by one of the following:
 - 1. Completion of the 211 course of any foreign language currently offered at the University of Michigan-Flint (prerequisite: completion of the prerequisite class or placement into the 211 course).
 - Completion of a one-credit Honors directed reading course in the language of choice, FRN 205, GER 205, LAT 205, PTG 205, or SPN 205 (prerequisite: completion of the prerequisite class or placement into the 211 course).
 - Placement out of the 211 course and into a higher-level

language course. Such placement means that the requirement is waived, and the foreign language option considered fulfilled.

- C. Completion of three honors elections. (See Honors Elections below.)
- D. Completion of 55 credits with a cumulative GPA of 3.4 or higher.

Note: In order to graduate from the four-year program, students must achieve a cumulative GPA of 3.5 or higher.

Transcript Designation

Students who complete the requirements of the Freshman/Sophomore phase of the program with a cumulative GPA of 3.3 or higher are named Freshman/Sophomore Honors Scholar Program Students and have such recorded in their transcripts.

Phase Two: Junior/Senior Concentration Program

The Junior/Senior phase is designed to promote independent study and scholarship within the student's concentration or major area of specialization. During the sophomore year, students apply for acceptance into the concentration. After they are accepted, students, with the aid of the Honors Representative for the department, select an advisor. The advisor works closely with the student in planning the course of study for the concentration, as well as in planning for the final senior year project.

Note: For students enrolled in professional preparation programs in academic units other than the College of Arts and Sciences, the requirements for the junior and senior level and beyond are carried out under the provisions of a program-specific honors policy and procedure approved by the Honors Council. Students develop and implement an honors program contract coordinated by the professional program and subject to the approval of the Honors Program Director.

Admission Requirements

- Sophomores consult the Honors Representative (listed above) for the department or school in their major area of concentration concerning requirements for acceptance into the Junior/Senior phase of the program. This must be done in the fall of the sophomore year.
- Students should have completed all requirements of the Freshman/Sophomore phase of the program.

Advisor: Honors Advisor in the major area of study working in cooperation with the Honors Program Director

Requirements.

- A. Independent Study/Research Methods Course. HON 393 or equivalent in the student's concentration (1-3 credits).
- B. Off-campus Study Proposal. Completed in conjunction with the Research Methods Course.
- C. Off-Campus Study Semester. HON 495 or equivalent in the student's concentration.
- D. Honors Thesis. HON 496 or equivalent in the student's concentration.

- E. Senior Honors Seminar. HON 498 (390), generally taken in the winter semester of senior year.
- F. Completion of two additional honors elections.
- G. Completion of all University requirements and requirements for the major area of concentration
- H. Cumulative GPA of 3.5 or higher.

Special Features of the Honors Program

Honors Elections

Students are required to complete a total of five honors elections over their entire course of study in the four-year Honors program, three during the Freshman/Sophomore phase of the program and two during the Junior/Senior phase.

- Two elections must be outside the student's major area of concentration.
- One election may be a service election (see below).

To complete an honors election, the student develops an independent study project in conjunction with any regular course. Honors elections may not be completed for HON 155, 156, 251, 252 or 498.

The student approaches the professor early in the semester, and plans a study project which requires at least 15 hours of extra work over the semester. The student and the professor agree upon a time line and sign an Honors Election Contract (available from the Honor Program Secretary, Mary Packer, in Biology, 264 MSB).

Honors election projects serve to supplement in depth or in breadth the regular content or experience of the course. They may include the following:

- · a short essay, lab report, book report, or research paper
- an additional assignment for the course
- a performance review
- · an oral presentation
- a performance
- · field work or report on field work
- a conference presentation
- a study of another culture attached to a foreign language course
- any project considered appropriate by the instructor as a means to extend the breadth or depth of the course

A service election requiring a minimum of 30 hours of service may be fulfilled in one of the following ways:

- a community service project completed through the Service Learning Office. For details and forms, contact Laura Bucklen, 338 UCEN, (810) 766-6898.
- a service project within the university. The project is completed under the auspices of a professor, generally in connection with a course. It may also be completed under the auspices of the supervisor of a department (for example, the Head of Circulation in the library).
- a service project within or in connection with the Honors Program under the auspices of the Honors Director or the Honors Director's designate.

Honors elections in the form of independent study projects, conference presentations, field research projects and the like may be completed in conjunction with independent study courses HON 292 and 393 subject to the approval of the supervising professor and the Honors Director.

Honors elections do not receive a grade. Instead, the work is evaluated as satisfactory or unsatisfactory by the instructor, and the results reported on the appropriate form to the Honors Program Secretary. The evaluation is not used in arriving at a grade for the course. Forms and detailed instructions are available from the Honors Program Secretary, Mary Packer, in Biology, 264 MSB

The Off-Campus Experience

The core of the Junior/Senior phase of the program is the Off-Campus Study Project. Students begin preparing for this project in their junior year, with the aid of their Honors Advisor. Students submit a proposal for their Off-Campus Study project, and a budget estimating expenses.

Students are eligible for up to \$3000 in expenses from the Honors program, and may apply for additional research support through the Office of Research in order to cover the costs of traveling and conducting research. Students are encouraged to travel to other states and other countries in order to benefit from a new and different context.

Sites for the Off-Campus Experience may include:

- university campuses
- research institutes
- hospitals or other similar institutions
- places of business
- political offices (internship in Washington, DC, for example)
- a site in the field for work in biology, anthropology, archeology, health care
- an appropriate site agreed upon by the student, the Honors advisor and the Honors Director

Possible projects may include:

- original research either in the field or in a laboratory, generally working with a professor at another university campus or on site
- an internship connected with the student's area of specialization
- a summer program in the United States or abroad
- foreign language study to gain proficiency in the language
- travel connected with the student's research, creative project or performance
- an appropriate project agreed upon by the student, the Honors advisor, and the Honors Director

Project Proposal: The Research Methods Course

During their junior year, students enroll in a 300-level Independent Study/Research Methods course (HON 393 or the equivalent in their concentration). This course is designed for the development of the Off-Campus Study Proposal. In order to complete this course satisfactorily, students should:

- work one-on-one with their departmental Honors Advisor to develop a project.
- conduct individual research to find several potential sites for the Off-Campus Study Experience.
- consult the Honors Director concerning required format of
- submit the proposal and a budget estimating expenses for the Off-Campus Study Experience to the advisor for approval.

submit the proposal to the Honors Director who in turn submits it to the Honors Council for approval.

Funds are released and credit for HON 393 (or the equivalent) is given only after the completed proposal has been approved by the Honors Council.

Project Development: Honors Thesis I

In conjunction with their Off-Campus Study Experience students enroll in HON 495 (or the equivalent in the concentration), an independent study course which provides four credits for the Off-Campus Study Experience.

To allow for flexibility in scheduling, the student may enroll in HON 495 or its equivalent before, during or after the Off-Campus Study Experience.

The student may arrange for additional credits in one or more of the following ways:

- Arrangements may be made for credits to be transferred from a summer course or study program, if applicable.
- The student may undertake an additional independent study course, such as HON 393, with the approval of the Honors advisor and the Honors Director.

The student receives no credit and no final grade for HON 495 (or its equivalent) until the Honors Thesis (HON 496 or the equivalent) is satisfactorily completed. Until that time, the student receives a grade, designed for work in progress.

Project Production: HON 496

Following the Off-Campus Study Experience, the Honors student completes a Senior Thesis or creative project under the supervision of the Honors Advisor. The Honors Thesis or project is designed to provide expertise in the student's discipline and further enrichment of the student's curriculum.

The Honors Thesis is generally a research paper ranging in length from 35 to 60 pages. The paper should be well written, carefully documented and organized.

A creative project also could meet the requirements of the senior project. The production, performance or creative work should be fashioned according to the requirements of the student's specific area of study, and must be deemed appropriate by agreement of the Honors Advisor, the Honors Director and the Honors Council. Examples include:

- the writing and directing of a play
- the production of a film
- the creation of a piece of music or art

The Honors Thesis or project may represent original research or a new finding in the field or may be an original creative work. It may also result in conference presentations and publications in scholarly journals. However, originality in the form of new findings in the field is not required for the completion of a satisfactory thesis, nor is publication or presentation at a conference.

Completion and Approval of the Honors Thesis

To complete the Honors Thesis satisfactorily, the student should:

develop drafts of the Honors Thesis in cooperation with the Departmental Honors Advisor.

- consult with the Honors Director concerning Honors Thesis format.
- submit the final approved draft to a committee of readers generally consisting of the advisor, a second member of the department, an outside reader, and the Honors Director or an Honors Council member.
- give a Thesis presentation before the committee or at a conference.
- submit a final draft of the Honors Thesis for binding.

Final Submission and Binding

The student does not receive a grade for HON 495 and 496 (or their equivalents in the concentration) until the student has submitted the final revised draft of the thesis in the department, ready for binding at the Print Shop.

Generally seven or eight bound copies are made, one for each member of the committee of readers, one for the department, one for the Honors Program, and one or more copies for the student. Binding costs at the Print Shop are generally covered by the school or department.

Senior Honors Seminar: HON 498

Students generally enroll in the Senior Honors Seminar, HON 498 (390), in the winter semester after they return from their Off-Campus Study Experience. The seminar allows Honors students from different disciplines to come together to share ideas and perspectives from a cross-disciplinary perspective.

The Junior/Senior University Honors Scholar Program

This two-year program parallels the Junior/Senior phase of the four-year University Scholar Program. It is designed for

- transfer students from community colleges and universities.
- University of Michigan-Flint students who did not previously participate in the Honors Program.

Students accepted into the Junior/Senior two-year program apply for admission into their concentration in the school or department of their choice.

Upon completion of the program, students are named Junior/Senior University Honors Program Scholars and have such recorded on their transcripts and diplomas along with departmental and/or school honors.

Prerequisites.

- Completion of 55 credits at the University of Michigan-Flint and/or by transfer.
- B. GPA of 3.5 or higher, based on all courses completed in the freshman and sophomore years. (Transfer students must present their complete transcripts.)
- C. Completion of at least three quarters of the general education requirements.
- D. Departmental recommendation for acceptance into an honors concentration program.
- E. Approval by the Honors Program Council.

Requirements.

- A. The requirements of a BA, BS, BME or BBA.
- B. The requirements of a departmental honors concentration program.
- C. GPA of 3.5 or higher at the University of Michigan-Flint.
- D. HON 355, 495 (or departmental equivalent), 496 (or departmental equivalent), 498.
- E. Two courses taken as honors elections (see Honors Elections above).

Courses in the Honors Program (HON)

155. Great Books I. *Acceptance into the Honors Program.* (5)h.

Study, discussion, and written critical analysis of works ranging from epic poems to political treatises. Subject matter may be scientific, historical, or philosophical works from the period of Classical Greece to the Middle Ages and the Renaissance. Two class periods a week devoted to writing in a variety of expository modes. Writing is related to works under discussion and includes a paper of some depth and complexity. Completion of HON 155 and 156 fulfills the general education requirement in English composition. Graded ABC>N.

156. Great Books II. *HON 155 or consent of Honors Director.* (5)h.

Study, discussion and written critical analysis of works from the Enlightenment to the nineteenth and early twentieth centuries. Two class periods a week are devoted to written critical analyses. Writing includes a research paper of some depth and complexity. Completion of HON 155 and 156 fulfills the general education requirement in English composition. Graded ABC>N.

251. Great Ideas I. HON 156. (3)h or s.

In-depth exploration of key concepts, ideas and themes in the history of civilization. Emphasis on class discussion, critical reading and writing. *Course content determines whether h or s credit applies. Graded ABC>N*.

252. Great Ideas II. HON 251. (3)h or s.

Continued focus on key concepts, ideas and themes in the history of civilization. Emphasis on class discussion, critical reading and writing. *Course content determines whether h or s credit applies. Graded ABC.>N.*

292. Directed Reading. Consent of Honors Program Director. (1-3)h or s.

May be reelected to a total of six credits. Graded ABCDE/Y.

355. Great Books. Acceptance into the Junior/Senior Honors Program. (3-5) h.

Study, discussion and written critical analysis of works ranging from epic poems to political treatises. Subject matter may be scientific, historical or philosophical works from the period of classic Greece to the Middle Ages and the Renaissance. Writing is related to works under discussion and includes a

research paper of some depth and complexity. When elected for 5 credits, two class periods a week are devoted to writing in a variety of expository modes; election for 3 credits only by approval of the Honors Program Director. Class meets with HON 155; students complete additional assignment appropriate to a 300 level course.

393. Independent Study and Research Methods. Acceptance into the Honors Program; consent of Honors Director. (1-3).

Also listed as departmental credit in schools and departments offering an honors concentration. May be reelected for a total of 6 credits. Graded ABCDE/Y.

495. Honors Thesis I (Off-Campus Study). Acceptance into the Honors Program; consent of Honors Council or its designate; consent of department chair. (4).

Independent study course designed for the off-campus study experience. Credit and grade are not given until completion of HON 496. Also listed as departmental credit in all departments offering honors concentrations. ABCDE/Y.

496. Honors Thesis II (Senior Honors Project). Acceptance into the Honors Program; consent of Honors Council or its designate; consent of department chair; prior or concurrent election of HON 495. (4).

Independent study course designed for the completion of the Senior Honors Project (Honors Thesis). Also listed as departmental credit in all departments offering honors concentrations. Graded ABCDE/Y.

498. Senior Honors Seminar. Prior or concurrent election of HON 496. (3).

Seminar for students completing the departmental honors concentration program. Topics derived from each student's specialized work discussed from an interdisciplinary perspective. Also listed as departmental credit in all departments offering an honors concentration. Graded ABC>N/Y.

International and Global Studies

238 Theatre (810) 762-3230

Website: http://www.flint.umich.edu/departments/internatl

Director: Dr. Matthew Hilton-Watson

Core Faculty: John Ellis (HIS), Ernest Emenyonu (AFA), Guluma Gemeda (AFA), Matthew Hilton-Watson (FOR), Richard Hill-Rowley (ERS), Weiqi Li (SOM), Seyed Mehdian (SOM), Beverley Smith (ANT), Sapna Taggar (EDU), Maureen Tippen (SHPS) Mary Wagner (MUS)

Faculty Advisors: Students should contact the Program Director, Dr. Matthew Hilton-Watson (FOR), for a referral to the most appropriate faculty member for advising.

The International and Global Studies Program is an interdisciplinary program that aims at providing students with a framework for focusing on international relations and global trends. The Program has grown out of the conviction that International and Global Studies merits its own focus. The purpose

of the Program is to enable students to gain a global perspective of human events and behavior; to appreciate the cultural diversity of the World; to discern global patterns and processes and to understand their impact on particular regions. Students can major in one of the existing fields (e.g., history, management, or nursing) with a minor in International and Global Studies.

The Program's courses are intended to provide students with a global perspective at three levels: chronological, spatial, and thematic. The Program is enriched by study abroad courses organized by the University faculty, and by the opportunity for students to study at the Japan Center for Michigan Universities located in Hikone, Japan. Students will earn University of Michigan-Flint credits by participating in University of Michigan-Flint sponsored study abroad courses. Furthermore, the Program provides information to students who are interested in study abroad in general and issues International Student/Teacher Identity Cards. The Program is enhanced further by co-sponsoring events with the International Student Organization and by a variety of extracurricular activities, including lecture and film series.

Programs in International and Global Studies

A Minor in International and Global Studies and an Honors minor in International and Global Studies are available.

Minor in International and Global Studies

Requirements. Twenty-one to 29 credits, distributed as follows. A demonstrated proficiency in a foreign language, as evidenced by completion at UM-Flint of one of ARB 112, FRN 112, GER 112, JPN 112, LAT 105, RUS 112 or SPN 112; or equivalent proficiency by examination. The foreign language requirement is automatically satisfied for any student seeking a Bachelor of Arts degree.

- A. Core courses (9 credits).
 - 1. Two from: INT/ANT 100; INT/GEO 115; INT/HIS 113; INT/POL 230.
 - One from: ANT/INT 375, 415; BIO/GEO/INT 372; ECN/INT 366, 367; HIS/INT 346; POL/INT 359; SOC/WGS/INT 376.
- B. Options (12 credits). A program planned with a faculty advisor, including courses from both the Regional Studies and Topical Studies options below. Up to three credit hours from a study abroad course, at the Core Faculty's discretion, may be applied to one of the Option categories. No course(s) may be elected to satisfy requirements for both parts A and B.
 - 1. Regional Studies Option.

Focus on various regions of the world from the perspectives of different fields, including art, culture, economy, history, language, literature, music and politics. Africa: AFA 201; AFA/ANT 250, 260, 305, 369; AFA/ART 308; AFA/HIS 230, 231; AFA/POL 340, AFA 360/POL 343.

East/Southeast/South Asia: ANT 255, 295; ANT/INT 385, 386; HIS 290, 291, 376, 377, 378, 380; INT 384 or 385 or 386 or 387.

Eastern Europe/Russia: CPL 258, 259; HIS 352, 353, 357. Latin America: ANT 284, 315, 318; HIS 302, 303, 343; POL 344; SOC 265; SPN 319.

North Africa/Southwest Asia: ANT 240; HIS 216, 283, 385, 386; HIS/ANT 215.

Western Europe: ENG 218; FRN 212, 310; GER 212, 310; HIS 210, 211, 325, 326, 351, 355, 367, 372, 373, 374; HIS/WGS 370; MAS/SPN 319; MUS 227; POL 345; SPN 212, 310.

2. Topical Studies Option.

International global themes from the perspectives of different fields.

World Health: ANT/HCR 330; HCR 331; NUR 381; PSY 230, 314.

International Management: BUS 385, 432, 466; MGT 585.
 International Political Economy: ANT 352; ANT/INT 415; ANT/POL 351; ANT/SOC 375; CRJ 384; ECN/INT 366, 367; ECN 356, 360; POL 245, 333, 437; POL/INT 359; POL/PUB 441.

Language and Culture Studies: AFA/DAN/INT 204; ANT 355; ANT/INT 299; ANT/INT 375; ANT/LIN 335; ANT/SOC 325; ANT 359/WGS 358; COM 381; HIS 387; MUS 226.

Women's and Gender Studies: ANT/WGS 378; HIS/WGS 370; SOC/WGS/INT 376; WGS 399. World Environment: BIO 376; BIO/GEO/INT 372; ENV 100, 289; GEO 150; GEO/RPL 215; RPL 312. World History: AFA/ANT/PHL 203; BIO 305; HIS/INT 112, 346; HIS 328, 360, 412, 479; MUS 321.

C. Demonstrated proficiency in a foreign language, as evidenced by completion at UM-Flint of one of ARB 112, FRN 112, GER 112, JPN 112, LAT 105, RUS 112 or SPN 112; or equivalent proficiency by examination. (The foreign language requirement is automatically satisfied for any student seeking a Bachelor of Arts degree.)

See the Foreign Languages section of this *Catalog* for concentrations in French or Spanish and International and Global Studies combining the International and Global Studies minor with a 22-credit program in either French or Spanish.

Honors Minor in International and Global Studies

Requirements.

- A. Admission to the UM-Flint Honors Scholar Program.
- B. Concentration in a subject compatible with the IGS minor.
- C. Completion of all requirements for an IGS minor. It is recommended that honors elections be made for courses for the minor at the 300- level or higher.
- D. Completion of an Honors Scholar off-campus experience outside the United States.
- E. Completion of either the 211- or 205- level of a foreign language at UM-Flint.
- F. A minimum 3.5 cumulative grade point average.
- G. Completion of all the requirements for the Honors Scholar Program. See the Honors section in this *Catalog*.

Courses in International and Global Studies (INT)

100. Introduction to Cultural Anthropology. (3)s/cs1.

Examination of the enormous cultural diversity within and between the world's peoples and the political importance of this diversity today. Subsistence methods, kinship patterns, power relations, linguistic variations, cultural conflicts, and forms of inequality around the world. "Culture" as a historically dynamic process that is both creative and constantly undergoing transformation. *Graded ABCDD->N. Also listed as ANT 100*.

112. World History to 1500. (3)s.

Survey of cultural, social, intellectual, economic and political heritage in the development of major civilizations to the sixth century. History and interconnections among civilizations of the ancient Middle East, the Mediterranean periphery, Europe, Sub-Saharan Africa, the Americas, East Asia and the Indian Subcontinent, examined from a global perspective. *Not open to students who have completed (HIS 110). Also listed as HIS 112.*

113. World History since **1500.** (3)s.

Survey of cultural, social, intellectual, economic and political heritage in the development of major civilizations since the sixth century. History and interconnections among civilizations of Europe, the Mediterranean periphery, East Asia, the Middle East, Sub-Saharan Africa, the Americas, and the Indian Subcontinent, examined from a global perspective. *Not open to students who have completed (HIS 111). Also listed as HIS 113.*

115. World Regional Geography. (3)s.

Global patterns of economic development, land use, population and human conflict. Where and how people live and interact with the environment in different parts of the world including problems of famine, trade, geopolitics and ethnic conflict. *Also listed as GEO 115*.

204. World Dance Forms. *Sophomore standing; DAN 116, 117, 118 or 120, 121, or 130, 131; or consent of instructor.* (2)f.

Movement and lecture course with emphasis on global cultures and their folk traditions through dance. Specific area of exploration determined a semester prior to course offering. Also listed as AFA 204 and DAN 204.

230. International Relations. (3)s.

Introduction to major concepts and theories of international relations. The role of the state and non-state actors in international affairs. Problems of war and peace, globalization, and development. *Also listed as POL 230*.

299. Third World Cultures Through Film. (3)s.

Focus on ways in which social and cultural themes surrounding the "Third World" are represented in fictional and non-fictional films, important cultural documents and social commentaries which help establish a cross-cultural framework for exploring the politics of cultural conflict and transformation. Through films, associated readings, and class discussions, students learn to critically interrogate and analyze shifting meanings of the concept of "Third World." *Also listed as ANT 299*.

346. Twentieth Century World History. Junior standing or consent of instructor. (3)s.

Survey of the history of the world in the 20th century in its political, economic, social, and cultural manifestations. Central

historiographical themes of the 20th century; salient issues confronting the globe entering the 21st century. Also listed as HIS 346.

352. Culture and Economy in Cross-Cultural Perspective. ANT/INT 100. (3)s.

Exploration of different economic systems that have emerged around the world and the relationship between cultural dynamics and economic transformations. Critical analysis of concepts used to describe the "economy," emphasizing elements of production, distribution, consumption, and social reproduction. Primary focus on the "non-Western" world, how anthropologists analyze economic issues, and relevance to understanding capitalism and world systems. Also listed as ANT 352.

359. Comparative Revolutions. POL 190 or consent of instructor. (3)s.

Comparison and analysis of revolutionary change in the Twentieth Century. Theoretical explanations of the causes and processes of revolutions; reasons for success and failure. Political consequences of revolutions for social and economic organization. International dimensions of social revolutions. Also listed as POL 359.

366. The Global Economy. ECN 201, 202. (3)s.

Consideration of the Global Economy, primarily since 1945. Theories of growth and technological change. Case studies of major countries and investigation of key sectors, including manufacturing, information technology, and financial services. Also listed as ECN 366.

367. World Economic History. ECN 201, 202; or consent of instructor. (3)s.

Study of economic development from invention of agriculture to the present. Topics include technological change, evolution of economic institutions, the industrial revolution, colonialism and decolonization, and globalization. Theoretical focus on issues of growth and development. Also listed as ECN 367.

372. Biogeography. GEO 150; BIO 111, 113; or consent of instructor. (3).

Geographic distribution of plants and animals, past and present, as influenced by geological, biological, geographical, human and other factors. Mass extinctions, geographic diffusion, major biomes, human evolution, environmental issues, biogeographical mapping techniques. Also listed as BIO 373 and GEO 372.

375. Social and Cultural Change. ANT/INT 100 or SOC 100.

Institutions and social change. Emphasis on theories, ideologies, social movements and revolutions. Study of colonialism, economic crisis, peasant struggles, nationalism, indigenous rights, independence movements, and struggles over development and underdevelopment. Also listed as ANT 375 and SOC 375.

376. Sex, Work, and International Capital. ANT 100 or SOC 100 or consent of instructor. (3).

Analysis of significance of women's labor to international

capital in a cross-cultural perspective. Examination of social construction of "third world" and "development," and potential and limits of these categories in understanding ideological and material conditions of lives of women across race, class and national boundaries in the world of work. Also listed as ANT 376, SOC 376 and WGS 376.

383. Special Topics on Japan I. Enrollment in Japan Center Program. (4).

Study abroad. Topics determined on annual basis at the Japan Center.

384. Special Topics on Japan II. Enrollment in Japan Center Program. (4).

Study abroad. Topics determined on annual basis at the Japan Center.

385. Japanese Society and Culture I. Enrollment in Japan Center Program. (4)s.

Exploration of Japanese culture from a variety of viewpoints and including such topics as the family, women's roles, education, religions, politics, architecture and economics. Also listed as ANT 385.

386. Japanese Society and Culture II. Enrollment in Japan Center Program. (4)s.

Continuation of ANT/INT 385. Also listed as ANT 386.

394. Special Topics in Study Abroad. Enrollment in Study Abroad Program consent of instructor. (3).

Study abroad course open to all UM-Flint students. Graded ABCD>N.

395. Directed Research in Study Abroad. Enrollment in Study Abroad Program, consent of instructor. (3).

Study abroad directed research course open to all UM-Flint Students. *Graded ABCD>N*.

398. Topics in International and Global Studies. Consent of instructor; at least sophomore standing. (1-6).

Different topics each semester and/or section, to be announced in advance of registration. Graded ABCD>N.

415. Seminar on Contemporary Global Issues. SOC/ANT 302 or 303 or senior standing; consent of instructor. (3)s.

Issue-based course linking recent social theory, empirical research, and predicaments of public policy within a comprehensive global framework. Focus on globalization and issues of social and political importance central to recent debates within and outside the academy. Multi-disciplinary approach, materials drawn from the U.S., Europe, and developing world that highlight recent global socio-economic transformations. Designed to serve students majoring in a number of different fields, especially those engaged in specific research projects and/or preparing for graduate school. Also listed as ANT 415.

Graduate Courses in International and Global Studies

515. Seminar on Contemporary Global Issues. Graduate standing, SOC/ANT 302 or 303 or consent of instructor. (3).

See INT 415 for description. Not open to students with credit for ANT/INT 415. Also listed as ANT 515.

546. Twentieth Century World History. *Graduate standing.* (3).

See INT 346 for description. Not open to students with credit for HIS/INT 346. Also listed as HIS 546.

552. Culture and Economy in Cross-Cultural Perspective.

Graduate standing; ANT/INT 100 or consent of instructor.

(3).

See INT 352 for description. Not open to students with credit for ANT/INT 352. Also listed as ANT 552.

559. Comparative Revolutions. *Graduate standing.* (3).

See INT 359 for description. Not open to students with credit for POL/INT 359. Also listed as POL 559.

575. Social and Cultural Change. Graduate standing, ANT/INT 100 or SOC 100; or consent of instructor. (3).

See INT 375 for description. Not open to students with credit for SOC/ANT/INT 375. Also listed as ANT 575 and SOC 575.

576. Sex, Work, and International Capital. *Graduate standing, SOC 100 or ANT 100; or consent of instructor.* (3).

See INT 376 for description. Not open for students with credit for SOC/ANT/WGS/INT 376. Also listed as ANT 576, SOC 576 and WGS 576.



Campus Directory

ORGANIZATION OF THE UNIVERSITY

Regents **University of Michigan**

Julia Donovan Darlow, Ann Arbor Laurence B. Deitch, Bingham Farms Olivia P. Maynard, Goodrich Rebecca McGowan, Ann Arbor Andrea Fischer Newman, Ann Arbor Andrew C. Richner, Grosse Pointe Park S. Martin Taylor, Grosse Pointe Farms Katherine E. White, Ann Arbor Mary Sue Coleman, ex officio

Executive Officers University of Michigan

Mary Sue Coleman, B.A., Ph.D. President of the University

Sally J. Churchill, M.A., JD. Vice President and Secretary of the University

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E. Royster Harper, M.A., Ed.D. Vice President for Student Affairs

Robert P. Kelch, M.D.

Executive Vice President for Medical Affairs

Marvin Krislov, M.A., J.D. Vice President and General Counsel

Daniel E. Little, A.B., Ph.D. Chancellor, University of Michigan-Dearborn

Jerry A. May, B.A., M.Ed. Vice President for Development

Juan E. Mestas, M.A., Ph.D. Chancellor, University of Michigan-Flint

Lisa M. Rudgers, B.A. Vice President for Communications

Timothy P. Slottow, B.A., M.B.A. Executive Vice President and Chief Financial Officer

Teresa A. Sullivan, A.M., Ph.D. Provost and Executive Vice President for Academic Affairs

Cynthia H. Wilbanks, B.A. Vice President for Government Relations

Citizens Advisory Committee University of Michigan-Flint

Reverend Thulisiwe Beresford State Senator Bob Emerson Judge Judith Fullerton Nick George State Representative Lee Gonzales Tim Herman Lawrence E. Moon Ghassan Saab Kathryn Sharbaugh David Sharp Ernestine Smith Maureen Smyth Thomas Taylor David Zick

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Juan E. Mestas, Ph.D. Chancellor

Jack Kav. Ph.D.

Provost and Vice Chancellor for Academic Affairs

David W. Barthelmes, M.S., M.B.A. Vice Chancellor for Administration

Mary Jo Sekelsky, M.A., Ed.D.

Vice Chancellor for Student Services and Enrollment Management

Kristen Skivington, Ph.D. Vice Chancellor for Institutional Advancement

Academic Deans University of Michigan-Flint

D. J. Trela, Ph.D. Dean of the College of Arts and Sciences

Robert W. Barnett, Ph.D. Associate Dean of the College of Arts and Sciences

Roy C. Barnes, Ph.D. Assistant Dean of the College of Arts and Sciences

Susanne Chandler, Ph.D. Dean of the School of Education and Human Services

Traki L. Taylor-Webb, Ph.D. Associate Dean of the School of Education and Human Services

Augustine O. Agho, Ph.D. Dean of the School of Health Professions and Studies

Douglas I. Moon, Ph.D. Dean of the School of Management

Vahid Lotfi, Ph.D. Associate Provost and Dean of Graduate Programs

Emeritus Faculty

- Paul A. Adams (1970-2003), Associate Professor Emeritus of Bioloy; University of Michigan, Ph.D.
- Anita Barry (1975-2003), Professor Emerita of Linguistics; Queen's College, B.A.; University of Pennsylvania, M.A.; University of Minnesota, Ph.D.
- Bernice F. Blamer (1959-1988), Assistant Professor Emerita of Education; University of Michigan, A.M.
- Harry H. Blecker (1957-1989), Professor Emeritus of Chemistry; Rutgers University, Ph.D.
- Donald Boys (1967-2002), Associate Professor Emeritus of Physics; Case Institute of Technology, B.S.; Iowa State University, Ph.D.
- Janice Brady (1982-2006), Assistant Professor Emerita of Nursing; University of Michigan, B.S.N., M.S.; Michigan State University, Ph.D.
- C. Paul Bradley (1956-1983), Professor Emeritus of Political Science; Columbia University, Ph.D.
- Paul Bronstein (1981-2004), Professor Emeritus of Psychology; City College of New York, B.A.; Miami University M.A.; Rutgers, Ph.D.
- Thomas L. Coffey (1973-1992), Professor Emeritus of Sociology/Anthropology/Social Work; University of Michigan, Ph.D.
- Virgil W. Cope (1968-2006), Professor Emeritus of Chemistry; State College of Iowa, B.A.; University of Kansas, Ph.D.
- Kendall B. Cox (1966-1989), Assistant Professor Emeritus of Philosophy; University of Michigan, Ph.D.
- Mary E. Cox (1966-2002), Professor Emerita of Physics and Engineering; Albion College, A.B.; University of Michigan, A.M; University of California, Los Angeles, Ph.D.
- Richard E. Darnell (1971-2004), Professor Emeritus of Physical Therapy; New York University, B.S.; Michigan State University, M.A., Ph.D., FAPTA
- Donald E. DeGraaf (1956-1990), Professor Emeritus of Physics; University of Michigan, Ph.D.
- Harry K. Edwards (1980-2003), Professor Emeritus of Computer Science; Youngstown State University, B.S.; University of Missouri-Rolla, M.S., Ph.D.
- Dennis F. Ellis (1977-2003), Professor Emeritus of Business Economics; Alma College, B.S.; University of Detroit, M.A.; Wayne State University, M.A., Ph.D.
- Hani I. Fakhouri (1972-2000), Professor Emeritus of Anthropology; Wayne State University, B.A., M.A.; Michigan State University, Ph.D.

- Walker Fesmire (1982-1997), Professor Emeritus of Accounting; Ohio State University, B.S.; Xavier University, Cincinnati, M.B.A.; University of Mississippi, Oxford, Ph.D.
- Thomas Filson (1967-2002), Associate Professor Emeritus of Education; Chicago State College, A.B.; University of Minnesota, Ph.D.
- Richard W. Fortner (1980-1997), Dean Emeritus & Professor Emeritus of Management and Accounting; Indiana University, B.S., M.B.A., D.B.A., C.P.A.
- Harry Frank (1969-2002), Professor Emeritus of Psychology; University of California-Berkley, A.B.; University of Colorado, M.A., Ph.D.
- Peter R. Gluck (1972-2002), Professor Emeritus of Political Science; Hobart College, B.A.; State University of New York-Buffalo, M.A., Ph.D.
- Robert W. Heywood (1965-1994), Professor Emeritus of History; University of Illinois, Ph.D.
- Charles A. Jones (1991-2003), Associate Professor Emeritus of Sociology; College Ozards, B.A.; Fordham University, M.S.W.; University of Michigan, Ph.D.
- Clinton B. Jones (1984-1994), Chancellor Emeritus; Claremont Graduate School, Ph.D.
- Larry M. King (1974-2006), Associate Professor Emeritus of Mathematics; Brooklyn College, B.S.; University of Maryland, M.A., Ph.D.
- Judith J. Kollmann (1968-2006), Professor Emerita of English; University of California-Berkeley, B.A.; University of Colorado-Boulder, M.A., Ph.D.
- Lubomyr M. Kowal (1966-1999), Professor Emeritus of Economics; St. Francis College, B.A.; University of Detroit, M.B.A.; University of Illinois, Ph.D.
- Robert M. Kren (1968-2004), Professor Emeritus of Chemistry; San Francisco State College, B.S.; Washington State University, Ph.D.
- Lawrence D. Kugler (1966-2003), Professor Emeritus of Mathematics; California Institute of Technology, B.S.; University of California-Los Angeles, M.A., Ph.D.
- John A. Larson (1976-1994), Professor Emeritus of Management; Northwestern Illinois University, Ph.D.
- Neil O. Leighton, (1973-1999), Professor Emeritus of Political Science; Otterbein College, B.A.; Indiana University, M.A., Ph.D.
- William J. Lockwood (1969-2003), Professor Emeritus of English; Williams College, A.B.; Claremont Graduate School, M.A.; University of Pennsylvania, Ph.D.

- Theophilus S. Lynch (1966-1993), Professor Emeritus of Spanish & Comparative Literature; University of Pennsylvania, Ph.D.
- John D. Marquardt (1980-2002), Associate Professor Emeritus of Accounting; University of Michigan-Flint, A.B.; Eastern Michigan University, M.B.A.; University of Illinois, Ph.D.
- William A. Marsh (1970-2001), French Distinguished Professor Emeritus of Physical Geography; Central Michigan University, B.A.; University of Missouri, M.A.; University of Michigan, Ph.D.
- Wilfred G. Marston, (1970-2000), Professor Emeritus of Sociology; Seattle Pacific College, B.A.; University of Washington-Seattle, M.A., Ph.D.
- Carolyn M. Mawby, (1974-2002), Associate Professor Emerita of Music; Michigan State University, B.M.; Brown University, M.M.
- Renate McLaughlin (1968-2006), Provost & Vice Chancellor of Academic Affairs Emerita & Professor Emerita of Mathematics; University of Munster, Germany, Vordiplom; University of Michigan, A.M., Ph.D.
- William J. Meyer (1970-2004), Professor Emeritus of Political Science; St. John Fisher College, B.A.; Pennsylvania State University, M.A., Ph.D.
- Douglas E. Miller (1964-2006), Associate Professor Emeritus of Art & German; University of Michigan, A.B., A.M., Ph.D.
- Charlie Nelms (1994-1998), Chancellor Emeritus; Indiana University, Ed.D.
- Vincent O'Keeffe (1975-1994), Associate Professor Emeritus of Music; Columbia University, Ed.D.
- Mary E. Periard (1980-2005), Associate Professor Emerita of Nursing; University of Michigan, B.S.N., M.S.
- Maxine H. Perine (1964-1986), Assistant Professor Emerita of Education; Columbia University, Ed.D.
- Ellis Perlman (1967-2002), Professor Emeritus of Political Science; University of California-Los Angeles, A.B., M.A., Ph.D.
- Paul K. Peterson (1969-2006), Associate Professor Emeritus of Philosophy; University of Minnesota, B.A., Ph.D.
- Donald M. Pollie (1963-1985), Professor Emeritus of Psychology; University of Michigan, Ph.D.
- Consuela M. Provost, (1972-1999), Professor Emerita of English and Theatre; Xavier University, B.S.; Louisiana State University, M.A.; University of Michigan, A.D.
- Wesley D. Rae (1969-1996), Professor Emeritus of English; University Wisconsin, Ph.D

- Alfred C. Raphelson (1956-1991), Professor Emeritus of Psychology; University of Michigan, Ph.D.
- Nallapu N. Reddy (1974-2005), Professor Emeritus of Economics; Michigan Technological University, B.S.; University of Missouri, M.S.; University of Notre Dame, M.A.; Pennsylvania State University, Ph.D.
- Frank C. Richardson (1956-1996), Professor Emeritus of French, German & Comparative Literature; University of Michigan, Ph.D.
- Carl H. Rinne, (1970-1999), Associate Professor Emeritus of Education; DePaul University, B.A.; Stanford University, M.A., Ph.D.
- Frank E. Rose (1963-1994), Associate Professor Emeritus of Physics; Cornell University, Ph.D.
- Lois M. Rosen (1984-2003), Professor Emerita of English; Temple University, B.A., Ed.M.; Michigan State University, Ph.D.
- A. Raymond Roth (1968-1991), Associate Professor Emeritus of Music; Michigan State University, Ph.D.
- Thomas C. Schaal (1994-2005), Associate Professor Emeritus in Nursing; University of Pennsylvania, B.S.N.; Boston University, M.S.N.; University of Pittsburgh, Ph.D.
- John B. Schroeder (1959-1995), Associate Professor Emeritus of Political Science; University of Michigan, Ph.D.
- Ronald E. Silverman (1972-2005), Professor Emeritus of Psychology; Colgate University, A.B.; State university of New York at Buffalo, M.A., Ph.D.
- Barnard E. Smith (1980-1989), French Distinguished Professor Emeritus of Management; Stanford University, Ph.D.
- Harold L. Stahly (1965-1991), Professor Emeritus of Education; Indiana University, Ed.D
- Edward E. Sullivan (1966-1998), Professor Emeritus of Education; University of Michigan, Ph.D.
- Johannes Tall (1974-1992), Associate Professor Emeritus of Music; University of Minnesota, Ph.D.
- Jane Taylor (1967-1990), French Distinguished Professor Emerita of Biology; University of Cincinnati, Ph.D.
- Birgitta J. Vance (1962-2000), Professor Emerita of Spanish; Wayne State University, A.B., M.A., Ph.D.
- Harriet M. Wall (1972-2005), Professor Emerita of Psychology; Purdue University, B.S.; San Diego State College, M.S.; University of Rochester, Ph.D.
- Charles T. Weber (1977-1994), Associate Professor Emeritus of Economics; Ph.D.

- Zelma H. Weisfeld (1960-1989), Professor Emerita of Theatre and Drama; M.F.A.
- Kenneth B. West (1966-1999), Professor Emeritus of History; University of Washington, B.A., M.A., Ph.D.
- Sue A. Woestehoff (1969-2006), Professor Emerita of Education; University of Minnesota, B.S., M.A., Ph.D.
- Ellen A. Woodman (1976-2002), Assistant Professor Emerita of Nursing; University of Cincinnati, B.S.; University of Michigan, M.S., Ph.D.
- Lung-Chiang Wu (1981-2001), Associate Professor Emeritus of Computer Science; Cheng Kung University, B.S., Kansas State University, M.S.; University of Michigan, M.S., Ph.D.
- Dorothea E. Wyatt (1956-1975), Professor Emeritus of History; Stanford University, Ph.D.

Professors, Associate Professors & Assistant Professors

- As of September 1, 2006. Date in parentheses indicates year of initial appointment.
- Aamot, Kirk C. (1999), Associate Professor of Music; St. Olaf College, B.A.; University of Minnesota, M.M.; University of Colorado, D.M.A.
- Ableser, Judith (2004), Assistant Professor of Education; University of Guelph, B.A.Sc.; University of Toronto/O.I.S.E. M.A.; Wayne State University, Ph.D.
- Agho, Augustine (2001), Dean, School of Health Professions and Studies & Professor of Health Professions; Alaska Pacific University, B.A., Governors State University, M.H.A., University of Iowa, Ph.D.
- Aiyer, Ananthakrishnan (2000), Assistant Professor of Anthropology; St. Xavier's College, B.A.; Temple University, M.A., Ph.D.
- Alexander, Lois L. (1987), Associate Professor of Music; University of Michigan, B.M.E.; University of Cincinnati, M.M.; Michigan State University, Ph.D.
- Alfaro, Ricardo (1989), Professor of Mathematics; Pontificia Universidad Catolica del Peru, B.S.; University of Cincinnati, M.S., Ph.D.
- Althoen, Steven C. (1975), Professor of Mathematics; Kenyon College, B.A.; City University of New York, Ph.D.
- Alvey, Jennifer E. (2003), Instructor in Anthropology and Women's and Gender Studies; Temple University, B.A., M.A.
- Anderson, Jami L. (1999), Associate Professor of Philosophy; Arizona State University, B.A.; University of Southern California, M.A., Ph.D.

- Andrews, Margaret (2006), Professor of Nursing and Director of Academic Programs; St. John College, B.S.N.; Case-Western Reserve University, M.S.N.; University of Utah, Ph.D.
- Angur, Madhukar G. (1991), French Distinguished Professor of Marketing; Karnataka Regional Engineering College, B.Tech; Indian Institute of Management, Ahmedabad, M.B.A.; The University of Texas, Arlington, Ph.D.
- Apple, Charles G. (1986), Associate Professor of Communications; Monteith, Wayne State University, Ph.B., M.A., Ph.D.
- Arya, Avinash (2005), Assistant Professor of Accounting; Agra University, B.S., M.S.; Indian Institute of Management, M.B.A.; State University of New York, Ph.D.
- Babbar, Anjili (2005), Assistant Professor of English; University of Rochester, B.A., Ph.D.; McGill University, M.A.
- Bailey, Charles W. (1976), Associate Professor of Sociology; University of Michigan-Flint, A.B.; University of Michigan, M.S.W.
- Baird, Darryl G. (1998), Associate Professor of Art; Southern Methodist University, B.A.; University of North Texas, M.F.A.
- Barnes, Roy C. (1996), Assistant Dean, College of Arts & Sciences & Associate Professor of Sociology; Pomona College, B.A.; Mississippi State University, M.A.; University of Wisconsin, Ph.D.
- Barnett, Robert W., (1994), Associate Dean, College of Arts & Sciences & Professor of English; Alma College, B.A.; Central Michigan University, M.A.; University of Nevada, Ph.D.
- Barnfather, Janet S. (1986), Associate Professor of Nursing; Wayne State University, B.S.N.; Wayne State University, M.S.N.; University of Michigan, Ph.D.
- Bernstein, Stephen D. (1990), Professor of English; Indiana University, B.A.; University of Wisconsin, M.A., Ph.D.
- Bernsten, Janice G. (1990), Associate Professor of Linguistics; Whitman College, B.A.; University of Illinois, M.A.; Michigan State University, Ph.D.
- Bix, Robert A. (1977), Professor of Mathematics; University of Chicago, B.A.; Yale University, Ph.D.
- Blakely, Everett J. (1980), Associate Professor of Social Work; University of Michigan-Flint, B.A.; University of Michigan, M.S.W.
- Blume, Brian D. (2006), Assistant Professor of Organizational Behavior/Human Resources; Purdue University, B.S.; Bradley University, M.B.A.; Indiana University, Ph.D.
- Blumner, Jacob (2005), Assistant Professor in English; California State University, B.A., M.A.; University of Nevada, Ph.D.

- Brock, Arlesia (2006), Assistant Professor in Health Sciences & Administration; Louisiana State, B.S.; University of W. Florida, M.A., University of S. Florida, Ph.D.
- Buffin, Brian (2006), Assistant Professor in Chemistry; Calvin College, B.S.; University of Utah, M.S.; University of Utah, Ph.D.
- Cao, Wei (2004), Assistant Professor of Education; Yunnan Normal University, B.A.; Northern Kentucky University, M.A.; University of Cincinnati, Ed.D.
- Casement, Rose (1999), Associate Professor of Education; Eastern Michigan University, B.S.; University of Maine, M.Ed.; University of Maine, Ed.D.
- Cebulski, Paulette M. (1973), Associate Professor & Director of Physical Therapy; St. Louis University, B.S.; University of Minnesota, M.S.; University of Michigan, Ph.D.
- Chan, Phoebe (2004), Assistance Professor in Economics; University of Michigan, B.S.; Stanford University, M.A., Ph.D.
- Chandler, Susanne (2004), Dean, School of Education & Human Services & Professor in Education; California State University-Fullerton, B.M.; University of California-Davis, M.A.; Ohio State University, Ph.D.
- Chen, Clement Chih Hao (2001), Assistant Professor of Accounting; University of Michigan, B.B.A., Michigan State University, M.B.A., University of Kentucky, Ph.D.
- Cho, Seunghye (2006), Assistant Professor in Theatre & Dance; Hansung University, B.A.; Hanyany University, M.S.; University of Oklahoma, M.F.A.
- Chow, T. Edwin (2005), Assistant Professor in Earth & Resource Science; University of Texas, B.A.; University of South Carolina, M.S., Ph.D.
- Costantini, Giovanna (2005), Assistant Professor in Communications & Visual Arts; Wayne State University, B.A., M.A.; University of Michigan, Ph.D.
- Creech, Constance (1989), Assistant Professor of Nursing and Director of Academic Programs; University of Michigan-Flint, B.S.; Wayne State University, M.S., Ed.D.
- Cushing, Simon S. C. (1999), Associate Professor of Philosophy; Oxford University, B.A., M.A.; University of Southern California, M.A., Ph.D.
- Dauwe, Loretta J. (1985), Professor of Physics; University of Dayton, B.S.; University of Missouri-Rolla, M.S.T.; Purdue University, Ph.D.
- Dedman, Denise (2005), Assistant Professor in Social Work; Auburn University, B.A.; University of Georgia, M.S.W.
- DiBlassio, Brian W. (2000), Assistant Professor in Music; University of Miami, B.M.; University of Michigan, M.M.

- Dorfman, Aviva B. (1998), Assistant Professor of Education; Mills College, B.A., Harvard Graduate School of Education, M.Ed., University of Michigan, Ph.D.
- Drouin, Jacqueline (2000), Assistant Professor of Physical Education; Oakland University, B.S., M.S., Wayne State University, Ph.D.
- D'Souza, Harry J. (1983), Professor of Mathematics; St. Xavier's College, B.S.; University of Bombay, India, M.S.; University of Notre Dame, M.S., Ph.D.
- Dunlop, Charles E.M. (1972), French Distinguished Professor of Philosophy; Stanford University, A.B.; Wright State University, M.S.; Duke University, M.A., Ph.D.
- Ellis, John Stephen (2002), Assistant Professor of History; Eastern Michigan University, B.S., University of Wales, M.A., Boston College, Ph.D.
- Ememyonu, Ernest N. (2002), Professor of Africana Studies; University of Nigeria, B.A., Columbia University-Teachers College, M.A., University of Wisconsin, Ph.D.
- Farmer, Michael E. (2004), Assistant Professor of Computer Science; Columbia University, B.S.; University of Michigan, M.S.; University of Minnesota, M.S.; Michigan State University, Ph.D.
- Finney, Mary Jo (1998), Associate Professor in Education; Michigan State University, B.A.; Oakland University, M.A.T., Ph.D.
- Fortner, Richard W. (1980), Dean Emeritus & Professor Emeritus of Management & Accounting; Indiana University, B.S., M.B.A., D.B.A., C.P.A.
- Foster, Thomas C. (1987), Professor of English; Dartmouth College, A.B.; Michigan State University, M.A., Ph.D.
- Freedman, Eric G. (1993), Associate Professor in Psychology; Brandeis University, B.A.; University of Maine, Ph.D.
- Freisen, Lauren D. (1997), Professor in Theatre & Dance; Bethel College, B.A.; Pacific School of Religion, M.A.; Graduate Theological Union, Ph.D.
- Fry, Donna K. (1987), Associate Professor in Physical Therapy; University of Michigan, B.S., M.S., Ph.D.
- Furman, Marva J. (1987), Professor of English; Tuskegee Institute, B.A.; Bucknell University, M.A.; Florida State University, Ph.D.
- Gallant, Patricia A., (2003), Assistant Professor in Education; University of Vermont, B.S., M.E., Ed.D.
- Gano-Phillips, Susan (1994), Associate Professor in Psychology; University of Michigan, B.S.; University of Illinois, M.A., Ph.D.

- Gemeda, Guluma (1998), Assistant Professor of Africana Studies; Addis Ababa University, B.A., M.A., Michigan State University, Ph.D.
- Gifford, Mary Jo (1996), Associate Professor of English; College of the Holy Cross, B.A.; Boston College, M.A., Ph.D.
- Gillespie, Carolyn M. (1987), Professor of Theatre & Dance; Marquette University, B.A.; Stanford University, M.F.A.
- Hakam, Imane A. (1991), Associate Professor of Foreign Languages; Cairo University, Egypt, M.A., Ph.D.
- Han, Lixing (2000), Assistant Professor of Mathematics; Tianjin University, B.S.; Chinese Academy of Sciences, M.S; University of Connecticut, M.S., Ph.D.
- Hanashiro, Roy S. (1989), Professor of History; University of Hawaii, B.A., M.A., Ph.D.
- Hansen, Kristina D. (1981), Associate Professor of Mathematics; Coe College, B.A.; University of Iowa, M.S., Ph.D.
- Heinze, Hillary (2006), Assistant Professor in Psychology; Hope College, B.A.; Wayne State University, M.A., Ph.D.
- Hemphill, Thomas (2005), Assistant Professor of Strategy & Business; College of New Jersey, B.S.; Drexel University, M.B.A.; University of Pennsylvania, M.S.; Rutgers University, M.S.; George Washington University, Ph.D.
- Hernandez, Rudolph (2005), Instructor in Sociology; Wayne State University, B.A.; Michigan State University, M.A.
- Hill-Rowley, Richard (1982), Associate Professor of Earth & Resource Science; Lanchester Polytechnic, England, B.S.; University of Georgia, M.A.; Michigan State University, Ph.D.
- Hilton-Watson, Matthew (1997), Associate Professor of Foreign Languages; University of Kentucky, B.A., M.A.; University of Michigan, Ph.D.
- Hiramatsu, Kazuko (2000), Assistant Professor in English; Northwestern University, B.A.; University of Connecticut, Ph.D.
- Horgan, Terrence G. (2004), Assistant Professor of Psychology; Illinois State University, B.S.; University of Missouri-Columbia, M.A.; Northwestern University, Ph.D.
- Jarvinen, Michael K. (2003), Assistant Professor in Psychology; University of Michigan – Flint, B.A.; Purdue University, M.S.; Dartmouth Medical School, Ph.D.
- Kahn, Margaret F. (1984), French Distinguished Professor of Political Science; Oberlin College, B.A.; University of California-Berkeley, M.A., Ph.D.
- Kandogan, Yener (2002), Associate Professor of Business Economics; Bilkent University-Turkey, B.S., M.S., University of Michigan, Ph.D.

- Kartha, C. Peethambaran (1979), French Distinguished Professor of Quantitative Methods; University of Kerala, B.Sc.; Indian Agricultural Research Institute, M.S.; University of Wisconsin, M.S., Ph.D.
- Kaufman, Martin (1991), Associate Professor of Earth & Resource Science; University of Michigan, B.A., M.U.P., Ph.D.
- Kay, Jack (2005), Provost & Vice Chancellor for Academic Affairs & Professor of Communications; Wayne State University, B.S.; Southern Illinios University, M.S.; Wayne State University, Ph.D.
- Kent, Alicia (2001), Assistant Professor of English; Stanford University, A. B., University of Wisconsin-Madison, M.A., PhD
- Knecht, Linda (1984), Assistant Professor of Nursing; Duke University, B.S.N.; Wayne State University, M.S.N.
- Knezek, Suzanne (2006), Assistant Professor of Education; Michigan State University, B.S., M.A., Ph.D.
- Knight, Suzanne (2004), Instructor in English; Central Michigan University, B.S., M.A.; Michigan State University, Ph.D.
- Koch, Larry W. (1990), Associate Professor of Sociology; University of Missouri, B.A., M.A., Ph.D.
- Kollmann, Judith (1968), Professor Emeritia in English; University of California-Berkley, B.A.; University of Colorado, M.A., Ph.D.
- Kosnoski, Jason (2005), Assistant Professor in Political Science; Drew University, B.A.; University of Virginia, M.A.; New School for Social Research, Ph.D.
- Kupperman, Jeffrey P. (1997), Assistant Professor of Education; University of Chicago, A. B., University of Michigan, M.A., Ph.D.
- Landon, Stephen (2005), Assistant Professor in Theatre & Dance;
 Lawrence Tech University, B.S.; Wayne State University,
 M.F.A.
- Laube, Heather (2003), Assistant Professor of Sociology; University of Wisconsin-Madison, B.A.; University of Wisconsin-Milwaukee, M.A.; University at Albany, State University of New York, Ph.D.
- Laverty, William W. (2002), Assistant Professor in Political Science; Ohio University, B.A., M.A.; Florida Atlantic University, M.P.A.; Indiana University, Ph.D.
- Lawand, Jamile T. (1995), Associate Professor of Foreign Languages; University of Seville, Spain; University of Michigan, Ph.D.
- Li, Weiqi (2001), Assistant Professor of Management Information Systems; Nanjing Aeronautical Institute-China, B.S., B.A., University of Mississippi, M.B.A., M.S., Ph.D.

- Litwin, Kenneth J. (2003), Assistant Professor of Sociology and Criminal Justice; Youngstown State University, B.A.; Ohio State University, M.A., Ph.D.
- Lotfi, Vahid (1990), Associate Provost & Professor in Operations Management; State University of New York, B.S., M.S., Ph.D.
- LoVasco, Laura M. (2004), Instructor in Physical Therapy; Oakland University, B.A.; University of Michigan – Flint, B.S., M.P.T.
- Lutzker, Adam (1999), Assistant Professor in Economics; University of Maryland, B.A.; University of Michigan, Ph.D.
- Mars, Joan R. (1999), Associate Professor in Criminal Justice; University of Guyana, PT.I., L.L.B.; University of the West Indies, PT.II., L.L.B.; Sir Hugh Wooding Law School, J.D.; Wayne State University, Ph.D.
- Mazumder, Quamrul (2006), Assistant Professor in Computer Science, Engineering Science & Physics; Bangladesh University, B.S.; South Dakota State University, M.S.; Oklahoma State University, M.B.A.; University of Tulsa, Ph.D.
- McFarland, Marilyn (2006), Associate Professor of Nursing; Wayne State University, B.S.N., Ph.D.
- McGrath, Marianne P. (1991), Associate Professor of Psychology; University of Illinois, B.S.; University of Houston, M.A., Ph.D.
- Mehdian, Seyed M. (1999), Professor of Finance; Tehran College of Business, B.B.A.D.Y.; Western Michigan University, M.A.; Southern Illinois University, Ph.D.
- Mestas, Juan E. (1999), Chancellor & Professor of Foreign Languages; Universidad de Puerto Rico, B.A.; State University of New York, M.A., Ph.D.
- Mojica, Rafael H. (1990), Associate Professor of Foreign Languages; Pontificia Universitas Gregoriana, B.A.; University of Colorado, M.A., Ph.D.
- Moon, I. Douglas, (1989), Dean, School of Management & Professor of Operations Management; University of Texas, B.S., M.S.; Virginia Polytechnic Institute & State University, Ph.D.
- Moreland, Keith A. (1994), Professor of Accounting; University of Michigan, B.B.A.; University of Cincinnati, M.B.A., Ph.D.
- Mulhorn, Kristine A. (1996), Associate Professor in Health Sciences & Administration; Allegheny College, B.A.; University of Michigan, M.H.S.A., University of Delaware, Ph.D.
- Murshed, Feisal (2005), Assistant Professor of Marketing; University of Dhaka, M.B.A.; Wright State University, M.B.A.; University of Pittsburgh, Ph.D.

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- Nas, Tevfik F. (1982), Professor of Economics; Middle East Technical University, Turkey, B.S.; Florida State University, M.B.A., Ph.D.
- Oaklander, L. Nathan (1972), French Distinguished Professor of Philosophy; University of Iowa, B.A., M.A., Ph.D.
- O'Donnell, Paul E. (1986), Professor of Foreign Languages; University Province, France, D.U.E.L.; University of Michigan; B.A., M.A., Ph.D.
- Omoike, Anselm (2005), Assistant Professor in Chemistry; University of Calabar, B.S.; University of Ilorin, M.S.; Queen's University, Ph.D.
- Pace, Gary L. (1963), Associate Professor of Biology; Eastern Michigan University, B.S.; University of Michigan, M.S., Ph.D.
- Pardales, Michael J. (2001), Assistant Professor of Education, Montclair State University, M.Ed., Michigan State University, M.A., PhD.
- Parfitt, Bruce D. (1995), Associate Professor of Biology; University of Wisconsin-Oshkosh, B.S.; Arizona State University, M.S., Ph.D.
- Parker, Shandowyn L (2000), Associate Professor in Health Sciences & Administration; University of Alabama at Birmingham, M.P.H., Ph.D.
- Pearson, Christopher A. (1998), Associate Professor of Physics/Engineering; University of Minnesota, Ph.D.; Hamline University, B.A.
- Peng, Jacob (2005), Assistant Professor of Accounting; Tunghai University, B.A.; University of Illinois, M.S.; Texas Tech University, Ph.D.
- Perry, Mark J. (1996), Associate Professor of Finance; Metropolitan State University, B.A.; University of Minnesota, M.B.A.; George Mason University, M.A., Ph.D.
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- Pflugrad-Jackisch, Ami (2006), Assistant Professor in History; University of Buffalo, B.A., Ph.D.; University of Maine, M.A.
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- Rahme, Joseph G. (1992), Associate Professor in History; University of Michigan, B.A., M.A.; University of Chicago, Ph.D.
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- Roach, Stephanie M. (2003), Assistant Professor of English; Adrian College, B.A.; Case Western Reserve University, M.A.; University of Connecticut, Ph.D.
- Robertson, Theodosia S. (1986), Associate Professor of History; Dominican College of San Rafael, B.A.; Indiana University, Ph.D.
- Rosaen, Sarah (2006), Assistant Professor in Communication & Visual Arts; University of Michigan-Dearborn, B.A.; Michigan State University, M.A., Ph.D.
- Rosenthal, Judy V. (1993), Associate Professor in Anthropology; Cornell University, M.A., Ph.D.
- Rubenstein, Bruce A. (1974), French Distinguished Professor of History; Michigan State University, B.A., M.A., Ph.D.
- Sanders, Jerry D. (1998), Associate Professor in Biology; East Texas State University, B.S., M.S.; University of Texas Southwestern Medical Center, Ph.D.
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- Schilling, Kenneth E. (1984), Professor of Mathematics; University of California, Davis, B.S.; University of California, Berkeley, M.S., Ph.D.
- Schumer, Beverly A. (1987), Assistant Professor in Education; Oakland University, B.A., M.A.; University of Michigan, Ed.D.
- Seipke, Heather L. (2003), Assistant Professor in Communications and Visual Arts; Wayne State University, B.A., M.A., Ph.D.
- Selig, Suzanne M. (1980), Professor & Director of Health Sciences & Administration; University of Florida, B.A.; University of Maine, M.A.; University of Cincinnati, Ph.D.; Johns Hopkins University, M.P.H.; University of Michigan, M.S.W.
- Sevick, Michael C. (1996), Assistant Professor in Communication & Visual Arts; University of Michigan, B.F.A., A.A., M.F.A.
- Shantaram, R. (1971), Associate Professor of Computer Science; Ferguson College, India, B.S.; Poona University, India, M.S.; Wayne State University, M.S.; Pennsylvania State University, Ph.D.

- Siebenthal, Sharman L. (2003), Assistant Professor in Education; Oregon State University, B.A.; Michigan State University, Ph.D.
- Simkani, Mehrdad (1988), Associate Professor of Mathematics; University of South Florida, B.A., Ph.D.
- Smith, Beverley A. (1997), Associate Professor of Anthropology; University of Toronto, B.A.; Michigan State University, M.A, Ph.D.
- Song, Jie (2004), Assistant Professor in Chemistry; Nanjing Forestry University, B.E.; Chinese Academy of Forestry, M.S.; University of North Dakota, Ph.D.
- Sonnega, John (2006), Assistant Professor in Health Sciences & Administration; University of Michigan, B.A., B.S.; Johns Hopkins University, Ph.D.
- Stach, Robert W. (1987), Professor of Chemistry; Illinois Wesleyan University, B.A.; University of Wisconsin, Ph.D.
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- Sturtevant, Ann P. (2002), Assistant Professor of Biology; Cornell University, A.B., University of Illinois, M.S., Ph.D.
- Sucic, Joseph F. (1996), Associate Professor of Biology; Thiel College, B.A.; Virginia Polytechnic Institute & State University, M.S, Ph.D.
- Svoboda, Frederic J. (1980), Professor of English; Michigan State University, B.A., M.A., Ph.D.
- Taggar, Sapna (2000), Associate Professor in Education; University of Michigan, B.A.; Michigan State University, Ph D
- Taghaboni-Dutta, Fataneh (1990), Associate Professor of Operations Management; Purdue University, B.S.I.E., M.S.I.E., Ph.D.
- Taylor-Webb, Traki (1998), Associate Professor in Education; Coppin State College, B.S.; University of Illinois, M.A., Ph.D.
- Thomas Jr., Charles B. (1987), Associate Professor of Sociology; Cornell University, B.A.; Harvard University, M.A., Ph.D.
- Tischler, Jessica L. (2001), Assistant Professor of Chemistry; Saginaw Valley State University, B.S., Michigan State University, Ph.D.
- Toebosch, Annemarie (2003), Assistant Professor in English; University of Nijmegen, M.A.; University of Michigan, M.A., Ph.D.

- Trela, Dale J. (1999), Dean, College of Arts & Sciences & Professor of English; University of Illinois, B.A.; University of Edinburgh, Ph.D.
- Trumble, Stephen (2006), Assistant Professor in Biology; Southwest Texas State University, B.S.; California State University, B.S.; University of Alaska, Ph.D.
- Tu, Shu-Yi (2001), Assistant Professor of Mathematics; Tung-Hai University, B.S., University of California, M.A., Ph.D.
- Turner, Stephen W. (2000), Associate Professor in Computer Science, Engineering Science & Physics; Western Michigan University, B.S.; Michigan State University, M.S., Ph.D.
- Uludag, Suleyman (2006), Instructor in Computer Science, Engineering Science & Physics; Marmara University, B.A.; Illinois Institute of Technology, M.B.A.; DePaul University, M.S., Ph.D.
- Vaziri, Mojtaba (1990), Professor of Physics; Tehran Taibiyet Moalem University, B.S.; Purdue University, Ph.D.
- Velthouse, Betty A. (1988), Associate Professor in Organizational Behavior; Henry Ford Hospital School of Nursing, R.N.; Ball State University, B.S.N.; University of Wisconsin-Milwaukee, M.S.N.; University of Pittsburgh, M.B.A., Ph.D.
- Wagner, Mary H. (2000), Assistant Professor of Music; Kalamazoo College, B.S., University of Michigan, M.B.A., Kent State University, M.A., M.M., Ph.D.
- Waters, Christine M. (1987), Associate Professor of Art; University of Wisconsin-Madison, B.S., M.F.A.
- Watkins, Marcia Y. (1990), Associate Professor of Art; Bowling Green State University, B.S.; Michigan State University, M.F.A.
- Wehbe-Alamah, Hiba (2006), Assistant Professor in Nursing; Saginaw Valley State University, B.S.N., M.S.N., Ph.D.
- Weller, Kirk E. (2006), Associate Professor of Mathematics; Hope College, B.A.; University of Notre Dame, M.S., Ph.D.
- Whitmore, Jeanette (2005), Assistant Professor in Psychology; University of Toledo, B.A., M.A., Ph.D.
- Wigston, David L. (1996), Professor of Biology; University of Exeter, B.S., Ph.D.
- Williams, Fred E. (1998), Professor of Operations Management; Carnegie Institute of Technology, B.S.M.E.; Purdue University, M.S.I.M., Ph.D.
- Woehrle, Kathleen (1995), Associate Professor of Social Work; Michigan State University, B.S., M.A.; Ohio State University, M.S.W., Ph.D.
- Wrobel, Thomas A. (1986), Professor of Psychology; Manhattan College, B.A.; Wayne State University, M.A., Ph.D.

- Wyne, Mudasser F. (2002), Associate Professor of Computer Science, Engineering Science & Physics; University of Peshawar, B.S., Quaid-I-Alam University, M. S., University of Birmingham, Ph.D.
- Zeff, Jacqueline L. (1991), Professor of English; University of Michigan, B.A.; Wayne State University, M.A.; University of Pittsburgh, Ph.D.

Clinical Faculty

- As of September 1, 2006.
- Curatti, Patricia R. (1999), Clinical Assistant Professor of Physical Therapy; Ohio State University, B.S., M.S.
- Filter, Marilyn (2006), Clinical Assistant Professor in Nursing; University of Michigan, B.A., M.S.; Michigan State University, Ph.D.
- George, Kristi J. (2005), Clinical Assistant Professor of Nursing; Hurley School of Nursing, R.N.; University of Michigan-Flint, B.S.; Michigan State University, M.S.
- Kincaid, Cynthia B. (1980), Clinical Associate Professor of Physical Therapy & Associate Director for Clinical Education; University of Michigan, B.S.; Indiana University, M.S.
- Lebeck, Lynn L. (2002), Clinical Assistant Professor in Health Sciences & Administration & Director, Academic Programs; University of Detroit Mercy, M.S.; Madonna University, B.S.; Rush University, Ph.D.
- Rodda, Becky J. (1996), Clinical Assistant Professor of Physical Therapy; Texas Woman's University, B.S.; Washington University, M.H.S.
- Tippen, Maureen (1994), Clinical Assistant Professor in Nursing; Northern Michigan, B.S.N.; Pace University, M.S.

Librarians

- As of September 1, 2006.
- Anderson, Vera K. (1997), Associate Librarian; University of Michigan-Flint, B.A.; University of Michigan, M.I.L.S.
- Davis, Dorothy G. (1977), Associate Librarian; Centenary College of Louisiana, B.A.; School of Library Science, University of Oklahoma, M.L.S.
- Friesen-Lynn, Laura L. (2004), Assistant Librarian; University of California, M.L.S., M.F.A.; University of Michigan-Flint, B.A.
- Gifford, Paul M. (1987), Senior Associate Librarian; University of Michigan, B.A., A.M.L.S.
- Hart, David J. (1977), Senior Associate Librarian; University of Michigan-Flint, A.B.; School of Library Science, University of Michigan, A.M.L.S.
- Im, Clara Kui-Bin (1988), Senior Associate Librarian, Beloit College, B.A.; University of Wisconsin-Milwaukee, M.L.I.S.; Rochester Institute of Technology, A.A.S.

- Prygoski, Vincent W. (2000), Associate Librarian; Central Michigan University, B.S.; University of Michigan, M.I.L.S.
- Streby, Paul G. (1996), Associate Librarian; University of Michigan-Flint, A.B.; University of Virginia, M.A.; University of Michigan, M.I.L.S.

Lecturers

- As of September 1, 2006.
- Aanerud, Marian (2003), B.S., M.S., Lecturer III in Computer Science, Engineering Science & Physics
- Abbenante, Mark (2004), B.S., M.A., Lecturer I in Psychology
- Akers-Jordon, Cathy (1998), B.A., M.L.S., Lecturer III in English
- Anderson, James E. (1988), A.B., M.A., Lecturer IV in English
- Andrews, Jjenna H. (2003), B.F.A., M.F.A., Lecturer I in Communication & Visual Arts
- Arellano, Ralph, Jr. (1992), B.A., Lecturer II in Education
- Bakken, James D. (2001), B. Arch., Lecturer II in Communication & Visual Arts
- Barber, Kimberly R. (2004), M.S., Ph.D., Lecturer I in Health Sciences & Administration
- Barrett, Jason B. (2002), B.S., Lecturer I in Computer Science, Engineering Science & Physics
- Batzer, Frederick R. (2004), B.S., Ph.D., Lecturer I in Chemistry
- Bauer, Jill Marie (1997), B.A., M.A., Lecturer II of English
- Bell, Libby (2004), R.N., B.S.N., Lecturer I in Nursing
- Bellamy, Allen (2005), M.A., Ph.D., Lecturer III in Psychology
- Benish, John G. (1999), B.S., Lecturer II in Mathematics
- Bennett, Mary (2005), B.F.A., M.F.A., Lecturer I in Theatre & Dance
- Benson, Steven (2006), B.F.A., M.F.A., Lecturer I in Communications & Visual Arts
- Bentley, Susan (2003), B.A., M.A., Lecturer I in Education
- Biallas, Daryl (2006), B.A., M.A., Lecturer I in Foreign Language
- Bingham, Steven H. (2002), M.A. B.A, Lecturer II of Education
- Bluhm, Minnie V. (1999), M.P.H., Ph.D., Lecturer IV in Health Sciences & Administration
- Booms, Stephanie (2005), B.S., M.A., Lecturer I in English
- Borton, Danny (1996), B.S., M.A., Lecturer II in Health Sciences & Administration
- Brown, Cherie D. (1997), B.S., M.A., Lecturer II of Computer Science, Engineering Science & Physics

- Browning Jr., Gerald L. (2001), B.A, M.A., Lecturer I in English
- Buckle, Brenda (2005), B.S.N., M.S.N., Lecturer I in Nursing
- Bush, Peter J. (2003), M.B.A., M.S., Lecturer II in Management Information Systems
- Butler, Pamela (2006), B.A., Lecturer I in Political Science
- Cardani, Mary Ann (1984), B.S., M.S., Lecturer IV in Biology
- Carnahan, Gary M. (2000), B.A., Lecturer II in Education
- Carr, Julie (2005), B.A., M.M., Lecturer I in Music
- Cavallini, Enrico Francesco (1998), B.M., M.A., Lecturer II in Music
- Chakravarthy, Srinivas (2006), M.S., Ph.D., Lecturer I in School of Management
- Chaney, Carol (1994), B.A., M.F.A., Adjunct Lecturer in Music
- Clark, David B. (1999), B.A., J.D., Lecturer I of History
- Coffin, Christopher (2004), B.S., M.S., Lecturer I in Chemistry
- Coffin, Pamela J. (1972), B.A., M.S., Lecturer IV in Chemistry
- Colarossi, Susan L. (1999), B.S., Lecturer I in Nursing
- Colish, Julie (1983), B.A., M.A., Lecturer IV in English
- Council, Terry (2006), Lecturer I in Theatre & Dance
- Coviak, James (2001), B.M.E., M.M., Lecturer II of Music
- Cronin, Kasey (2006), B.S., M.A., Lecturer I in Education
- Croom, Leander T. (2003), B.A., M.S.W., Lecturer II in Social Work
- Cullari, Francine (2006), M.A., J.D., Lecturer I in School of Management
- Currie, Traci E. (2004), M.F.A., Ph.D., Lecturer III in Communications
- Daassa, Mohamed A. (1999), A.B.D., Ph.D., Lecturer II of Foreign Language & History
- Dagley, David, (2001), B.S., M.Ed., Lecturer II of Education
- Dahnke, Laura J. (2002), B.S., Lecturer I of Nursing
- Darragh, Scott B. (2004), M.A., Ph.D., Lecturer I in Economics
- DeFrance, William L. (2003), M.A., Ed.D., Lecturer I in Economics
- DeGroot, Frederick A. (2000), B.S., M.S., Lecturer II of Earth & Resource Science
- Delaney, Thomas J. (2006), B.G.S., M.A., Lecturer I in Education
- Determan, Coleen (2004), B.S., M.S.W., Lecturer I in Social Work

- Douglas, Chris C. (2006), B.S., Ph.D., Lecturer I in Economics
- Douglas, Daryl L. (2004), M.A., Psy.D., Lecturer I in Psychology
- Dunham, Kathleen, M. (2002), B.A., M.S., Lecturer II of Education
- Emenyonu, Patricia (2003), Ed.S., Ph.D., Lecturer II in English and Africana Studies
- Engelstein, Lisa (2006), B.A., M.A., Lecturer I in Health Sciences & Administration
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- Filak, Dorothy (1985), B.A., M.A., Lecturer I in Communication & Visual Arts
- Filos, Deborah (2001), B.S.N., M.S.N., Lecturer I in Nursing
- Fleck, Leonard M. (2002), A.B., Ph..D., Lecturer II in Health Sciences & Administration
- Flynn Jr., Danny (2006), B.A., M.A., Lecturer I in English
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- Furrow, Hannah B. (2004), B.S., M.A., Lecturer I in English
- Galerneau, Quentin J. (1983), B.A., M.A., Lecturer IV in Computer Science
- Gardner, Cynthia (2004), B.S., Lecturer I in Biology
- Gebler, Michael (1988), M.S., Ph.D., Lecturer IV in Chemistry
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- Giguere, Raymond E. (1999), B.S., M.A., Lecturer II of Mathematics
- Gilbert, James R. (1998), B.F.A., M.F.A., Lecturer II in Art
- Glenn, Mark (2006), B.A., M.A., Lecturer I in Political Science
- Gouin, Nancy S. (1987), B.S., M.P.H., Lecturer IV of Health Sciences & Administration
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- Habeck, Dania E. (2002), M.A., M.P.T., Lecturer II in Biology

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- Heckman, Robert (2004), M.S., Ph.D., Lecturer I in School of Management
- Hicks, Linda M. (1982), B.A., M.S., Lecturer IV in Computer Science
- Hill, John D. (2003), B.M.E., M.M., Lecturer I in Music
- Hochstetler, Scott (2005), B.A., M.M., Lecturer I in Music
- Hovnanian, Michael (2006), M.M., D.M.A., Lecturer I in Music
- Howard, Lila (2006), B.S., M.A., Lecturer II in Education
- Hrinik, Larry R. (2003), B.A., M.A., Lecturer II in Health Science & Administration
- Hudson, Bonnie L. (1993), B.A., M.S.N., Lecturer IV of Nursing
- Ionina-Prasov, Marina A. (1991), B.S., M.S., Lecturer IV of Chemistry
- Irish, Norman (2006), M.S., Ph.D., Lecturer I in School of Management
- Irwin, William (2006), B.A., M.F.A., Lecturer I in Theatre & Dance
- Jaffurs, Sheri E. (2004), B.M.E., M.M, Lecturer I in Music
- Johnston, Charles C. (2004), A.B., M.D., Lecturer I in Nursing
- Jones, Dawn M. (2005), B.S., M.A., Lecturer in Education
- Kalisz, Christina (2005), B.S., M.S., Lecturer I in Nursing
- Kalmar, Pamela J. (1999), B.A., M.A., Lecturer I in School of Management and Lecturer II in Computer Science, Engineering Science & Physics
- Kaye, G. Donald (1996), B.A., M.S., Lecturer II in Music
- Kelly, Nanette (1998), B.S., M.S., Lecturer IV in Biology
- Kenner, William (2003), B.A., M.A., Lecturer I in Communication & Visual Arts
- Key, Sammie (2005), B.A., M.A., Lecturer I in Education

- King, Jeanne (2002), A.B.A., M.A., Lecturer II of Education
- Knoll, Theresa R. (2004), B.A., M.A., Lecturer I in Foreign Language
- Kraft, Theresa (2006), B.S., M.B.A., Lecturer I in School of Management
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- Lake, Daniel (2004), B.S., M.S., Lecturer I in School of Management
- Larsen Jr., Dave M. (1997), B.A., M.A., Lecturer III in English
- Legacy, Marilyn (2006), B.S.N., M.S.N., Lecturer I in Nursing
- Leshchinskaya, Ida M. (1997), Lecturer II in Music
- Lezovich, Christopher (1999), B.B.A., J.D., Lecturer II of Management
- Logan, Elizabeth (2005), B.M., M.M., Lecturer I in Music
- Lorch, Janet L. (2000), A.A., Lecturer III in Communication & Visual Arts
- Luster-Turner, Rose M. (2001), B.S.N., M.S.N., Lecturer III of Nursing
- Malinowski, Elizabeth A. (1984), B.S., M.S., Lecturer IV in Biology
- Martindale, Barbara (1999), B.A., M.A., Lecturer II in Education
- Mayhew, Earl (2006), B.S., M.S., Lecturer I in Biology
- Mayrberger, Sheri L (1999), B.S., M.S., Lecturer II in Biology
- McCombs, Laverne A. (1998), B.A., M.S.W., Lecturer II in Social Work
- McCullen, Megan (2006), B.A., Lecturer I in Sociology, Anthropology & Criminal Justice
- McGill, Anthony D. (2004), M.A., Ph.D., Lecturer III in Communications
- McGraw, Rodney B. (2003), M.B.A., Ed.D., Lecturer I in Organizational Behavior
- McKinley, Michael (2005), B.A., M.A., Lecturer I in Philosophy
- Mess, Lillian (2006), B.S.N., M.S.N., Lecturer I in Nursing
- Metzelaar, Lee (2004), B.A., M.A., Lecturer I in Education
- Mignerey, Kristen (2006), B.A., M.L.P.P., Lecturer I in Education
- Mikulski, James (2006), B.S., M.A., Lecturer I in MPA Program
- Miller, Sandra G. (2002), B.S.N., M.S.N., Lecturer I of Nursing
- Miller, Tamara L. (2003), B.A., Lecturer II in Education

- Miu, Nick (2004), B.M.E., M.A., Lecturer I in Education
- Moiz, Amena (2006), B.S., M.A., Lecturer I in Education
- Mojica, Yolanda (1998), M.A., Ph.D., Lecturer II of Education
- Moliassa, John A. (2001), B.A., M.A., Lecturer II of Mathematics
- Morolla, Marcantonio (1995), B.A., M.A., Lecturer II in Public Administration
- Moss, George W. (2001), M.A., Lecturer I of Africana Studies
- Mpondi, Douglas (2006), M.A., Ph.D., Lecturer I in Africana Studies
- Munroe, Derwin S. (1999), B.A., M.P., Lecturer III in Political Science
- Murdock, James R. (2003), A.B., M.A., Lecturer I of Management
- Murray-Wright, Margie (2005), B.S.N., M.S.N., Lecturer I in Nursing
- Nas, Paula L. (1995), M.A., J.D., Lecturer IV of Economics
- Nordstrom, Harriet L. (1998), B.A., M.A., Lecturer II of Psychology
- O'Connor, Catherine A. (1997), M.A., Ph.D., Lecturer II in English
- O'Donnell, Patrick M. (2003), B.A., Ph.D., Lecturer III in MPA Program
- Ollila, Delena (2006), B.A., Lecturer I in Music
- Packer, James D. (1991), B.S., M.A., Lecturer II of Mathematics
- Packer, Matthew (2005), B.M.E., M.M., Lecturer I in Music
- Panoff, Christine A. (1981), A.B., M.A., Lecturer II in Mathematics
- Pape, Walter (2003), B.A., Lecturer I in Computer Science, Engineering Science & Physics
- Phillips, James C. (1997), B.S., M.A.T., Lecturer II of Mathematics
- Philpott, Douglas M. (1999), J.D., Lecturer II in Management
- Polenberg-Ramsay, Marcia L. (2002), B.A., M.F.A., Lecturer II in Communications & Visual Arts
- Pons Hervas, Maria D. (2005), M.A., Ph.D., Lecturer III in Foreign Language
- Porter, Michelle (2003), B.S., Ph.D., Lecturer I in Biology
- Price, Jeffrey Michael (2002), B.M., M.M., Lecturer II of Music
- Procopio, Mary (2005), M.M., D.M.A., Lecturer I in Music
- Prost, Kenneth L. (1991), B.S., Lecturer II in Mathematics
- Przybylski, Jill (2006), M.P.T., Lecturer I in Physical Therapy

- Reed, Shelley (2005), B.S., M.Ed., Lecturer I in Education
- Royston, Pamela J. (1997), B.B.A., M.S.A., Lecturer II in School of Management
- Rzyhak, John P. (2002), B.S., M.S., Lecturer II in Health Sciences & Administration
- Saylor, Diane (2006), M.S., M.A., Lecturer I in English
- Scrimger, Marlos J. (1991), B.S. M.S., Lecturer IV of Earth & Resource Sciences
- Seamon, Josephine (2006), B.S., M.A., Lecturer I in Education
- Seamon, Steve (2003), B.S., M.A., Lecturer I in Education
- Shimoda, Kimiko (2006), B.F.A., M.A., Lecturer I in Theatre & Dance
- Shomali, Lemma (2006), B.A., Lecturer I in Computer Science, Engineering Science & Physics
- Simpson, Larry D. (2006), B.A., M.A., Lecturer I in Education
- Sippert, Karin (1992), B.A., Lecturer II in Mathematics
- Sjolander, Christopher (2006), B.S., M.S., Lecturer I in Earth & Resource Science
- Smith, Deborah A. (2004), B.S., Ph.D., Lecturer I in Nursing
- Smith, Sandra (1995), B.S.N., M.S.N., Lecturer I in Nursing
- Sodeman, Timothy D. (2000), B.A., M.A., Lecturer I of Education
- Stahl, David (2006), B.S., Lecturer I in Computer Science, Engineering Science & Physics
- Stevens, Holly A. (2003), B.A., M.A., Lecturer I in Communication & Visual Arts
- Stimpson, Gloria (2006), B.A., M.A., Lecturer I in Education
- Sturtevant, Mark A. (2004), M.S., Ph.D., Lecturer I of Biology
- Swanson, Christopher R. (2001), B.S., M.P.A., Lecturer II for Health Sciences & Administration
- Szuch, Ernest J. (1974), B.A., M.S., Lecturer IV in Biology
- Tabaka, Kathleen E. (2004), B.S, M.S.A, Lecturer I in Education
- Tambling, Connie S. (1988), B.A., M.A., Lecturer II in Foreign Language
- Taylor, Debra (2000), M.A., Ph.D., Lecturer II in Nursing
- Theile, Joan E (2003), B.A., Lecturer II in Education
- Thomas, Patricia (2006), B.S.N., M.S.N., Lecturer I in Nursing
- Thornburg, John E. (1993), D.O, Ph.D., Lecturer II in Nursing
- Thum, Maureen (1980), M.A., Ph.D., Lecturer IV in English
- Torres, Edgar (2001), M.S., M.P.T., Lecturer IV of Physical Therapy

- Tuttle, Dale B. (2003), M.B.A., Ph.D., Lecturer I in School of Management
- Tyler, Joseph (2006), M.A., Ph.D., Lecturer I in Foreign Language
- Ullrich, Donna L. (2004), M.A., J.D., Lecturer I in Communication & Visual Arts
- Valacak, Mark J. (1992), B.S., M.P.H., Lecturer II in Health Sciences & Administration
- Vergon, Charles (2001), B.A., J.D., Lecturer II in Political Science
- Verrill, Harland (1994), B.S., Ph.D., Lecturer II in Health Sciences & Administration
- Verrochi, Meredith (2006), B.A., M.A., Lecturer I in Philosophy
- Viele, Dennis P. (1993), B.S., M.S., Lecturer IV in Biology
- Wacker, Tracy L. (1990), B.S., M.S., Lecturer IV in Biology
- Wade, Cynthia A. (2001), B.S.Ed, M.A.C.T., Lecturer II in Education
- Wagonlander, Charles F. (2002), B.A., M.A., Lecturer III in Communication & Visual Art
- Walton, Brian (2006), B.S., M.A., Lecturer I in Education
- Wandmacher, Stevens F. (1995), M.A., Ph.D., Lecturer II in Philosophy
- Ware, Margaret L. (1995), B.S., M.S., Lecturer IV of Biology
- Weiss, Paul (2006), B.A., M.A., Lecturer I in Mathematics
- West, Renee (2000), B.A., Lecturer I in Foreign Language
- Wielinski, Beth E. (2001), B.F.A., Lecturer II in Theatre & Dance
- Wiess, Janelle (2006), B.A., M.S., Lecturer III in English
- Williams, Jeffrey (2006), B.B.A., M.B.A., Lecturer I in School of Management
- Williams, Julie (2006), B.S.N., M.N., Lecturer I in Nursing
- Wistrand, Carolyn (2000), B.A., M.A., Lecturer II of Africana Studies
- Worth, Janice M. (1996), M.S.W., M.F.A., Lecturer IV in English
- Wright, Joseph N. (2003), B.M, Lecturer II in Music
- Wright, Ronald O. (2002), M.A., Ed.D, Lecturer II of Education
- Yancho, Mari (2003), B.M., M.M., Lecturer II in Music
- Yang, Li-Hsuan (2003), M.A., Ph.D., Lecturer III in Computer Science, Engineering Science & Physics
- Yarber, Kim D. (2004), B.S., M.Div., Lecturer I of Africana Studies
- Zeigler, Carmen S. (2003), M.A., B.S., Lecturer I in Education

- Zeiss, Rebecca S. (2006), B.F.A., M.F.A., Lecturer I in Communication & Visual Arts
- Zimmerman, Dean (2006), B.M., M.M., Lecturer I in Music
- Zuberi, Morenk (2003), B.S., M.A., Ph.D., Lecturer in Management

Supplemental Faculty

- As of September 1, 2006.
- Abernathy, Andrea (2006), B.S.N., Adjunct Clinical Lecturer in Nursing
- Achwal, Mohan V. (1992), INT SC, M.B.B.S., Adjunct Instructor in Health Sciences & Administration
- Alisoglu, Roy M. (1998), B.S.N., M.S., Adjunct Instructor in Health Sciences & Administration
- Bair, Mary (2005), B.S.N., Adjunct Clinical Lecturer in Nursing
- Bardzilowski, Edith (2003), R.N., B.S.N., M.S.N., N.N.P., Adjunct Clinical Lecturer in Nursing
- Bell, Libby L. (2004), R.N., B.S.N., Adjunct Clinical Lecturer in Nursing
- Beltran, Felix E. (1991), R.N., B.A.S., Adjunct Clinical Instructor in Health Sciences & Administration
- Bourne, Lynnette K. (2004), R.N., B.S., M.S., Adjunct Clinical Lecturer in Nursing
- Brandt, Betty (2006), B.S., Adjunct Clinical Lecturer in Nursing
- Brown, Michael K. (2004), B.A., M.A., Intermittent Lecturer in MPA Program
- Buckle, Brenda (2005), B.S.N., M.S.N., Adjunct Clinical Lecturer in Nursing
- Bur, Kevin P. (1994), M.S., D.O., Adjunct Instructor in Health Sciences & Administration
- Clolinger, Chris A. (1999), B.S., Adjunct Lecturer in Health Sciences & Administration
- Coggins, Kathryn S. (2004), B.S., Adjunct Clinical Lecturer in Nursing
- Cooper, Sandra F. (1999), B.S., M.S., Adjunct Clinical Lecturer in Nursing
- Desai, Hemant D. (1995), B.S., M.D., M.B.B.S., Adjunct Instructor in Health Sciences & Administration
- Dillard, Dorothy L. (1994), B.A.S., R.N., Adjunct Clinical Instructor in Health Sciences & Administration
- Dimond, Deborah L (2004), B.S., Adjunct Clinical Lecturer in Nursing
- Doerr, Kay (2006), B.S., M.S., Intermittent Lecturer in Health Sciences & Administration
- Esquerra-Swiers, Anita (2006), B.S., M.S., Adjunct Clinical Lecturer in Nursing

- Filos, Deborah L. (2001), B.S.N., Adjunct Clinical Lecturer in Nursing
- Fitch, Patricia (2004), B.S.N., M.S.N., Adjunct Clinical Lecturer in Nursing
- Fryzel, Shawn A. (1996), B.S., M.S., Adjunct Instructor in Health Sciences & Administration
- Gandhi, Jayshri M. (1997), M.B.A., M.S., Adjunct Lecturer of Computer Science, Engineering Science & Physics
- Goldie, Lauren B. (2005), B.S., Adjunct Clinical Lecturer in Nursing
- Guzelaydin, Suzanne K. (2001), R.N., B.S.N., M.S.N, Adjunct Clinical Lecturer in Nursing
- Harvey, Jacqueline M. (1989), B.A., M.S.W., Clinical Instructor in Social Work
- Hausauer, Bruce R. (2003), R.N., C.R.N.A., Adjunct Instructor in Health Sciences & Administration
- Higgins, Carol A. (2000), M.S.N., A.N.P., Adjunct Clinical Lecturer of Nursing
- Hiscock, James T. (2000), M.S., Adjunct Instructor of Health Sciences & Administration
- Holifield, Elizabeth A. (2004), B.S., Adjunct Clinical Lecturer in Nursing
- Jones, Mary Lou (1993), B.A., M.S., Adjunct Instructor in Health Sciences & Administration
- Kalisz, Christina (2005), B.S.N., M.S.N., Adjunct Clinical Lecturer in Nursing
- Kassel, Michael B. (1990), B.A., M.L.S., Ph.D., Adjunct Lecturer in History & English
- Keusch, Tonia (2006), B.S., Adjunct Clinical Lecturer in Nursing
- Landis, Theresa J. (1997), B.S., M.A., Ed.S., Adjunct Lecturer in Health Sciences & Administration
- Louwsma, David L. (1994), B.S., M.S., D.O., Adjunct Instructor in Health Sciences & Administration
- McGee, Evia L. (1991), B.A., M.S., Adjunct Instructor in Health Sciences & Administration
- Mueller, Douglas A. (1983), B.A., M.F.A., Adjunct Instructor in Theatre & Dance
- Potts, John (2004), C.R.N.A., M.S., Adjunct Instructor in Health Sciences & Administration
- Prokott, Wayne T. (2004), D.O, Adjunct Instructor in Health Sciences & Administration
- Rees, Tammy J. (1991), B.S., M.S., Adjunct Instructor of Health Sciences & Administration
- Reigle, Martie M. (1994), B.S.N., M.S., Adjunct Instructor in Health Sciences & Administration
- Richardson, Richard S. (2004), R.N., B.S.N., M.S.N., Adjunct Clinical Lecturer in Nursing

- Santala, James H. (1991), B.S., R.N., Clinical Instructor in Health Sciences & Administration
- Shirey, Lauren (2006), B.S., M.P.H., Intermittent Lecturer in Health Sciences & Administration
- Smith, Sandra K. (1995), B.S.N., M.S.N., Adjunct Clinical Lecturer in Nursing
- Stevens, Theresa M. (1997), B.A., M.A., Adjunct Lecturer in Nursing
- Stump, Lawrence R. (1991), M.Ed., B.S.N., Adjunct Instructor in Health Sciences & Administration
- Swanson, Christopher R. (2001), M.P.A., Adjunct Instructor of Health Sciences & Administration
- Thota, Surya R. (1991), B.S., M.B.B.S., Adjunct Instructor in Health Sciences & Administration
- Tischler, Janie M. (2000), M.S.N., Adjunct Instructor of Health Sciences & Administration
- Towes, Diane (2006), M.S.N., R.N., Clinical Instructor in Nursing
- Treat, Robert L. (2000), B.S., M.S., Adjunct Instructor in Health Sciences & Administration
- VanSlyke, Kimberly (2006), B.S.N., Adjunct Clinical Lecturer in Nursing
- Watson, Barbara M. (1991), B.S., R.N., Adjunct Clinical Instructor in Health Sciences & Administration
- Wells, Juanita (2005), B.S.N., Adjunct Clinical Lecturer in Nursing
- Wilhelm, Monique R. (2004), B.S., Adjunct Lecturer in Chemistry
- Wilkerson, Laura (2005), B.S., M.S., Adjunct Clinical Lecturer in Nursing
- Will, Denise C. (2004), R.N., B.S.N., M.S.N., Adjunct Clinical Lecturer in Nursing
- Winterlee, Terri R. (2000), M.S.A., Adjunct Instructor of Health Sciences & Administration
- Wizauer, Leslie A. (1991), B.S., Adjunct Clinical Instructor in Health Sciences & Administration
- Yaste, Michelle A. (1994), B.S.N., M.S.N., Adjunct Clinical Lecturer in Nursing
- Zuwala, Ronald J. (2000), M.S., Adjunct Instructor of Health Sciences & Administration

Regular Staff

- Acker, Charlene, Admin/Project Coordinator, Urban Health & Wellness Center
- Adams, Rodney, Groundskeeper II, Facilities Management
- Alarie, James A, Business Systems Analyst Intermediate, Information Technology Services

- Alberto, Sandra, Administrative Assistant Senior, Thompson Center for Learning & Teaching
- Alexander, Beulah A., Executive Secretary, School of Education & Human Services
- Alexander, Laura, Facilities Management Director, Facilities Management
- Allen, Charles, Systems Administrator Intermediate, Information Technology Services
- Allen, Philicia, Guard, Public Safety
- Allen, W. KaNeesha, Community Outreach Coordinator, School of Health Professions & Studies
- Amy, Raegan, Admin/Project Coordinator, Service Learning
- Anderson, David, HVAC Repairperson I, Facilities Management
- Angeluski, Marie, Administrative Assistant Intermediate, Music
- Armour, Elizabeth L., Student Activities Assistant Director, Office of Student Life
- Arnould, Karen A., Registrar, Office of the Registrar
- Arnst, Scott, IT Academic/Administrative Division Intermediate Director, Information Technology Services
- Arthur, Karen, Benefits Representative, Human Resources & Affirmative Action
- Ashby, Michael M., Graphic Artist, Office of University Relations
- Atherton, Larry W., Laboratory/Classroom, Services Supervisor, Biology
- Atwell, Kendra, Student Administrative Assistant Intermediate, School of Management
- Bachman, Gayle M, Administrative Assistant Intermediate, Public Safety
- Bailey, Tonya C., Program Manager, Educational Opportunity Initiatives
- Baker, Amanda, Child Care Center Teacher, Early Childhood Development Center
- Ball. Twinette, Communications Officer, Public Safety
- Banks, Rhonda K., Associate Registrar, Office of the Registrar
- Banks, Steven, Vehicle Mechanic-Regional Campus, Facilities Management
- Barclay, Jane, Information Resources Assistant Senior, Library
- Barden, Timothy, A/C Refrigeration Mechanic, Facilities Management
- Barthelmes, David, Vice Chancellor, Office of the Vice Chancellor for Administration
- Bartholomew, Melody A., Executive Assistant to the Chancellor, Office of Chancellor

- Baryo, Teresa, Executive Secretary to Top Executive, Vice Chancellor for Administration
- Bassett, Barbara L, Administrative Assistant Intermediate, Educational Opportunity Initiatives
- Bazemore, Henry E, Program Manager, Office of Educational Opportunities Initiatives
- Beam, Sharon, Secretary Senior, Communication & Visual Arts
- Beamish, Coleen, Administrative Assistant Intermediate, School of Education & Human Services
- Bearman, Abigail, Admissions Representative, Office of Admissions
- Becker, Andrea, Instructional Learning Senior, Office of Extended Learning
- Becker-Cornell, Della, Child Care Site Director, Early Childhood Development Center
- Bedore, Judy, Secretary Senior, Economics
- Berg, Deborah, Secretary Intermediate, Health Sciences & Administration
- Berry, Sherri Marie, Employee Services Intermediate Supervisor, Recreational Services
- Biocchi, Rachel, Student Admin Assistant Senior, School of Education & Human Services
- Blackwell, Theresa, Instructional Learning Senior, Office of Extended Learning
- Blakely, Clara, Program Manager, Educational Opportunities Initiatives
- Bloink, Kathleen, Secretary Intermediate, Associate Provost
- Blondin, Dale M., Mechanical Engineer Senior, Facilities Management
- Boonstra, Krista M., Office Administration Intermediate Supervisor, Office of the Registrar
- Borcherding, Nicole, Major Gifts Officer Intermediate, Vice Chancellor for Institutional Advancement
- Bortner, Chari S., Program Manager, Educational Opportunity Initiatives
- Boshaw, Kay, Food Service Intermediate Supervisor, Building Management & Events
- Boss, Lisette, Secretary Senior, Biology
- Bouchard, Kelly, Administrative Assistant Intermediate, Physical Therapy
- Brackins, Kameron, Admissions Representative, Office of Admissions
- Bradford, Kimberly, Administrative Assistant Intermediate, Facilities Management
- Branch, Tawana, HR Assistant Intermediate, Human Resources & Affirmative Action

- Broadworth, Amanda, Secretary Intermediate, History
- Broadworth, Rhonda, Secretary Senior, College of Arts & Sciences
- Brown, Phillip, Senior Media Engineer, Michigan Television
- Brownell, Christine, Financial Specialist Associate, Financial Services & Budget
- Brunger, Roxanne M., Budgeting Intermediate Supervisor, College of Arts & Sciences
- Burton, Shaquana, HR Generalist Intermediate, Human Resources & Affirmative Action
- Buster-Williams, Kimberley, Admissions Director, Office of Admissions
- Butka, Kimberly, Admissions Assistant Director, Office of Admissions
- Butterfield-Halbedel, Dennis, Maintenance Mechanic II, Facilities Management
- Byrnes, Susan, Financial Aid Officer Associate, Office of Financial Aid
- Caballero Jr, Joseph, HVAC Repairperson I, Facilities Management
- Campbell, Bettina, Program Manager, Health Sciences & Administration
- Campbell, Marcia, Secretary Intermediate, School of Management
- Cantu, Concepcion, Executive Secretary to Top Executive, Office of the Chancellor
- Carpenter, Wendy, Administrative Assistant Senior, Academic Advising and Career Center
- Carrasco, Erin, Student Administrative Assistant Intermediate, Associate Provost
- Carter, Lola, Receptionist, Office of Research
- Catrell, Kelli, Administrative Assistant Senior, University Outreach
- Caudle, Melissa N., Marketing Manager, University Relations
- Chandonnet, Cynthia, Administrative Assistant Senior, Office of Admissions
- Chaney, Carol A., Information Center Consultant, Music
- Chapman, Ronald, Building/Facilities Manager, Facilities Management
- Christensen, Marilyn, Administrative Assistant Senior, Printing Services
- Clolinger, Amy C., Database Administrator Intermediate, Recreational Services
- Clolinger, Chris A., Employee Services Intermediate Supervisor, Recreational Services

- Coleman, Sonja, Secretary Intermediate, Educational Opportunities Initiatives
- Coles, Todd, Police Officer, Public Safety
- Collins, Karen, Admin/Project Coordinator, Center for Civic Engagement
- Conley, Sally J., Administrative Specialist, Office of Research
- Corba, George, Media Engineer, Michigan Television
- Corey, Jean, Admin/Project Coordinator, School of Management
- Couture, Tammi, Food Service Associate, Early Childhood Development Center
- Cox, Bert, Maintenance Mechanic II, Facilities Management
- Cozart Jr., Allen C., Police Sergeant, Public Safety
- Cummings, Suzanne, Medical Assistant, Urban Health & Wellness Center
- Curry, Kimberly, Teacher Assistant, Early Childhood Development Center
- Dahl, Quentin, Broadcast Schedule Coordinator Coordinator, Michigan Television
- Daraiseh, Jennifer, Business Systems Analyst Intermediate, Information Technology Services
- Davidson, Jon, Marketing Communications Specialist, Associate Provost
- Davis, Erik B., Editor/Broadcast Graphics & Design, Michigan Television
- Davis-Henson, Theda, Senior Financial Specialist Intermediate, Michigan Television
- Dawson, Vicky, Admin/Project Coordinator, Women's Educational Center
- Day, Tawana L., Program Manager, Educational Opportunities Initiatives
- Dean, Janet, Community Outreach Coordinator, School of Health Professions & Studies
- Declute, Phillip, Security Officer, Public Safety
- DeGalan, Susan L., Financial Aid Officer Intermediate, Financial
- Deibis, Mary, Administrative Specialist, Associate Provost
- Dekold, Michael, Groundskeeper II, Facilities Management
- DePew, Janel, Database Administrator Intermediate, School of Education & Human Services
- Dinsmore, Judith, Executive Secretary to Top Executive, Vice Chancellor for Student Services & Enrollment Mgt.
- Dixon, Deborah, Evaluator, Office of the Registrar
- Dobbs, Jeffery, Academic Advisor/Counselor, Academic Advising and Career Center

- Doerr, Kimberly E., Budget Analyst Intermediate, Vice Chancellor for Institutional Advancement
- Eberechuku, Ambakisye, Security Officer, Public Safety
- Eisenbeis, Tina, Wellness Specialist, Recreational Services
- Ellison, Kenneth, Energy Management Systems Operator, Facilities Management
- Erlenbeck, Philip, Data Security Analyst Associate, Information Technology Services
- Fabbro, Sue E., Executive Secretary to Top Executive, Office of the Provost
- Fattaleh, Dennis L., Business Administrator Intermediate, School of Management
- Fenner, Grant, Custodian II, Facilities Management
- Fielder, Suzanne M., Housekeeping Supervisor, Facilities Management
- Fisch-Ferguson, Jennifer, Secretary Senior, Educational Opportunity Initiatives
- Fleming, Rhoda L., Accounting Clerk Intermediate, Financial Services & Budget
- Flynn, Crystal A., Diversity Trainer, Educational Opportunity Initiatives
- Ford, Susan, Teacher Assistant, Early Childhood Development Center
- Fortner, Michele, Program Manager, Health Sciences & Administration
- Frazee, Leslie, Groundskeeper II, Facilities Management
- Fritzler, Kay, Customer Services Assistant Intermediate, Recreational Services
- Fritzsching, Kristyn, Child Care Center Teacher, Early Childhood Development Center
- Furrow, Hannah, Program Manager, School of Education and Human Services
- Fusero, Dominic, Desktop Support Specialist Intermediate, School of Management
- Fykes, Stephanie, Secretary Intermediate, Office of Admissions
- Gandhi, Jayshri, Business Systems Analyst Lead, Student Services & Enrollment Mgmt.
- Ganges, Tendaji, Program Director Regional Campus, Educational Opportunity Initiatives
- Gardner, Vicki, Custodian II, Facilities Management
- Garth, Valerie, Admin/Project Coordinator, Nursing
- Gaspar, Nicholas, Instructional Learning Senior, Office of Extended Learning
- Gauss, Karen, Admissions Representative, Office of Admissions

- Getty, Daniel R., Desktop Support Specialist Intermediate, Information Technology Services
- Gidcumb, Dwayne M., Groundskeeper II, Facilities Management
- Gidcumb, Laurie, Custodian II, Facilities Management
- Gilles, Maris K., Academic Advisor/Counselor, Nursing
- Glasco, Gerald L., Division Controller, Financial Services & Budget
- Godmar, Cheryl, Academic Advisor/Counselor, School of Education & Human Services
- Golembiewski, Margaret M., Academic Advisor/Counselor, Academic Advising and Career Center
- Gooding, Jason, Desktop Support Specialist Senior, Information Technology Services
- Goodman, Alaina, Executive Secretary to Top Executive, Vice Chancellor for Institutional Advancement
- Gottler, Mary L., Child Care Center Teacher, Early Childhood Development Center
- Gouin, Nancy S., Program Manager, Health Sciences & Administration
- Graham, Lisa, Annual Giving Programs Senior Manager, Vice Chancellor for Institutional Advancement
- Graham, Peggy L., Meetings/Special Events Manager, Building Management & Events
- Grays, Roslyn, Receptionist, School of Education & Human Services
- Griffin, Barbara, Secretary Senior, Academic Advising and Career Center
- Griffin, Shawn M., Financial Aid Officer Intermediate, Financial Aid
- Grimshaw, Linda M., Financial Aid Officer Senior, Financial Aid
- Griswold, Richard, Accountant Senior, Financial Services & Budget
- Gross, Anna, Administrative Assistant Intermediate, College of Arts & Sciences
- Gross, Cynthia, Accounts Receivable Clerk, Financial Services & Budget
- Groulx, Diana, Custodian II, Facilities Management
- Hahn, Robert C., Marketing Analyst Senior, Associate Provost
- Halbedel, Shannon, Academic/Research Program Officer Associate, School of Health Professions & Studies
- Haley, John, Postal Clerk III, Facilities Management
- Hall, Carol, Secretary Senior, Nursing
- Hall, William, Security Officer, Public Safety

- Hardy, Timothy, Boiler Operator, Facilities Management
- Harkins, Jean, Secretary Intermediate, College of Arts & Sciences
- Harris, Jamila, Academic/Research Program Officer Associate, School of Health Professions & Studies
- Harris, Pallastean, Guard, Public Safety
- Harris, Sally A., Sponsored Research & Programs Director, Office of Research
- Harrison, Brenda L., Academic Advisor/Counselor, School of Management
- Harrold, Tamash, Accounting Clerk Intermediate, Michigan Television
- Hathaway, Margaret A., Administrative Specialist, Nursing
- Hawkins, Nita M., Administrative Assistant Associate, Student Development Center
- Hayden, Sherry L., Administrative Assistant Associate, Center for Environmental Research
- Heckard, Bonnie L., Assistant to the Vice Chancellor, Provost
- Heiser, Kenneth M., Operations Manager Non-Manufacturing, Information Technology Services
- Heiser, Krista R., Administrative Assistant Senior, Office of Extended Learning
- Helms, Amalie, Administrative Assistant Senior, Urban Health & Wellness Center
- Henderson, Wayne W., Chief Media Engineer, Michigan Television
- Hill, Ricky, Custodian II, Facilities Management
- Hoffman, Shelly L., Major Gifts Officer Senior, Vice Chancellor for Institutional Advancement
- Hogan, Jennifer L., Assistant to the Vice Chancellor, University Relations
- Hohn, Kathleen M., Administrative Assistant Intermediate, Facilities Management
- Holt, Annette, Stockkeeper III, Facilities Management
- Hooker, Wendee, Teacher Assistant, Early Childhood Development Center
- Hoover, Scott D., Business Systems Analyst Intermediate, Information Technology Services
- Hoppe, Kelli R., Financial Aid Officer Associate, Financial Aid
- Horgan, Mary E., Financial Aid Officer Senior, Financial Aid
- Horton Jr, Sidney V., Desktop Support Specialist Senior, Information Technology Services
- Houbeck, Robert L., Head Regional Campus Library, Library
- Howe, Kathryn, Secretary Intermediate, Public Safety

- Hunter Jr., David L., Lead Police Officer, Public Safety
- Hurley, Dee Dee, Human Resources Assistant Senior, Human Resources & Affirmative Action
- Hurse, Jessie, Student Activities Coordinator, Student Life
- Hyatt, Tara L., Child Care Center Teacher, Early Childhood Development Center
- Idalski, Timothy, Police Officer, Public Safety
- Ihrig, Lynne, Systems Administrator Associate, Information Technology Services
- Isbister, Kimberly A., Administrative Assistant Intermediate, Institutional Analysis
- Jagielo, Timothy, Electrician, Facilities Management
- Jencks, Brenda, Secretary Senior, Health Sciences & Administration
- Johnson, Sandra, Secretary Intermediate, School of Health Professions & Studies
- Johnson, Thomas, Electrician, Facilities Management
- Jones, James A., Program Manager, Educational Opportunity Initiatives
- July, Virginia, Administrative Specialist, Student Development
- Kalkman, Lora, Associate Director, School of Health Professions & Studies
- Kassel, Michael B., Academic Support Center Coordinator, Student Development Center
- Kegebein, Ruth, Administrative Assistant Associate, Financial Aid
- Keller, Robert C., Multifunction Materials Management Senior Supervisor, Facilities Management
- Kelley, Michael, Maintenance Mechanic II, Facilities Management
- Kendall, Beatrice, Budget Analyst Associate, School of Education & Human Services
- Kidd, Reva J., Business Administrator Associate, Physical Therapy
- Kimbrell, Steven D., Creative Services Director, Michigan Television
- King, Keith B., Laboratory/Classroom Services Supervisor, Earth & Resource Science
- King, Lawrence A., Architect Senior, Facilities Management
- Klein, Patricia, Secretary Senior, Mathematics
- Klinger, Joanne H., Business Administrator Intermediate, Health Sciences & Administration
- Koch, Gregory, Groundskeeper II, Facilities Management

- Koral, Jung, Admissions Counselor II, Office of Admissions
- Kraszewski, Gerald, Security Officer, Public Safety
- Kruse, Lynn, Academic Advisor/Counselor, Nursing
- Lai, Cuong C., Systems Administrator Intermediate, Information Technology Services
- Landis, Theresa J., Campus Rec/Intramurals Director, Recreational Services
- Lane, Michael J., Environmental Health/Safety Manager, Environment, Health & Safety
- Lauro, John A., Business Systems Analyst Staff Specialist, Information Technology Services
- Leavy Jr., Ervin, Customer Service Supervisor, Recreational Services
- Lee, Stacy, Admin/Project Coordinator, Office of the Registrar
- Leist, Kathleen, Secretary Intermediate, Computer Science, Engineering Science & Physics
- Letts, Linda K., Administrative Assistant Intermediate, Theatre & Dance
- Lince, Joy, Teller Intermediate, Financial Service & Budget
- Littleton, Sonja, Guard, Public Safety
- Lockwood, Lloyd, HVAC Repairperson I, Facilities Management
- Long, Jennifer, Buyer Intermediate, Purchasing
- Look, Jerry A., Broadcast Announcer, Michigan Television
- Lopez, Jessie, Counselor, Student Development Center
- Lopez, Misti, Communications Officer, Public Safety
- Lorence, Darlene, Offset Press Operator III, Printing Services
- Louis, Andre C., Research Process Manager, Office of Research
- Ly, Michelle G., Systems Administrator Senior, Information Technology Services
- Mabbitt, Robert, Marketing Coordinator, University Relations
- Makedonsky, Elizabeth, Academic Records Assistant Intermediate, Office of the Registrar
- Maki, Bradley T., Program Manager, Associate Provost
- Malik, Michael, Business Systems Analyst Associate, Facilities Management
- Manning, Beth, HR Administration Intermediate Supervisor, Human Resources & Affirmative Action
- Manning, Paul, Media Engineer, Michigan Television
- Marcum, Gayle, Secretary Senior, Foreign Language
- Martin, Lois, Secretary Senior, Facilities Management

- McClung, Danny, Groundskeeper II, Facilities Management
- McCool, Emily K., Administrative Assistant Associate, Michigan Television
- McDaniel, Doritta M., Student Career Counselor, School of Management
- McDonnell, Sara, Admin/Project Coordinator, Center for Environmental Research
- McElroy, Christopher, Television Producer/Director, Michigan Television
- McGee, Linda, Billing Clerk Intermediate, Financial Services & Budget
- McGregory, Marcell, Maintenance Mechanic II, Facilities Management
- McKnight, Jolie, Accountant Intermediate, Financial Services & Budget
- McTiernan, Eleanor, Secretary Senior, Sociology, Anthropology & Criminal Justice
- Mercado, Mark, Business Systems Analyst Intermediate, Information Technology Services
- Milem, Laura, Secretary Intermediate, Philosophy, Women's and Gender Studies
- Miller, Larry, Housekeeper Chancellor's House, Facilities Management
- Mitchell, Daniel A., Laboratory/Classroom Services Supervisor, Computer Science, Engineering Science & Physics
- Mittan, Sharon, Secretary Senior, Psychology
- Montry, Robert N., Ombudsperson, Student Services & Enrollment Management
- Moore, Dalana, Assistant Controller Division, Financial Services & Budget
- Moore, Ella, Secretary Intermediate, Social Work
- Moore, Najila F.S., Child Care Center Teacher, Early Childhood Development Center
- Moran, Shirley, Buyer Assistant, Purchasing
- Moss, Aimi K., Student Affairs Director, Academic Advising and Career Center
- Mueller, Douglas A., Technical Manager, Theatre & Dance
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Some University offices are open from 8:00 a.m. to 6:30 p.m., Monday through Thursday and from 8:00 a.m. to 5:00 p.m. on Friday. Selected offices are also open for additional evening hours.

All University offices may be reached by dialing the number above, or you may dial offices directly by using the numbers below. Individual building hours are posted at the main entrances of all buildings. Contact the Department of Public Safety if you have a question about building hours.

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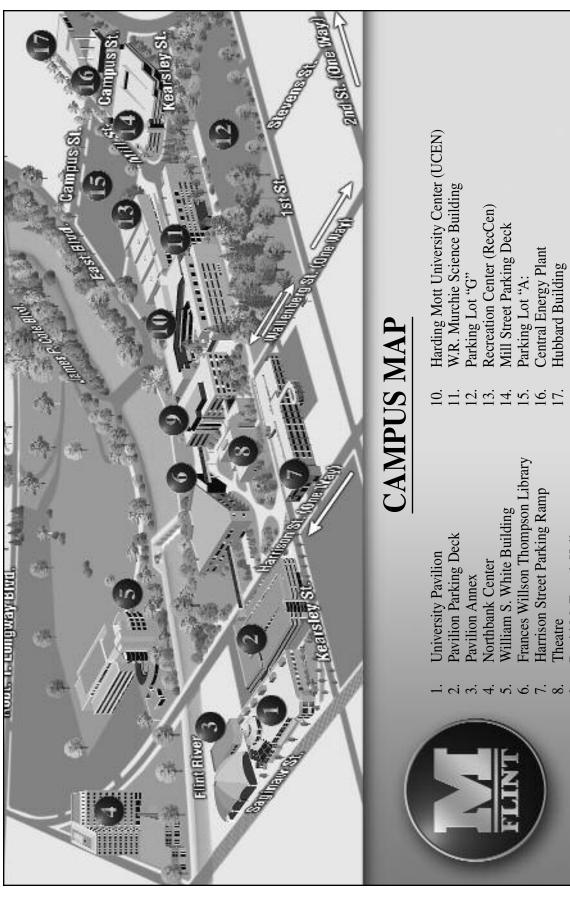
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